Do We Live in Hell? A Comprehensive Empirical Survey of the World's Suffering

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1 Introduction

In Weltschmerz, Frederick Beiser writes: "What is the darkest view of life? That which likens it to hell" (Beiser 2016). This was Arthur Schopenhauer's view. In 1818, he declared that "the world is hell" and, later, that

if you try to imagine, as nearly as you can, what an amount of misery, pain and suffering of every kind the sun shines upon in its course, you will admit that it would be much better if, on the earth as little as on the moon, the sun were able to call forth the phenomena of life; and if, here as there, the surface were still in a crystalline state (Schopenhauer 1851).

Bernard Williams wrote in "The Human Prejudice" that, from an impartial moral perspective, "if for a moment we got anything like an adequate idea of [the suffering of our world] and we really guided our actions by it, then surely we would annihilate the planet, if we could" (Williams 2006). In a 2022 article published in *The New Yorker*, William MacAskill said the following:

Imagine you're travelling through a foreign country. During a long bus ride, there's an explosion and the bus overturns. When you come to, you find yourself in a conflict zone. Your travel companion is trapped under the bus, looking into your eyes and begging for help. A few metres away, a bloody child screams in pain. At the same time, you hear the ticking of another explosive. In the distance, gunshots fire. That is the state of the world. We have just a horrific set of choices in front of us, so it feels virtuous, and morally appropriate, to vomit, or scream, or cry (Lewis-Kraus 2022).

Is the world really that bad? The aim of this paper is to provide the first—to my knowledge—comprehensive empirical survey of suffering in the world. We will see that the above statements are not inaccurate or misleading: the world really is awash in terrors and torments, sadness and sorrows, agony and anguish. It is difficult to comprehend the oceanic amounts of misery, trauma, loneliness,

heartbreak, pain, and disappointment that surrounds us and, in some cases, pervades our own lives. Recognizing this fact is unpleasant, which is why it typically goes unrecognized. This paper looks the reality of our shared predicament directly in the eyes.

Three points are worth making before we proceed. First, the human mind is not good at dealing with big numbers, and there are a lot of big numbers in what follows. Reading that 1 million—or 1 billion—people are suffering horribly does not hit one in the moral gut as it should. One way to mitigate this big-number effect is to break such numbers into smaller parts that better convey the magnitude and enormity of large losses. For example, rewriting "1 million deaths" as "100,000 deaths, plus 100,000 deaths, plus 200,000 deaths, plus 200,000 deaths, plus 300,000 deaths, pl

Second, the survey below could support the disturbing claim that the world has become much worse over time, contra New Optimists like Steven Pinker who claim that the world has never been better. One's conclusion on the matter will hinge on how one chooses to assess the relevant statistics. Pinker and Andrew Mack write that "the only sound way to appraise the state of the world is to count. How many violent acts has the world seen compared with the number of opportunities?" (Pinker and Mack 2014). But perhaps this is the wrong approach: is 1 million deaths really less bad if the population is 10 trillion compared to 10 million? I don't think so: the loss of a single life is bad to some extent independent of all other facts. Hence, assessing whether the world has become better or worse over time should focus on absolute rather than relative numbers.

To illustrate, consider this scenario discussed in Torres 2024:

Imagine a fictional world extending across three centuries of its existence. In the first century, the total population is one billion people. In the second century, the total population is 10 billion people. In the third century, the total population is 100 billion. The total population is thus growing over time. Now let's say that during the first century, 30 percent of the population dies in violent conflicts. During the second century, 20 percent die in conflicts. And during the third century, 10 percent die in conflicts. So, while the population is growing, the percentage of deaths is declining.

Pinker and other New Optimists would describe this as an unequivocal win, given their comparative methodology. Yet, at the same time, the *total number* of deaths is growing: from 300 million in the first century to 2 billion in the next century to a staggering 10 billion in the third.

Imagine living at the end of the third century. You hop in a time machine and travel back to the end of the first century, where you meet someone and say: "I'm so sorry that you are living in such horrible times, where 30% of the population

has died in violent conflicts. But take heart, because your descendants are much better off; violent deaths significantly decline in the future." Your interlocutor responds: "That is wonderful to hear! How many people have died in the century that you're from?" And you answer: "Only 10 billion—the very same number as the entire human population in your century."

Surely you can see how your interlocutor from the past would find your response absurd, even if you were to add that 10 billion is only 10% of the global population. Evaluations of the world should put the most weight on absolute numbers, especially when those numbers are very large. Given that the global population, in our actual world, has grown hyperbolically over time, there is a strong case to make that the world has never been worse than it is today (or within the recent past, e.g., since the hemoclysm of the 20th century). This is because the world has never contained so much total suffering than it does right now, by virtue of (a) how large the population has become, and (b) our failure to address the issues highlighted below.

Finally, the present survey is also germane to theological debates surrounding the "argument from evil," which asks: How can an omnibenevolent and omnipotent deity allow so much suffering (or any suffering at all)? It is not clear how one can read the data below and avoid the conclusion that God, as traditionally understood, does not exist. Perhaps God is evil, and that is why our world contains so much misery, but this encounters the reverse problem of goodness (Law 2010). It thus seems likely that if God does exist, he is morally indifferent. And if God is morally indifferent, then who knows what the afterlife might hold, if there is one.

We now turn to the empirical part of this paper, which I hope can serve as a useful resource for future debates among philosophers and theologians. I may update this paper on occasion to include new data (it was originally written in the summer of 2024, and hence some data is already outdated—because things have become even worse rather than better).

2 Human Misery

The following is not an exhaustive survey of human suffering. Though our focus will be primarily on the present, some subsections will expand this scope to include the recent past.

2.1 Death and Violence

Every year, an average of 440,000 human beings are murdered around the world and over 580,000 people die violently (UNODC 2023; SAS 2023). Nearly 800,000 people are so hopeless or desperate that they commit suicide (SAVE 2021). One and a half million people die of diarrheal diseases, 18.5 million die of heart attacks, strokes, and other cardiovascular ailments, and another 10 million die of cancer, resulting in 27,600 lives lost every single day (Roser 2021). Roughly 50% of people will be diagnosed with cancer during their lifetime (NHS 2022).

Some 2.3 million babies die every year within the first month, amounting to 6,300 deaths per day, while 10,000 people die annually from earthquakes, 320,000 drown, and 1.35 million perish in traffic accidents (UNICEF 2024; NatGeo 2023; SDN 2018; Ahmed 2023). Sixty-one million people in total died in 2023, and so far this year, as of April 2024, over 17 million people have perished, with roughly 150,000 of these having happened the day that I am writing this (see WM 2024).

Nearly 11,000 civilians have been murdered in the Russia-Ukraine war, including 587 children (HNGO 2024). Four million have been displaced, and over 14 million people, 3 million of whom are children, are in need of aid; 80% of those in need also require mental health support. Up to 378,000 people perished during the Tigray War from 2020 to 2022, while 2.7 million were internally displaced and another 13 million required food aid. In Gaza, as of this writing, at least 34,000 people have died, more than 13,000 of whom are children who have been shot to death, blown away by missiles, or crushed under buildings in a genocide that has primarily affected women and children (Guerin 2024; Abdu 2024; AJ 2024a; Lederer 2024). One report states that doctors are "doing sometimes 14, 15 amputations, mostly on children, per day, and they've been doing it for six months now" (Scahill 2024). Entire families have been murdered, and most major governments have chosen not to intervene, including the US.¹ This follows other genocides in recent memory, such as the genocide in Darfur that caused 300,000 civilian deaths (HMM 2023) and the Rwandan genocide, in which up to 800,000 people perished and 500,000 women were raped (WP 2024a). Looking back a few decades earlier to the mid-20th century, the Nazis killed some 6 million Jews during World War II, a conflict that took the lives of roughly 56 million human beings (not including the 28 million people who perished from disease and famine caused by the fighting). The previous world war, from 1914 to 1918, killed around 20 million people. In many cases, the bodies of deceased soldiers sunk into the muddy, rat-infested trenches without ever being identified, leaving families back home without anyone to bury.

Some historians call the period since the end of WWII the "Long Peace," as no two superpowers have engaged in direct conflict during this period (Pinker 2011). Yet, according to my calculations, over 40 million human beings have perished in violent wars since 1945, using mostly conservative estimates. Examples include: up to or at least (depending on the statistic) 377,000 deaths in the Yemeni Civil War, 383,000 deaths in the South Sudanese Civil War, 200,000 deaths in the 2013-2017 War in Iraq, 613,407 deaths in the Syrian Civil War, 350,000 deaths in the Boko Haram insurgency, 400,000 deaths in the Mexican drug war, 654,965 deaths in the 2003 Iraq War with another 800,000 perishing during the US invasion, 1,260,000 deaths from the Global War on Terrorism, 5,400,000 deaths in the Second Congo War (also called "Africa's World War"), 800,000 deaths in the First Congo War, 300,000 deaths in the Burundian Civil War, 300,000 deaths in the Sierra Leone Civil War, 105,000 deaths in the

¹The war in Gaza was triggered by a horrific terrorist attack perpetrated by Hamas, which killed around 1,200 Israelis and foreigners.

Bosnian War, 100,000 deaths in the Sri Lankan Civil War, 2 million deaths in the Soviet-Afghan War, 3.6 million deaths in the Bangladesh Liberation War, 4.3 million deaths in the Vietnam War, 4.5 million deaths in the Korean War, and 158,000 deaths in the Greek Civil War—to mention just a few of the conflicts since WWII.

Although military and civilian death rates have declined during the Long Peace, these rates have fluctuated throughout history: the current death rate is about the same as it was in the year 1400, and the death rate appears to have been temporarily lower in the latter 17th and 19th centuries (see Beauchamp 2015). Given the climate catastrophe, discussed below, we might expect the prevalence of deadly wars (and terrorism) to rise this century. The history of civilization is largely a history of war, and there is no reason to expect this to change in the future, especially as resources dwindle. A United Nations report states that over the past 60 years, "at least 40 per cent of all intrastate conflicts have a link to natural resources," and many studies show that poverty foments conflict (UNP 2024; Braithwaite et al. 2014). This brings us to the next subsection.

2.2 Poverty

Around the world, roughly 1.2 billion people live in acute multidimensional poverty, while 712 million live in extreme poverty, which constitutes "an increase of 23 million people compared to 2019" (HDR 2022; BU 2025). Since 2017, the number of people who are malnourished—an estimated 735 million in total—has also been rising, and one estimate suggests that 840,000 could be malnourished by 2030 (CW 2023; Kretchmer 2020). Every day, 25,000 people die of hunger or hunger-related illnesses, including over 10,000 children, which amounts to roughly 7 children every minute (Root 2023). Two billion people do not have access to safe water, and 150 million are homeless (UNESCO 2024; Abbas 2024). In the US, 650,000 people have no home on any given night, 37.9 million live in poverty, 141,000 make the minimum wage, and another 882,000 earn less than this minimum (Ludden 2023; Shrider and Creamer 2022; BLS 2023). Sixteen percent of all US children live in poverty, and 333 million children deal with extreme poverty worldwide (ACF 2024). Over 1.4 billion children live on \$6.85 or less per day (GCECP 2024).

2.3 Abuse

We begin with the US, where roughly 463,000 people are raped or sexually assaulted each year (RAINN 2024). Almost 3 in 10 women have experienced either "rape, physical violence, and/or stalking by a partner and reported it having a related impact on their functioning" (NDVH 2024). Just under 25% of US women over the age of 18 "have been the victim of severe physical violence by an intimate partner in their lifetime" (NDVH 2023). Over 600,000 US children are abuse victims, and in 2023 the National Center for Missing and Exploited Children "received 36 million reports of child exploitation" (Seetharaman 2024).

Some 840,000 are abducted or go missing annually, resulting in an average of one child disappearing every 40 seconds (NCA 2024; CCPSC 2023). Many are found shortly after, though as of this writing "more than 20,000 missing person cases and 14,000 unidentified body cases remain open" (WPR 2024). Globally, some 50 million people live in modern slavery, and up to 1.3 million people in the US have survived torture (Fleck 2023; CVT 2023). Amnesty International reports that 141 countries "still torture citizens and prisoners" (Wells 2017). In the US, some 1.2 million human beings—disproportionately Black people—are caged in US prisons, with over 80,000 of these people held in solitary confinement (Carson 2023; AFSC 2024).

2.4 Physical and Mental Illness

Right now, over 55 million people suffer from dementia, with an estimated 78 million projected to have dementia by 2030 and 139 million by 2050 (ADI 2015). Rates of early-onset dementia are rising, with an increase of 131% in Alzheimer's diagnoses among young people in the US between 2013 and 2017 (BCBS 2020). Seven million people have died of Covid, and roughly 45 million Americans suffer from long Covid, which includes difficulty breathing, fatigue, sleep problems, joint, muscle, and chest pain, diarrhea, blood clots, and brain fog as symptoms. More than 3 million Americans deal with chronic fatigue, 50 million have chronic sleep disorders, and up to 3 million suffer concussions each vear (CDC 2024; HD 2023; APA 2024; UPMC 2025). Over 51 million Americans suffer chronic pain, and nearly 40 million have to take antidepressants (Dillinger 2023; Ahrnsbrak 2021). About 30% of people battle depression, and another 20% have an anxiety disorder, while roughly 46.8 million struggle with drug and alcohol abuse each year; over 178,000 Americans die of alcohol-related diseases on average every 12 months (Witters 2023; AAC 2024; DHHS 2024). Globally, 280 million people struggle with depression, and 301 million suffer from anxiety disorders (Koskie 2023). Eighty-seven percent of people worldwide, according to one survey, are unhappy with or hate their jobs (Adams 2013).

One US study finds that "around three-quarters of adults (76%) said they have experienced health impacts due to stress in the prior month," while 27% of people feel so stressed-out most days that they are unable to function (APA 2022). Seventy-nine percent of Americans "report feeling unhappy with how their body looks at times," and 21% admit to having cheated on a partner (Jackson and Lemay 2018; SRD 2024). About half of all first marriages end in divorce, while roughly 70% of all second and third marriages end this way (Banschick 2012). Eighty-two percent of people say that they have had their hearts broken at least once, and ghosting, a form of "emotional abuse" whereby one vanishes from a relationship with little or no warning or explanation, is becoming more common, with 60% of respondents in the US claiming to have been ghosted by a date or partner (Emamzadeh 2021; Prendergast 2023).

Rates of loneliness in the US have doubled since the 1980s, leading some experts to describe loneliness as constituting a "pandemic" (JEC 2018). A 2018 survey reports that 54% of Americans sometimes or always "feel as though

no one knows them well," while 46% are "sometimes or always feeling alone" (Jackson and Ballard 2018). Similarly, 60% of Australians say they "often feel lonely" (Wahlquist 2016). Social isolation has become so pervasive in the UK that the government introduced a "minister of loneliness" in 2018; Japan took similar steps in 2023 (JCCL 2023; JP 2023). There is a good case to make that we live in the loneliest societies in all of human history, and indeed historians have argued that loneliness is a uniquely modern phenomenon: people prior to the 19th century were sometimes alone, but almost never lonely (Alberti 2019). Feeling lonely has been linked to heart disease and stroke, addiction, depression and anxiety, suicidality and self-harm, dementia, and premature death (CDC 2023).

In some parts of the world, a growing number of people are dying alone—so-called "isolation deaths" or "lonely deaths." One survey found that there were 3,378 lonely deaths in South Korea in 2021, while another reports that Tokyo alone recorded 5,513 lonely deaths in 2018 (Cheong-mo 2022; Montgomery 2021). In some cases, the deceased are not discovered for weeks, months, or even years after dying, because no one notices that they are gone (Onishi 2017).

Returning to infectious disease, about 630,000 people died in 2022 of AIDS-related illnesses around the world, while more than 40 million have perished since the pandemics started in 1981 (UNAIDS 2023; WHO 2023). Upwards of 50 million people died from the Spanish flu that swept across the globe from 1918 to 1920, while the Hong Kong flu (1968-1969) killed up to 4 million people; the same number may have died from the 1957-1958 influenza pandemic (WP 2024b). From 1918 to 1922, the Russian typhus epidemic took the lives of some 3 million people, and around the same time a mysterious disease called "encephalitis lethargica," also known as "sleeping sickness," infected over 1 million people and killed over 500,000. To this day, no one knows what causes the disease, and sporadic cases still occur (Hoffman and Vilensky 2017). Many survivors never fully recover, and are left in a debilitating state of confusion, delirium, psychosis, or catatonia, as depicted in the movie Awakenings.

Given that, according to one study, "over half of known human pathogenic diseases can be aggravated by climate change," we might expect new infectious disease outbreaks, epidemics, and pandemics in the coming decades, a risk potentially exacerbated by the possibility of "engineered pandemics" involving designer pathogens (Mora et al. 2022). In other words, our destruction of the environment will increase the probability of "natural" pandemics in the coming decades, while bioterrorism and the accidental release of pathogens from laboratories will further exacerbate the danger. (One paper even suggests, plausibly, that the development of advanced genetic engineering and biotech might explain the Fermi Paradox; see Sotos 2019.)

3 Environmental Degradation

Let's now turn to the environmental situation and how this may impact human wellbeing in the coming decades and centuries.

3.1 Climate Change

According to the International Panel on Climate Change (IPCC), anthropogenic greenhouse gases risk consequences that will be "severe, pervasive, and irreversible" (IPCC 2020). These include unprecedented megadroughts (lasting decades), coastal flooding, famines and food supply disruptions harming millions of people, uncontrollable wildfires, more powerful (category 6) hurricanes, sea-level rise due to ocean warming and the melting ice caps, extensive desertification and deforestation, devastating biodiversity loss, the collapse of ecosystems, economic recessions, political instability, social upheaval, and mass migrations larger than anything witnessed in recorded history (see Osaka 2022; WFP 2021; Ritchie-Tyo 2024; Burrell 2020; Dean 2019). As alluded to earlier, climate change is a "threat-multiplier" and "threat-intensifier," and hence may foment interstate and civil wars as critical resources become scarcer. It may also exacerbate terrorism, and indeed some have argued that climate change fueled not only the Syrian Civil War but the subsequent rise of the Islamic State, an apocalyptic movement that, as of 2016, had murdered 33,000 people (Holthaus 2015). If the world looks like it is ending, we should expect apocalyptic ideologies of all kinds to become more prevalent.

Due to climate change, there could be 2 billion people displaced this century, resulting in the largest migration of people in human history (Beitrag 2017). Another study estimates that 1 billion will likely die as a direct result of global warming (Pearce and Parncutt 2023). More recently, a report published by the University of Exeter concludes that if we reach 2C of warming by 2050, more than 2 billion people will die prematurely. If we reach 4C of warming, more than 4 billion will perish, with attendant losses of at least 50% of "GDP between 2070 and 2090" (Trust et al. 2025).

Other studies project up to 74% of the human population being exposed to lethal heat waves by 2100 (Mora et al. 2017). Some of these events will exceed the 95-degree wet-bulb threshold of human survivability, meaning that even if one were naked in front of a giant fan in the shade, one would still perish (NASA 2022). Up to 30% of the planet will become arid land if temperatures rise by 2 degrees C, which seems highly probable given that we are currently on the 1.5 C threshold (Gabbatiss 2018; AJ 2024b). Between 2015 and 2019, "at least 100 million hectares of healthy and productive land" were lost each year due to human activities, a trend that will accelerate in the coming decades, and we have significantly altered 75% of Earth's terrestrial surface, "including 85% of wetland areas" (NEB 2023; UNEP 2022). The footprint of industrial civilization covers nearly the entire planet.

3.2 Tipping Points and Biodiversity Loss

Human activities have pushed the world across six of nine "planetary boundaries," which demarcate a "safe operating space" for civilization (Richardson et al. 2023). These boundaries being: climate change, ocean acidification, stratospheric ozone depletion, interference with nitrogen and phosphorus cycles, global

freshwater use, change in land use, rate of biodiversity loss, atmospheric aerosol loading, and chemical pollution. By crossing these boundaries, we have made ourselves vulnerable to "abrupt global environmental change" that could have "disastrous consequences for humanity" (Röckstrom et al. 2009). Other studies echo this warning: for example, one from 2012 argues that we may be approaching a sudden, catastrophic, irreversible collapse of the global ecosystem, while one from 2019 argues that there may be tipping points in Earth systems, and that crossing such tipping points could bring about a "Hothouse Earth" state, which would undermine the "habitability of the planet for humans" (Barnosky et al. 2012; Stefen et al. 2018).

Our profound impact on the environment has triggered the sixth major mass extinction event of the past 3.8 billion years—the last one having occurred roughly 66 million years ago, when the dinosaurs died out (Ceballos 2015; Kolbert 2014). One study suggests that our actions are causing the extinction of approximately one species every 10 to 15 minutes (Read 2021).

Not only is the number of species on Earth dwindling, but so are the populations of species that still exist. For example, the 2022 Living Planet Report found that the global population of wild vertebrates—mammals, birds, fish, reptiles, and amphibians—has declined since 1970 by a staggering 69% (WWF 2022). (I encourage readers to extrapolate this trend into the future: how many decades until the number is 100%?) Other studies report that 19% of all reptile species, 52% of freshwater turtles, and 60% of the world's primates are currently under threat (Böhm et al. 2013; Estrada 2017). An earlier study, from 2010, found that vertebrates in freshwater environments have declined by 41%, farmland birds in Europe have fallen by 50% since 1980, and bird populations in North America dropped by 40% between 1968 and 2003 (UNEP 2010). About 40% of all plant species—the foundation of the food chain—are currently "threatened with extinction," and 600 plant species have disappeared over the past 250 years—a rate that is 500 times the natural "background" rate of extinction (Pavid 2020; NSLA 2020). In 2019, the most comprehensive study ever published "on the state of global ecosystems" reported that "up to one million plant and animal species face extinction, many within decades, because of human activities" (Tollefson 2019).

This is alarming not just because, I would argue, our fellow creatures on Earth have final (or intrinsic) value, but because "without biodiversity, there is no future for humanity," to quote the Oxford zoologist David Macdonald (Carrington 2018).

3.3 The Oceans and Soil

Pivoting from the land to the water, there are more than 400 "dead zones" in the world's oceans and seas (Costa et al. 2019). A dead zone is a region of water that cannot sustain most marine life due to hypoxic conditions caused by "nutrient pollution," which comes "from agriculture, storm and wastewater facilities, use of fossil fuels, and daily domestic activities" (EPA 2024a). The atmospheric CO2 produced by burning fossil fuels is also driving ocean acidification, which,

along with ocean warming, is destroying coral reefs. According to a 2022 study, if we surpass 1.5 degrees C of warming, then 99% of the world's coral reefs could disappear (Heron et al. 2022). Another study found that the shells of snails are literally dissolving because of ocean acidification (UP 2018). Alarmingly, the rate of acidification today is roughly 4 times faster than the rate of acidification that occurred during the worst mass extinction event of the last 3.8 billion years: the end-Permian extinction, also known as the "Great Dying" (WP 2024c).

The ocean has also become a giant dumpsite for plastic trash. There is currently an "island" of plastic in the middle of the Pacific Ocean, south of Hawaii, that is more than twice the size of Texas (WP 2024d). Scientists have found microplastics accumulating on seafloors and the bottom of the ocean, including at the bottom of the Mariana Trench, the deepest crevasse in the world's oceans. And, indeed, a 2018 exploration of this trench even identified an intact plastic bag floating in the water, some 36,000 feet beneath the surface (Gibbens 2018).

Soil erosion and degradation caused by deforestation, converting natural ecosystems to pasture land, and the overuse of agrochemicals, is reducing annual crop yields (WWF 2024). Over the past 150 years, half of the planet's topsoil has been lost, and studies indicate that at current rates of degradation, "we will have lost 10% of soil productivity by 2050" (WWF 2024; Kuhlemann 2018). At the same time, the human population continues to grow, and one calculation shows that we will need to "produce more food in the next four decades than we have in the last 8,000 years of agriculture combined" (WWF 2012). To put population growth in perspective, there are twice as many people on planet Earth today than there were in 1975.

3.4 Toxic Chemicals

The problems that we will face this century, in the coming decades, are unprecedented in scale, complexity, and urgency. Yet preliminary studies suggest that higher CO2 concentrations in the air cause marked declines in cognitive performance. As an article in the Yale Climate Connection states, climate change is literally making us "dumber" (Grossman 2020). Worse, climate change is also fueling more wildfires, and wildfire smoke is linked to higher risks of dementia (EPA 2024b; Yarber 2023). Over 2 billion people are already affected by wildfire smoke for at least one day per year; this will get worse in the near future (Murez 2023).

Climate change isn't the only phenomenon harming our brains. The contemporary world is awash in toxic chemicals, including neurotoxins. There is mercury in fish, cadmium in chocolate bars, lead in wine and alcohol, organophosphates on fruits and vegetables, phthalates in our food, volatile organic compounds (VOCs) in household products, and BPS in store receipts (see HH 2017; Lee 2022; Archibald 2023; Lardieri 2019; Li et al. 2023a; CDC 2021a; NYDH 2024; Webb 2023). Endocrine-disrupting chemicals are found in everything from "canned baby food to scented shampoos," and a recent study found that 25% of children's toys contain dangerous chemicals (IE 2021; IISD 2021). Upwards of

800 million children—almost a third of all children in the world—suffer from lead poisoning, which causes permanent brain damage, and nearly 1 million people die of lead poisoning each year (NIEHS 2024a; WHO 2022). Arsenic poisoning affects at least 140 million individuals globally, and the Centers for Disease Control and Prevention (CDC) reports that 97% of Americans have detectable quantities of PFAS—dubbed "forever chemicals" because they will contaminate the environment for literally thousands of years—in their bodies. Even small doses of PFAS are linked to "a wide variety of health problems, including kidney and testicular cancer, liver problems, high cholesterol, and immunosuppression" (CC 2023; NIEHS 2024b; CWA 2024).²

We are also constantly exposed to microplastics, which can infiltrate every organ in the body, including the brain, and cause "oxidative stress, DNA damage, organ dysfunction, metabolic disorder, immune response, neurotoxicity, as well as reproductive and developmental toxicity" (Cassella 2023; Li et al. 2023b). Microplastics are present in both bottled water and public drinking water, meaning that there is no good way for most people to escape the threat. Public drinking water also contains trace amounts of prescription pharmaceuticals like antipsychotics, sex hormones, and antibiotics, and a meta-analysis coauthored by researchers at the Harvard School of Public Health found "strong indications that fluoride," which is added to public water systems in many countries, "may adversely affect cognitive development in children" (Paddock 2008; Dwyer 2014). Other studies show that exposure to air pollution causes student test scores to decline, and the effects on performance may be permanent (Weber 2019). "Once damage from pollution is done," write the authors of one study, "even during middle childhood, it might persist, potentially affecting outcomes far into the future" (Heissel et al. 2022).

People today are exposed to thousands of chemicals that our forebears just 100 years ago would have never encountered. These chemicals can be measured in human samples of urine, serum, blood, and breast milk (CDC 2021b). Right now, you—the reader—probably have dozens or hundreds of chemicals floating in your bloodstream and cerebrospinal fluid, in addition to whatever prescription (or non-prescription) drugs you also take. We do not understand the long-term, or even short-term in some cases, consequences of many of these chemicals, much less their potential additive or synergistic interactions. This is a giant experiment that we are conducting on ourselves in real time, and we have no idea how bad the outcome might be. Perhaps the increasing toxicity of our environment is why more than a dozen types of cancer are becoming more common among young people and rates of early-onset dementia are rising (Ledford 2024).³ According to a 2023 study, the "global incidence of early-onset cancer [people under the age of 50] 79.1 percent and the number of early-onset

 $^{^2}$ Alarmingly, one recent study found that "ocean waves crashing on the world's shores emit more PFAS into the air than the world's industrial polluters . . . The contaminated spray likely affects groundwater, surface water, vegetation, and agricultural products near coastlines that are far from industrial sources of PFAS" (Perkins 2024).

 $^{^3\,{}^\}circ\!$ Deaths from early-onset cancers," notes an article in Nature, "has risen by nearly 28 percent between 1990 and 2019 worldwide."

cancer deaths increased by 27.7 percent between 1990 and 2019," based on an analysis of 29 cancer types (Zhao et al. 2023).

4 Other Considerations

Let's now consider a few additional phenomena and trends that are pertinent to assessments of the world, including how it might go in the future. The brevity of this section does not do justice to these issues, but may suffice for the specific purposes of this paper.

4.1 Factory Farming

We currently keep nearly 2 billion animals in factory farms, where most live in abysmal conditions (FWW 2024). Some 23 million of these animals (not including aquatic animals like fish) are killed every day, which amounts to 266 per second (Roberson 2023). Each year, about 7 billion male chicks, which are deemed worthless by the industry, are slaughtered through methods like maceration and asphyxiation with CO₂ (Krautwald-Junghanns et al. 2018). The former involves newborn chicks being placed on a conveyer belt that dumps them, while still alive, into a shredder (Bashir 2017). Many of the chickens that aren't executed shortly after hatching have portions of their beaks sliced off, a process known as "debeaking" (KW 2016). A common method of killing adult chickens is called the "live-shackle slaughter method" (AA 2020). They are "hung upside down with their legs clamped into metal stirrups, which often results in broken bones," and "are then dunked into an electrified bath of water meant to stun them before their throats are slit and their bodies are thrown into boiling water" (THL 2023). Pigs are shot in the head with an electrical gun, though sick or weak piglets may be killed through "pig thumping," whereby workers—who are often themselves exploited, earning "poverty wages"—are thrown against the ground repeatedly until they die (Goldsmith 2024; ALDF 2020). Pregnant pigs and cows are kept in "gestation crates" so small that they are unable to turn around (Hussain 2023). Slaughterhouses kill cows by guiding them

into a stall and their heads are locked into a vice. They are then shot in the head with a "captive-bolt" gun, a weapon with a retractable bullet. This gunshot is designed to render cows insensitive to pain before they are hung upside down by their legs and have their throats slit. Finally, they are dismembered (THL 2023).

Factory farming is arguably one of the greatest moral crimes of history (Harari 2015).

4.2 Wealth Disparities

The gap between the rich and poor is growing. The top 10% of people around the world own nearly 75% of the world's total wealth, and the top 0.01% hold

almost 12% of these riches (WID 2023). In the US, the three wealthiest people have a higher net worth than the bottom half of society combined (Naysmith 2024). Since 2020, the five richest men in the world more than doubled their wealth, while the poorest 60%, which amounts to roughly 5 billion people, saw their wealth decline (Neate 2024). To put such disparities in perspective, the US minimum wage is \$7.25 per hour. Elon Musk, the richest person on Earth, makes approximately \$413,220 per hour, about 57,000 times the US minimum wage (Kaur Garg 2024). By the end of each 8-hour workday, Musk has amassed a staggering \$3,305,760, roughly twice the "median lifetime earnings for the typical US worker" (Picchi 2023). Recall from earlier that 141,000 Americans earn the minimum wage, while another 882,000 people earn wages less than this. According to a recent Brookings Institute report, "the current high levels of inequality are likely to persist or even rise further," adding that "artificial intelligence and related new waves of digital technologies and automation could increase inequality further within countries" (Qureshi 2023). We will discuss artificial intelligence (AI) below.

4.3 Democratic backsliding

Far-right fascist movements have been making strides globally, within countries such as the US (Donald Trump and JD Vance), France (Marine Le Pen), Brazil (Jair Bolsonaro), Argentina (Javier Milei), and Hungary (Viktor Orbán), to name a few. Some democratic countries have thus undergone "democratic backsliding," whereby the institutions and norms of democratic systems are eroded. This has lead scholars like Larry Diamond to declare that we are in a global "democratic recession" (Diamond 2015). Consider the case of the US: in 2016, the Economist Intelligence Unit's "Democracy Index" reclassified the US from a "full democracy" to a "flawed democracy," while an earlier study concluded, along similar lines, that the US is best characterized as an oligarchy—a state ruled by a small elite—rather than a democracy (Econ 2024; Gilens and Page 2014). The deterioration of democratic institutions within the US may have implications for not just the freedom and wellbeing of its citizens, but the probability of societal collapse. As Luke Kemp observes in a discussion about the causes of how civilizations end, "wealth and political inequality can be central drivers of social disintegration, as can oligarchy and centralisation of power among leaders. This not only causes social distress, but handicaps a society's ability to respond to ecological, social, and economic problems" (Kemp 2019).

4.4 Artificial Intelligence

Climate change, biodiversity loss, anthropogenic toxins, growing inequalities, and democratic backsliding are not the only reasons to worry about the future.

⁴ "Note also that "the richest 1 percent of humanity is responsible for more carbon emissions than the poorest 66 percent" (Watts 2023).

Advanced AI could also have catastrophic consequences if not properly managed and regulated. Studies show that "generative AI" systems, built on worker exploitation and massive intellectual property theft, are empowering autocratic regimes while undermining democratic processes (Crosston 2023; Kreps and Kriner 2023). Algorithmic bias continues to harm marginalized communities by perpetuating harmful stereotypes, and the "environmental costs" of generative AI are "soaring," according to an article in Nature (Crawford 2024). Bitcoin alone, according to one study, produces as much CO2 emissions as 2.7 billion homes per year, and could by itself "push global warming above 2°C" (Mora et al. 2018). AI-generated deepfakes, fake news, propaganda, and disinformation are polluting our information highways (Marcus 2024). In 2024, some voters in New Hampshire received robocalls involving an AI-generated clone of Joe Biden's voice, urging them not to cast their ballots, and around the same time Trump supporters shared fake AI images of the former—and perhaps future—president surrounded by Black people (Parks 2024; Spring 2024). A recent report from the World Economic Forum identifies "AI-powered misinformation [as] the world's biggest short-term threat," while the Climate Action Against Disinformation coalition warns that AI could "supercharge" disinformation about climate change, thus further imperiling the entire planet (Chan 2024; Speare-Cole 2024). AI could also enhance spear phishing, surveillance, and cyberattacks, and may eventually be used to control lethal autonomous weapons (LAWs) that make life-and-death decisions in combat scenarios without any human input (see Gerdes 2018).

4.5 Nuclear Conflict

Yet another global catastrophic risk derives from nuclear weapons. In a 1961 speech to the United Nations General Assembly, President Kennedy declared: "Today, every inhabitant of this planet must contemplate the day when this planet may no longer be habitable. Every man, woman and child lives under a nuclear sword of Damocles, hanging by the slenderest of threads, capable of being cut at any moment by accident or miscalculation or by madness." Though the US and Russian nuclear arsenals have shrunk since the height of the Cold War, the threat of nuclear conflict—initiated on purpose or due to some nuclear mishap—remains. As the 20th-century German philosopher Günther Anders pointed out, we cannot escape the nuclear predicament: we will live under the nuclear sword of Damocles for the rest of our existence on Earth, because humanity cannot un-invent nuclear weapons or permanently erase the knowledge required to build them (except, perhaps, if civilization were to catastrophically collapse). According to a 2019 study, if a nuclear war between the US and Russia were to occur, more than 5 billion people could perish—roughly 2/3 of the global population (Xia et al. 2022). That is equivalent to the entire human population in 1987.

How probable is a nuclear conflict, whether initiated by state actors or nonstate terrorist organizations? Martin Hellman argues that if the probability of a nuclear weapon being detonated somewhere in the world is 1% per year, then "in 10 years the likelihood is almost 10 percent, and in 50 years 40 percent if there is no substantial change" (Farber 2010). Given enough time, the probability of a nuclear conflict will approach 1.

5 Discussion

I am not a philosophical pessimist. More specifically, I do not believe that life is intrinsically not worth living or that nonexistence is always preferable to existence (Beiser 2016). Rather, I find it very hard to reject *empirical* pessimism: for contingent historical reasons, our world is a very bad place, worthy of the descriptor "hell," defined by the Oxford English Dictionary as "a place, state, or situation of wickedness, suffering, or misery" (OED 2024). Patently, our world is a place of great wickedness, suffering, and misery. Much of this misery is of our own making. People, one might plausibly argue, are on the whole selfish, greedy, callous, cruel, egotistical, arrogant, heartless, power-hungry, and—worst of all—largely indifferent to the suffering of others. Imagine a scenario in which, before he creates the universe, God asks you: "I'm thinking of making people, on the whole, selfish, greedy, callous, etc. What kind of a world do you think would result?" If God were to have asked me this question, I would describe a world almost exactly like the one that we actually live in. If he were to instead say: "I'm thinking of making people, on the whole, kind, caring, compassionate, loving, empathetic, cooperative, altruistic, charitable, and sensitive to the suffering of others. What kind of a world do you think would result?," I would describe a world profoundly different from this one. The fact that our world is exactly what one would expect if people were in general quite evil suggests that they are.

I am not convinced, however, that people are *inherently* bad, only that broader societal, economic, political, technological, etc. structures bring out and encourage such characteristics in us. Capitalism, for example, rewards avaricious and sociopathic individuals, and studies suggest that wealth may cause people to become less empathetic and ethical (Piff and Robinson 2016). Social media encourages people to be narcissistic, while dating apps "gamify" relationships and make it easier for people to ghost others (Torres 2023). I am, therefore, not yet willing to point the finger at humanity itself, although of course the aforementioned structures are ones that we—or at least a subset of us—created.

I also vehemently reject Bernard Williams' suggestion from section 1 that we would, or should, annihilate the world given the amount of suffering that it contains. There are some groups, such as the Efilists and the Gaia Liberation Front, who would exterminate all human life if they could. (Efilists go further in advocating for the end of all life on Earth and in the universe.) Rather, my hortatory conclusion from the data above is that we should try to make things better—to bring about *genuine progress*, in contrast to the shallow, comparative statistical progress celebrated by Pinker and other New Optimists. The world is contingently very bad, but the badness of the world is not the result of a

universal law of nature. Herein lies the lesson that one should draw from the survey above: if we made the world this way, then perhaps we can un-make it to be some other way.

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[Please note that two people were responsible for this bibliography, but they used different citation formats. My apologies for this inconsistency. If you have any trouble locating the relevant citation, contact me at philosophytor-res@qmail.com.]

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