

**DOMENICO  
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# **PANDORA'S JAR**

*On the moral obligation to maintain  
hope in the face of the existential  
threats of our time*

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Cover illustration by Stefano Minardi

This book is dedicated to Stefano, a bibliophile who is friends with ancient Greek philosophers, and to Ettore, who likes to see things from the least advantageous point of view, only to be pleasantly surprised when things turn out better than expected.



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# Note to the Reader

When I began writing this book in late summer 2024, I underestimated how quickly the world would change in the year that followed. At the time, many in Europe still hoped Donald Trump would not return to the White House. Yet even then, the erosion of democracy was unmistakable. Trump did not create this decline, but his rise acted as an accelerant - deepening divisions, destabilising institutions, and hastening the collapse of norms.

His re-election in November 2024 marked a decisive turning point. Since then, events have moved with such speed that the pre-Trump world already feels remote. Polarisation has hardened into entrenched camps, while international diplomacy seems increasingly incapable of containing the growing wave of crises.

Nowhere is this shift more evident than in US foreign policy, which has become erratic, transactional, and stripped of ethical commitment. The war in Ukraine has descended into confusion. Washington's wavering produced a deal granting US companies access to Ukrainian rare earths in exchange for renewed military aid - a Faustian bargain that commodifies both sovereignty and suffering.

Trump's vaunted promise to end the war within 24 hours has collapsed under the weight of reality. His failed negotiations with Vladimir Putin exposed the emptiness of ego-driven, spectacle-based diplomacy. The war continues. The human toll grows. Trump's response - Patriot missiles funded by European allies and vague threats of sanctions - offers more theatre than foresight.

As this book goes to print, Putin has met Trump in Alaska, with neither Ukraine nor Europe invited. No ceasefire was reached, but Trump urged Volodymyr Zelensky, the President of Ukraine, to "make a deal" by surrendering the Donbas. The parallels with 1938 are stark. Then, too, great powers imposed their will on smaller nations in the name of peace. The result was not peace, but catastrophe.

Trump's approach in the Middle East has been no less reckless. He praised Israel's pre-emptive strike on Iran's nuclear facilities, followed by US bombing raids, claiming that Tehran's nuclear program had been destroyed. The UN's nuclear watchdog quickly disputed this, warning that enriched uranium may have been moved before the attacks. Once again, Trump declared victory where uncertainty persists.

The devastation in Gaza is harrowing. Following the Hamas terror attack, Israel's offensive has produced staggering civilian casualties. Reports describe civilians shot while searching for food and water, and journalists killed by Israeli

forces. Yet the Trump administration has endorsed proposals to expel Palestinians, with Trump himself suggesting luxury housing developments in Gaza - plans widely condemned as genocidal. Instead of holding Israeli leaders to account, the United States imposed sanctions on the International Court of Justice itself.

The stakes could not be higher. If liberal democracies do not defend international law, human rights and democratic norms, they will have to stand by and watch authoritarian powers reshape the global order. Every day of inaction normalises the outrage of today. This is not a matter of ideology. It is a matter of survival for the post-war framework of cooperation and accountability. If that framework collapses, it may never be rebuilt.

History will judge whether democracies rose to the challenge - or squandered their last chance to prove they believed in the ideals they claim to defend.

Berlin, 22 August 2025



# Preface

Despite their remarkable organisation and efficiency, insects such as ants do not have an ethical code in the way that humans understand morality. Ant behaviour is driven by instinct, genetic programming and chemical signals, rather than by conscious moral reasoning or reflective consideration of the colony's future. An ant's actions - whether foraging, defending or feeding - are driven by evolved instincts that maximise the survival of the colony, not by deliberate choices about right and wrong. What may appear to be selfless or moral behaviour in ants, such as sacrificing oneself for the colony, is actually an evolved trait rooted in kin selection, which promotes the survival of closely related individuals to ensure the spread of shared genes.

In stark contrast, humans possess advanced cognitive abilities, self-awareness and a unique capacity for ethical reasoning. This enables us to think about issues of justice, fairness and the kind of society we want to shape. Human societies are built on complex relationships, diverse interests and the potential for large-scale conflict. Consequently, a moral code becomes essential to uphold social order, protect individual rights, and promote fairness in ways that simple instinctive behaviour cannot achieve. With free will comes a profound responsibility - the duty to make choices that reverberate beyond ourselves, touching the lives of others both now and in the future. Ethical frameworks serve as our compass in this task, shaping the principles by which we act and forming the backbone of accountability - a cornerstone of trust and cooperation in the intricate web of modern society.

Unlike insects, humans cannot simply abandon morality. Our ability to think abstractly and empathise with others means that ethical considerations are integral to our social structures. Without a moral code, the fabric of trust, cooperation and justice would likely unravel, leading to a society driven solely by self-interest or a survival-of-the-fittest mentality. Such a shift would undermine the social contract that has enabled human cooperation and progress through the millennia. One might think of ethics in society as akin to hygiene in medicine: just as a physician who neglects hygienic standards endangers the patient, a society that disregards ethical principles risks its own decay. Without ethics, the social fabric begins to fray, and what emerges is not health, but a form of collective illness.

Nowhere is the need for ethics more evident than in the global economy. Free markets, left unchecked, tend to prioritise profit maximisation over human wellbeing, environmental protection and social justice. Companies driven solely by profit often exploit natural resources without regard for sustainability, externalising environmental costs that are borne by communities and future generations rather than by those who benefit from the destruction. Yet environmental collapse will eventually affect business, as the degradation of ecosystems undermines the very basis of life on planet Earth.

Unrestrained capitalism, where the only criterion is the search for profit at any cost, often leads companies to exploit workers and outsource production to regions with weak regulations. This perpetuates cycles of poverty and abuse. The logic of unfettered markets also concentrates wealth and power in the hands of a few, creating huge inequalities where a tiny fraction of the population accumulates the majority of wealth, while billions struggle to meet basic needs. This injustice undermines social trust and breeds resentment, polarisation and civil unrest. Treating everything as a commodity - including health care, education and even human life - undermines moral values and erodes community bonds. Ethical guidelines, on the other hand, counter the logic of the market by affirming that the value of some things should not be determined purely by a profit margin.

Today the financial market's core logic prioritises profit over ethical considerations. Attempts to integrate ethics are often dismissed as obstacles to economic growth or mere "red tape." As long as the global economic system rewards wealth accumulation over social and environmental stewardship, ethics will remain a peripheral concern rather than a foundational principle.

To find a moral foundation in modern capitalist societies, we could revisit Immanuel Kant's concept of the categorical imperative: his ethical framework insists that humanity must always be treated as an end in itself, never as a means to an end. When companies act solely to maximise profit without regard to ethics, exploiting labour or polluting the environment, the universal result is widespread human suffering and an increasing likelihood of environmental collapse - a self-destructive and morally unacceptable option. The adoption of Kantian ethics challenges the logic of pure market capitalism by insisting that economic action must respect human dignity, a value that must be universally applicable.

As we advance technologically, the role of ethics in Artificial Intelligence (AI) becomes equally crucial. Unlike ants, AI systems do not operate on instinct, but can be designed to make autonomous decisions that can have a profound impact on human lives. To ensure that AI benefits humanity, it must be governed by

ethical principles that prevent harm, ensure fairness and maintain accountability. Ethical frameworks for AI are actively debated, drawing on philosophy, law and computer science to ensure that these systems not only perform tasks efficiently, but also align with human values and protect society from unintended consequences.

In conclusion, ethics is a fundamental necessity for human civilisation. A world driven solely by self-interest, devoid of ethical considerations would risk social fragmentation, erosion of human dignity and an environmental catastrophe. Therefore, adherence to strong ethical principles is not just desirable - it is essential for the survival and flourishing of human societies.

Modern societies increasingly fear losing control in a fast-paced, globalised world where the rising demand for specialised knowledge puts pressure on the adaptability of the workforce. In response, many turn to what feels like a safe haven - such as protectionist policies - even though the current system is clearly unsustainable. Trying to preserve outdated jobs by imposing tariffs on innovative products from more technologically advanced countries is not a viable long-term solution.

This book challenges the irrationality fuelled by social media and the rise of populism. As a scientist, I recognise that the scientific method has produced reliable knowledge and guided human progress over the past few centuries. However, science thrives in a tolerant and open society, where ideas are freely debated and accepted on the basis of their validity as demonstrated by experimental evidence, not on the authority of their proponents.

The intellectual evolution of humanity has seen a transition from myths to science. At the heart of this transformation lies hope: the belief that change is possible. This belief gives people the strength to strive for a better world. Early civilizations relied on myth to explain natural phenomena and human existence, offering comforting narratives and moral guidance. Over time, free thinkers began to challenge these myths, turning instead to observation, logic, and mathematics to achieve a rational understanding of the world. There are examples of this even in ancient times. Eratosthenes, who measured the Earth's circumference, and Archimedes, whose buoyancy principles helped determine the purity of a monarch's gold crown. This shift from myth to reason laid the groundwork for systematic learning, marked by hypothesis, experimentation, and validation.

Our species' progress hinges on accumulating and transmitting knowledge, allowing innovations to build on prior discoveries. The Industrial Revolution exemplifies this, combining scientific inquiry with technological advancement to

transform society. Innovations like the steam engine and later the internal combustion engine revolutionised production, transportation, and industry, fostering unprecedented economic and social progress. Rational thinking has consistently propelled technological development, driving efficiency and enhancing quality of life.

However, our growing dependence on technology brings significant risks. Modern infrastructure - including healthcare, communication, and transportation - rests on scientific principles and rational design. If our understanding of these principles declines, we risk becoming overly reliant on technology, making us vulnerable to failure or misuse. Indeed, a lack of technological literacy exposes us to misinformation and hampers informed decision-making at both personal and societal levels. Moreover, declining scientific literacy threatens economic stability, widens social divides, and undermines democratic participation. For example, if citizens struggle to grasp the complexities of policies on digital privacy, cybersecurity, or social media regulation, meaningful public debate becomes impossible. Furthermore, who will manage critical facilities like nuclear power plants if we lose access to expert knowledge? What would be the consequences of mismanagement in such a field?

To sustain progress and safeguard our achievements, investing in science and fostering rational inquiry is vital. Our prosperity depends on critical thinking and an informed understanding of science and technology. Without it, we risk losing control over the very systems that underpin modern life. Maintaining scientific literacy is not just a matter of preserving knowledge but a fundamental necessity to ensure that society remains resilient, innovative, and capable of shaping its own future.

When I was a university student, I once caught up with an old friend who was studying economics. For some reason, we ended up talking about how the Apollo astronauts moved on the Moon - specifically, how they were able to jump much higher than they could on Earth. To my surprise, my friend explained their high jumps by pointing to the lack of atmosphere, rather than the Moon's weaker gravity. He seemed genuinely unaware that the Moon's gravitational pull is only about one-sixth that of Earth's, which is the actual reason the astronauts could move in such an exaggerated, bouncing way.

This anecdote highlights a common pitfall: even well-educated individuals can sometimes lack basic literacy outside their field. It is a reminder that intuitive explanations are not always accurate, and that a minimal interdisciplinary understanding is invaluable. While expertise in a specific domain is important,

maintaining curiosity about fundamental concepts from other disciplines - be it philosophy, history, or science - enriches our perspective on the world.

This broader curiosity is what motivated me to write this book. Although my background is in physics, I have always sought to explore ideas from diverse fields. The book traces a path from philosophical ideas to historical context, scientific breakthroughs, and ultimately, contemporary geopolitics - an effort to see the world through multiple lenses in pursuit of a deeper, more nuanced understanding. Yet, I remain acutely aware that complete comprehension lies beyond our reach, at least within the span of a single lifetime. As the great Neapolitan actor Eduardo De Filippo once remarked, "We are all beginners - life is too short to become anything more."

I am increasingly concerned that current technological trends - when combined with climate change, rising inequality, geopolitical instability, social polarization, and a broader decline in rational discourse - are placing unprecedented strain on our society. We may be approaching a dangerous singularity, or rather, a convergence of multiple accelerating crises - technological, ecological, economic, geopolitical and psychological - that risk spiralling beyond our capacity to control them. Such a trajectory could ultimately threaten not only human survival, but the fate of all living beings on this planet.

I believe it is neither just nor adequate to entrust the decision-making process solely to a handful of individuals in power - let alone to "intelligent" machines. Instead, each of us should strive to take a more active and informed role in shaping our collective future. Of course, I fully acknowledge that many people around the world are consumed by the struggle for basic survival and simply cannot afford the time or resources for such engagement - and that is entirely understandable. Yet, there are many others who, despite having the means, passively accept their circumstances without making the effort to reflect on what truly matters.

Our increasingly digital world - shaped by technology, the Internet, social media, and virtual reality - has made society more detached from actual reality. It is as if we believe we can prosper while the planet itself is dying. Writing this book is my response to this threat - an appeal to society to take responsibility for its own future, for the sake of our children and for life on Earth.

Imagine living in a building where a fire breaks out in the basement. Instead of responding to the danger, someone turns off the fire alarm and carries on as usual. This would be reckless and dangerous. Yet, this is how some governments, including the Trump administration in US, have approached the climate crisis - by downplaying the threat and dismissing scientists who sound the alarm. Denial

and suppression do not make the problem go away; they only delay necessary action and increase risk.

The rapid rise of autonomous technologies, particularly AI, offers both profound opportunities and serious challenges. AI has revolutionised our capacity to process information, driving innovation across science, art, and medicine. Yet, as it reshapes entire fields, it also forces us to confront deeper questions about the nature of humanity. The fundamental difference between humans and machines lies in our capacity for consciousness, emotion, moral judgment, and accountability. While human actions are guided by values and responsibility, AI operates on data and algorithms, optimising for efficiency without ethical awareness. Its decisions mirror the intentions of its creators, not a moral compass of its own.

Humans are capable of interpreting complex contexts, cultural nuances, and evolving moral standards when it comes to knowledge, i.e. they can adjust ethical approaches over time and debate the right course of action in morally ambiguous situations. AI mimics ethical reasoning, but it cannot inherently understand or adapt to subtleties without explicit human intervention. We should consider that human ethical frameworks are dynamic and can evolve with societal change, scientific discovery, and philosophical debate. In contrast, AI systems require deliberate updates to reflect new ethical considerations; any change in approach must be engineered by humans.

AI can process and disseminate information efficiently but the ethical approach to knowledge remains a uniquely human domain - grounded in consciousness, moral reasoning, and a deep understanding of context that AI, as a tool, does not possess. This absence of moral agency makes AI especially susceptible to misuse - particularly by authoritarian actors who may exploit it to manipulate, oppress, or concentrate power. To prevent such outcomes, we should make sure that AI remains a tool in service of humanity, not a force of harm.

Western democracies are based on the principles of popular sovereignty, political pluralism, the rule of law and the protection of individual rights and freedoms. The Western idea of liberal, democratic government is based on free, fair and competitive elections with a clear separation of powers between the executive, legislative and judicial branches. The rule of law ensures that all individuals, including political leaders, are subject to the same legal framework. Fundamental rights such as freedom of speech, press and assembly are protected, contributing to a vibrant civil society and independent media that hold the powerful to account.

The above principles are central to what is often referred to as "the West," a broad and flexible term encompassing countries and cultures shaped by European traditions, particularly those influenced by the Renaissance, Enlightenment, and Industrialization. While geographically centred on North America (especially the US and Canada), Western and much of Central Europe, Australia, and New Zealand, the concept of the West is more than just a matter of location. It is closely tied to historical, political, and philosophical developments - such as democracy, capitalism, secularism, and individual rights.

Western democracy traces its roots back to ancient Greece in the 5<sup>th</sup> century BC, where Athens developed a direct democracy and citizens participated personally in decision-making. Later, the Roman Republic (509-27 BC) introduced elements of representative government, including elected officials and checks and balances. In the 17<sup>th</sup> and 18<sup>th</sup> centuries, Enlightenment thinkers such as John Locke (1632-1704), Montesquieu (1689-1755), and Jean-Jacques Rousseau (1712-1778) laid the foundations of modern democracy. They promoted ideas like constitutional government, separation of powers, and individual rights. These principles inspired the American and French Revolutions in the late 18<sup>th</sup> century, which established early models of representative democracy with constitutional limits on power. During the 19<sup>th</sup> and 20<sup>th</sup> centuries, democratic systems continued to evolve - suffrage expanded, parliamentary governments developed, and the concept of universal human rights took hold.

Democratic governance offers several key advantages over other systems. Most importantly, power originates from the people, not through force or hereditary rule. Regular elections and a free press hold leaders accountable, protect civil liberties, and help prevent the abuse of power. By providing legal and peaceful avenues for expressing grievances, democracies promote political stability and reduce the risk of violent unrest. When functioning effectively, democratic systems tend to encourage innovation, drive economic growth, and support higher standards of living.

The Western liberal order refers to the international system that emerged after World War II, largely shaped by the US and its allies. It is based on liberal democracy, free markets, human rights, multilateralism, and the rule of law. Institutions such as the United Nations (UN), the World Bank, the International Monetary Fund (IMF), the North Atlantic Treaty Organization (NATO), and the World Trade Organization (WTO) were established to promote economic stability, security, and international cooperation.

This system is increasingly challenged by rising powers like China and Russia, populist movements, economic inequality, and critiques of Western

interventionism. As these pressures mount, the resilience of Western democracy and its core values will be tested in the years to come. Amongst the weaknesses and challenges of democracy is its vulnerability to manipulation, where populism, misinformation, and corporate influence can distort public decision-making; while elected officials prioritise short-term focus, i.e. immediate popularity over long-term policy effectiveness.

In order to function properly, democratic regimes depend on an educated and engaged public, which means that citizens must be informed and active. Voter apathy and disinformation undermine the established democratic rule. In some cases, elected leaders may even attempt to erode democratic institutions from within, consolidating power in ways that resemble autocratic rule.

Today many authoritarian regimes use the mechanisms of democracy, such as elections, to create an illusion of legitimacy while maintaining autocratic control. Some common strategies include rigging elections through ballot-stuffing, vote suppression, or disqualifying opposition candidates and controlling the media to ensure only state-approved narratives are heard; in addition to suppressing civil society and dissent through legal or extra-legal means. These hybrid regimes, often called "electoral autocracies," exploit democratic symbols while gutting democratic substance; elections become a mere performance, and power remains centralised in the hands of an elite.

Another strategy used by autocratic regimes that want to appear democratic is the creation of "loyal opposition" parties that simulate political competition, while ensuring real power remains untouched. Authoritarian leaders may also change the constitution to remain in power indefinitely by removing term limits, as Putin's regime has done in Russia. Authoritarian leaders may also change the constitution to remain in power indefinitely by removing term limits, as Putin's regime has done in Russia.

In our current era, we see a collision of rapid technological change, looming environmental catastrophe, and an erosion of the moral foundations that have historically underpinned our understanding of humanity. The modern world is marked by accelerating change. Climate change challenges not only our physical survival but also our social and economic infrastructures. Simultaneously, rapidly developing technologies are reshaping how we interact, work, and even think. These transformations occur at such a pace that societal institutions and individual human capacities often struggle to keep up. A dissonance that can lead to a sense of alienation, where the very essence of what it means to be human is questioned.



Emergent technologies, if not guided by robust ethical considerations, will increase social inequalities, invade privacy, or even create unforeseen risks that threaten our very existence. The urgent and complex challenges posed by climate change require a collective and morally grounded response. The possibility of a devastating war, much more destructive than the First and Second World Wars, looms in the background. Without a commitment to ethical reasoning, political and economic systems may not adopt the drastic measures necessary for the survival of the human species on the planet.

In the 21<sup>st</sup> century, we must reclaim our humanity by reconnecting with our ethical roots - embracing rationality, reflection, and moral commitment. This requires integrating ethical reasoning and critical thinking into education, empowering individuals to navigate the complexities of today's moral challenges. Governance systems must shield themselves from short-term pressures and vested interests that threaten long-term ethical decision-making. The crises we face are no merely technical or environmental - they are deeply moral at their core. It is incumbent upon the most knowledgeable among us to foster open, informed conversations about the ethical implications of technology and environmental policy.

As humanity faces existential threats, abandoning a Kantian commitment to rational and ethical behaviour risks more than just policy failures - it endangers our shared survival. Active hope, unlike passive wishful thinking, transforms overwhelming challenges into collective action. It empowers individuals to see themselves as agents of change, shifting the narrative from despair to participation. When grounded in action, hope drives scientific innovation, ethical policymaking, and sustainable solutions, reinforcing our moral responsibility to address issues like climate change, nuclear war threats, and unregulated AI development.

Active hope also fosters resilience by strengthening community networks that can withstand crises and promote long-term societal stability. An engaged and hopeful citizenry pushes for transparency, ethical governance, and sustainable policies, countering short-term interests and authoritarian tendencies. By reaffirming our commitment to ethical responsibility, active hope aligns with the Kantian imperative - urging individuals to work toward a just, sustainable future that upholds human dignity.

This book begins with an exploration of the philosophical meaning of hope, tracing its evolution across cultures and time. Rather than offering a comprehensive review, it highlights key ideas that will serve as a moral compass

throughout the book.

Chapter 2, *Knowledge and Expertise*, examines how knowledge has enabled human progress, laying the foundations for modern society and economic development through scientific and technological revolutions. However, this progress also has a dark side, including contributing to environmental degradation, increasing the destructive impact of war, and facilitating the spread of misinformation in the digital age. Moreover, while technology has given humanity unprecedented power, it has not necessarily led to greater happiness, leaving many vulnerable to false or simplistic beliefs.

Chapter 3, *Reality, Fake News and Post-reality*, looks at how social media has amplified misinformation and conspiracy theories. Emotional narratives, often linked to political ideologies, reinforce false beliefs, exacerbated by cognitive overload and an unwillingness to face uncomfortable truths.

Chapter 4, *Deterministic Chaos*, explores some scientific ideas about order and the ability of science to make predictions. In the 20<sup>th</sup> century the universe, once thought to be governed by precise deterministic laws and therefore predictable, moved towards unpredictability with the advent first of quantum mechanics and later of chaos theory, thereby revealing the limits of deterministic predictability, especially in complex systems. Today, chaos theory plays a dominant role in our understanding of complex phenomena such as meteorology and climate change.

Chapter 5, *Existential Threats to Humanity*, addresses low-probability, high-impact risks that could lead to the collapse of society or even the extinction of life on Earth. These threats, which are deeply intertwined with human activities and technological and economic developments, require urgent action because their consequences, if left unchecked, would be catastrophic and irreversible.

Chapter 6, *Ethical Dilemmas in the 21<sup>st</sup> Century*, examines the social instability of our times. In moments of uncertainty, society often seeks stability in strong leaders, a tendency exploited by fascist ideologies. The rise of populism has weaponised xenophobia, scapegoating and irrational fears in order to gain political power, reshaping global discourse in an extremist direction.

Finally, Chapter 7, *From Our Origins to the Far Future*, reflects on humanity's long-term trajectory - whether toward continuous progress or sudden extinction. The human drive for ambition has led to remarkable innovations but also to environmental degradation and exploitation. Recognising our self-destructive tendencies may be the key to overcoming them, fostering a more sustainable and meaningful existence.

# 1. Hope for Humanity

*"We must accept finite disappointment, but never lose infinite hope."*

Martin Luther King, Jr. (1929-1968)

Hope is a fundamental characteristic of human nature, with historical and cultural variations in interpretation and significance. Throughout history, individuals have placed their trust in a higher power, seeking divine assistance and protection. Hope is widely regarded as a positive quality in modern times, but it was viewed with some caution in antiquity, as it was believed that excessive hope could lead to moral and practical shortcomings.

The body of myths, stories and legends that originated in ancient Greece concerning deities, hero figures and the nature of the world, collectively known as Greek mythology, constituted an integral aspect of ancient Greek religion and culture. These myths were utilised to elucidate a plethora of foundational concepts, including the genesis of the universe, natural phenomena, human conduct, and social norms. The rich tapestry of Greek mythology is characterised by a multitude of deities and mortals, whose exploits frequently involve interactions with the divine.<sup>1</sup> In ancient Greece, mythology served a religious purpose but also offered a means for exploring universal themes such as love, power, fate, justice and mortality. The mythical stories were initially transmitted orally and subsequently recorded in epic poems such as Homer's *Iliad* and *Odyssey*, or in the works of Hesiod (c. 8<sup>th</sup> century BC), among others.



*Figure 1 According to the myth, the beautiful Pandora opened the jar and all the evils of the world were released, only hope remained at the bottom of the jar.*

The story of Pandora is an illustrative example of a myth that elucidates the genesis of human misfortune. Pandora was the first woman created by Hephaestus, the god of craftsmanship, at the behest of Zeus. She was the means by which Zeus sought to punish humanity, particularly Prometheus, the Titan who had stolen fire from the gods and given it to humans. In response, Zeus sought to redress the balance by giving humanity a gift that would ultimately lead to disaster. Hephaestus modelled Pandora from clay, Athena endowed her with life, Aphrodite made her beautiful, and Hermes bestowed upon her charm and curiosity. The abundance of gifts she received from the gods led Zeus to give her the name "Pandora" (from the Greek for "all gifts"). She was then sent to Earth, where she married Epimetheus. She was presented with a jar by the gods as a wedding gift,<sup>2</sup> but was cautioned against opening it. Nevertheless, Pandora's intrinsic curiosity – a quality bestowed upon her by Hermes – ultimately prompted her to breach the jar's seal. Upon opening the jar, Pandora inadvertently unleashed a series of misfortunes that subsequently affected humanity, including pain, suffering, disease, and death. Pandora was remorseful and tried to reseal the jar, but it was too late. Nevertheless, one element remained at the bottom: hope.<sup>3</sup>

The Pandora myth offers insight into the existence of malevolence and affliction in the world. It also illustrates the importance of hope, as it was the last remaining element after the advent of adversity. The myth suggests that, despite

the inherent challenges of existence, hope may serve as a vital source of solace and resilience for humanity.

### ***Hope in Human Behaviour***

Today, as in antiquity, human beings can exhibit behaviour similar to that of the mythical figure of Pandora, particularly in light of the technological advances, environmental impacts and ethical challenges of our time. Like Pandora, human beings are by nature curious and innovative, which drives them to explore, innovate and push the boundaries of knowledge. The quest for understanding and progress, exemplified by the unravelling of the mysteries of the atom, genetic engineering and artificial intelligence (AI), is similar to Pandora's act of opening the jar out of curiosity and inadvertently releasing unknown, and sometimes fatal, forces.

Just as Pandora unleashed unintended suffering upon the world, the fruits of human ingenuity can sometimes have unforeseen and negative effects. The Industrial Revolution, for example, brought economic growth but also unfortunate environmental consequences, contributing to pollution, loss of biodiversity and ecological disasters. Similarly, nuclear technology brought with it both promise and danger: power plants to provide abundant energy, but also terrifying weapons of mass destruction. The advent of AI and robotics has been greeted with great optimism, but has also raised concerns about job loss, invasion of privacy and ethical concerns. In this sense, humanity's actions often lead to both progress and harm, much as Pandora's jar unleashed both misery and hope.

Despite life's many difficulties, especially in the most desperate situations, for example during a war, people maintain the tenacity to go forward and find solutions to make the situation more bearable. In our times, the many challenges we face, such as pandemics, climate change, wars and market turmoil - all require humanity's ability to persevere, adapt and find solutions, thereby reflecting a sense of hope for a positive outcome at the end of the road. This human attitude can be seen as the enduring presence of hope in Pandora's jar. As humankind, we must learn from our mistakes. The myth of Pandora teaches us to strike a balance between curiosity and innovation on the one hand, and responsibility and foresight on the other. The challenge for modern society is to harness the potential of human progress while minimising the risks. Ingenuity and hope must lead us to a better future.

In everyday life hope often plays an important role in enabling individuals to cope with adversity, to improve their lives and to maintain a sense of optimism

about the future. In this sense, hope is an element of motivation, and in the absence of hope, individuals may experience feelings of sadness or despair, lacking the motivation to face life's challenges. Hope is closely related to human resilience, that is, the ability to recover from setbacks, to rebuild after disasters and to persevere in the face of adversity. Hope provides us with the strength to overcome human suffering. Without it, despair and fear take over. In the context of mythology, hope is the belief that there is a future beyond pain. The myth of Pandora illustrates that despite the existence of suffering, hope serves as a sustaining force that enables individuals to persevere and move forward.

If humankind sees hope as a form of self-deception, then we must recognise that hope can play a more complex and challenging role in life. If hope is an illusion, then it can only serve to prolong suffering: some people may believe that circumstances will improve despite evidence to the contrary, leading to disappointment and a sense of anxiety. The absence of hope makes it difficult for a society to tackle systemic problems because most people would believe that such problems are unsolvable. That is, there is no hope of a solution. The resulting passivity inhibits any attempt to find solutions through action.

Hope could be seen as a form of false belief, i.e. a form of avoidance or even a delusion that becomes a means of escaping reality. For example, if individuals and societies continue to rely on technological solutions that have yet to be developed, or on the actions of future generations, rather than taking swift and decisive action to address the reality of climate change today, it may become increasingly difficult to address the crisis.

Some philosophers view hope as a psychological aid, providing comfort and making life's challenges more bearable. This is similar to how other illusions or coping mechanisms can function. It is not uncommon for individuals diagnosed with a terminal illness to maintain a sense of hope, despite the considerable odds stacked against them. While this hope may not ultimately influence the outcome of their health, it can provide emotional relief and help to prevent despair. It may therefore be the case that even when hope is delusional, it can still serve a functional role in human psychology.

It is possible that illusory hope sometimes justifies unfounded optimism. The positive tendency to hope for the best can sometimes lead to mistaken decisions and reckless behaviour. Individuals may believe that they have more control over their lives and destiny than they actually do. They may also hope to influence external forces that are beyond their control. Such illusions can prevent individuals from fully accepting and coping with the randomness and unpredictability of life. Provided that hope remains objectively linked to reality,

and not a form of evasion of responsibility, it can still serve as a motivation for greater commitment to finding solutions. Indeed, humanity could not have achieved as much as it has without hope. Exploration of the unknown is often driven by the desire to discover something better, despite significant risks and uncertain outcomes.

### ***On The Absurdity of Life***

For the French-Algerian philosopher and writer Albert Camus (1913-1960) life has no meaning or purpose, yet people continue to search for meaning and hope despite the futility of their actions. This is the human paradox of maintaining hope without a logical basis. Camus saw hope as an irrational aspect of the human condition, necessary only for psychological survival. Indeed, the notion of the absurd is at the heart of Camus's philosophy, which addresses the conflict between the human desire for meaning and the indifferent universe.



*Figure 2 The writer Albert Camus photographed when he was 32 years old.*

For Camus, the absurd arises from the contradiction between two realities. On the one hand, human beings have an innate desire to find meaning, purpose and order in life, as they seek to understand their existence, to find explanations for suffering, and to gain a sense of understanding in the context of the chaos that surrounds them. On the other hand, the universe is essentially indifferent to human life and offers no intrinsic meaning or purpose: Camus argued that the

nature of existence is such that life can be unpredictable, chaotic and full of suffering for no clear reason at all.

In essence, Camus proposes the idea that even in the face of absurdity, it is still important to live with passion and intensity. Despite the absence of an overarching purpose or an afterlife, one can be fully engaged in the present and appreciate each experience for what it is, despite its fleeting nature. The absurd person is not looking for hope or a definitive solution. On the contrary, he can choose to embrace the journey without necessarily expecting a final and meaningful conclusion at the end.

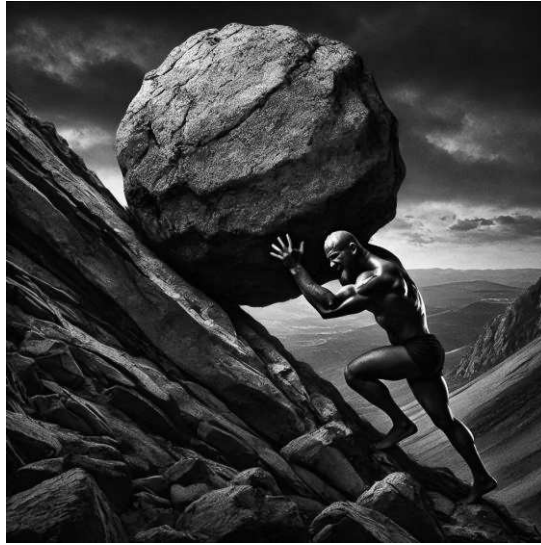
Camus suggests that human beings find meaning in the act of living, which includes experiences, passions, joys and struggles. He does not share the views of those who are nihilists or who hope on the basis of their religious beliefs. For him, nihilism, which denies all meaning and value, is a kind of philosophical capitulation. On the other hand, he does not subscribe to theistic belief or the notion of an afterlife or a divine plan as a source of ultimate meaning. The search for meaning from external sources can be avoided and life can be accepted as it is, without illusions or false expectations, striving to live fully and freely in the present moment. This involves living a life of authenticity and passion, while acknowledging the reality that the universe is indifferent and life has a finite duration: the absurd is an inherent aspect of reality, not something to be resolved.

In *The Myth of Sisyphus*,<sup>4</sup> Camus reinterprets the ancient Greek myth as a powerful metaphor for the human condition and the absurd. Sisyphus, condemned by the gods to eternally roll a boulder up a hill only for it to roll back down each time he nears the top, becomes for Camus a symbol of humanity's struggle to find meaning in a world that offers none. Rather than despair, however, Camus sees defiance and dignity in Sisyphus's persistence. By embracing the absurdity of his fate and continuing his task without illusion, Sisyphus transforms his punishment into a form of rebellion. As Camus famously concludes, "One must imagine Sisyphus happy" - not because his task is easy, but because he owns it, and in doing so, affirms his freedom and his humanity.

Although Camus's philosophy is compelling, it has been subject to considerable criticism: Not everyone finds Camus' defiant embrace of life convincing or sufficient. Confronting the absurd can indeed lead to nihilism, especially for those who feel overwhelmed by the lack of intrinsic meaning. The 20<sup>th</sup> century has shown how the collapse of traditional systems of meaning can lead to dangerous ideologies. This raises the question of whether Camus's approach can work for society as a whole, or whether it is a philosophy more suited to a few thoughtful individuals. Critics argue that without a metaphysical



basis for morality, ethical principles risk becoming arbitrary. Camus counters by appealing to common human experience, but this argument is not universally convincing.



*Figure 3 In the myth, Sisyphus is condemned as a divine punishment to push a large boulder up a slope, symbolising his eternal struggle. In Camus's vision, Sisyphus is happy because the struggle itself gives him meaning.*

That a man living a life without a purpose can still be kind to his fellows is not only possible but, for Camus, essential to living authentically. The problem is that this approach only works if one accepts life's lack of intrinsic purpose without succumbing to despair or nihilism. This entails embracing the freedom and responsibility to define one's own values by living with passion and finding solidarity and compassion in the common human condition. It must be assumed, however, that not everyone is able to embrace the absurd in this way. For many, the absence of meaning can lead to existential despair, moral relativism or the construction of dangerous ideologies, thus underlining the importance of promoting critical thinking, ethical education and communal bonds to help individuals meet the challenges of a purposeless world.

## ***Comparison Between the Myth of Pandora and that of Sisyphus***

The Greek myths of Pandora and Sisyphus offer two complementary perspectives on the human condition, each exploring suffering, struggle, and the search for meaning. The myth of Pandora presents suffering as a divine punishment, unleashed by higher forces beyond human control. When Pandora opens the jar given to her by the gods, she releases evils and misfortunes upon humanity: human beings are portrayed as passive, subject to an imposed fate. Yet, at the bottom of the jar remains hope - the only solace granted - a fragile comfort in a now-hostile world.

In contrast, the myth of Sisyphus reflects an active response to the absurdity of existence. Condemned by the gods to eternally push a boulder uphill, only to watch it roll back down each time, Sisyphus embodies the human who confronts an unending and seemingly meaningless struggle. But in this endless toil, Camus recognises a form of freedom: by accepting his condition without illusions and refusing to give up, Sisyphus transforms his punishment into an act of rebellion. His conscious resistance becomes a way to create meaning in a universe that offers none.

Whereas Pandora represents collective suffering and human helplessness in the face of divine forces, Sisyphus symbolises individual resilience and the courage to live in spite of the absurd. In the first myth, hope is granted from the outside as a final gift, almost as a form of grace; in the second, it arises from within, from the attitude of one who chooses to persevere.

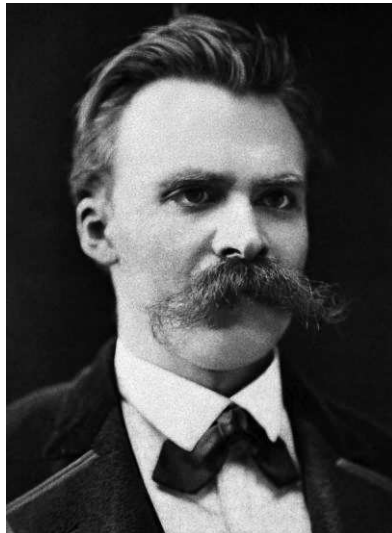
This tension between passivity and action can be further explored through the philosophical reflections of Gottfried Leibniz (1646-1716), who addressed the problem of evil through the concept of theodicy. Leibniz argued that we live in "the best of all possible worlds," where suffering plays a necessary role within a broader and benevolent divine plan. Unlike Pandora's myth, where evil is a punishment for human disobedience, Leibniz's vision sees pain as justified by its place in a higher, purposeful order.

These three perspectives - mythological, existential, and theological - offer different yet intertwined approaches: from suffering imposed and passively endured, to the personal challenge of the absurd, and finally to the search for a metaphysical order that redeems pain itself.

### ***Hope as a Necessary Delusion***

For the German philosopher Friedrich Nietzsche (1844-1900), hope is one of the illusions that are part of human existence, and without it, life would be difficult. Although an illusion, hope is beneficial in that it allows people to derive meaning and purpose from an otherwise chaotic world. Seen as a necessary illusion, hope can be conceptualised as a coping mechanism that gives individuals the strength to cope with the vicissitudes of life, whether there are reasons to hope or not.

Given the profound effect of hope on human psychology, it is probably superfluous to ask whether it can be considered an illusion or not. Although it may be considered irrational, it is nevertheless necessary for human beings to cope with the complexities of the world and the difficulties of life. Nietzsche's view of hope as a necessary illusion is situated within his overall critique of human existence, morality and the nature of suffering. Nietzsche does not necessarily see hope as a purely positive force. Rather, he sees it as a potentially misleading phenomenon that can lead humanity into cycles of false expectation and passive endurance. His perspective is set in the context of his philosophical approach to life, which challenges traditional moral values and encourages the acceptance of reality in all its forms.



*Figure 4 The philosopher Friedrich Nietzsche, photographed by Friedrich Hermann Hartmann (ca. 1875).*

He sees the myth of Pandora in a negative light, as he argues that the gods left hope as their final act of cruelty towards humanity. But despite his reservations, Nietzsche does not completely reject the concept of hope, seeing it as a vital, if illusory, phenomenon that plays a crucial role in human survival, and suggesting that people need illusions to survive. Since life is full of suffering, it is understandable that people cannot face the full weight of their existence without some form of consolation, otherwise the experience of life might become unbearable. Nietzsche's concept of the will to power suggests humans strive to survive and assert themselves, even if it means clinging to delusions. Hope, a kind of vital lie, helps humans navigate an existence that might otherwise seem absurd or meaningless. His "superhuman" (*Übermensch*) is someone who foregoes comfort and creates meaning.<sup>5</sup> The superhuman does not rely on hope for salvation or improvement of his condition. He confronts reality and shapes his life, because according to Nietzsche, hope is of no use when it replaces action. Hope must be bold and creative.

Nietzsche admired the ancient Greeks because they faced the harsh realities of life - pain, suffering and impermanence - particularly through their tragic dramas, without seeking solace in comforting illusions such as hope. He saw Socratic optimism as potentially undermining human resilience because it presupposed the achievement of rational progress, which he considered as an unattainable ideal.

On the one hand, hope can sometimes inadvertently lead to a sense of fragility and stagnation, as well as a reliance on external factors such as religion, tradition, or societal norms. However, Nietzsche also acknowledges that hope plays an important role in helping people cope with life's challenges and uncertainties. His objective is to transcend hope through the will to power and *amor fati*. He encourages humanity to move beyond passive hope and embrace a more courageous and self-determined existence.

### ***Humankind Today and in The Past***

It is striking to observe how the notion of life's purpose - what individuals perceive as their destiny - has evolved from the 18<sup>th</sup> century to the present day. The contrasting philosophies of Immanuel Kant (1724-1804) and Albert Camus help illuminate this transformation.

Kant, the Enlightenment philosopher and father of deontological ethics, viewed human beings as rational agents, morally bound to pursue the common good. In his 18<sup>th</sup>-century framework, purpose is found through the exercise of

reason and the fulfilment of moral duty. A meaningful life, for Kant, is one lived in accordance with the categorical imperative - a universal moral law grounded in rational principles. Freedom, in this view, is not the absence of constraint, but the capacity to will what is morally right.

Camus, writing in the 20<sup>th</sup> century, offered a radically different vision. He argued that humans are driven by a search for meaning in a universe that offers none. Reason, far from delivering moral clarity, reveals the absurd - the gap between our longing for meaning and the world's indifference. For Camus, there is no transcendent purpose or moral order. Instead, we must face the absurd honestly and live with authenticity, creating meaning through personal freedom, compassion, and solidarity. Ethics, in this context, is not dictated by universal laws but shaped by the individual's response to the human condition.

While Kant believed in a moral order supported by reason - and viewed belief in God and the afterlife as necessary, though unprovable, "postulates of practical reason" - Camus rejected such metaphysical consolations. He saw religious belief as a flight from reality, asserting instead that meaning must arise from finite human experience.



*Figure 5 Portrait by Johann Gottlieb Becker (1720-1782) of the German philosopher Immanuel Kant, 1768.*

In essence, Kant locates life's purpose in rational duty and moral law; Camus, in the individual's defiant creation of meaning within an indifferent universe. These divergent views reflect a broader shift in modern thought - from a belief in

objective moral order to an existential focus on subjective meaning and personal responsibility. Kant and Camus offer contrasting responses to the human condition: Kant affirms universal moral laws derived from reason; Camus embraces individual freedom and moral responsibility in a world devoid of ultimate meaning. Modern challenges - from cultural pluralism to existential doubt - have further complicated belief in a single, rational moral framework, raising questions about the universality of ethics in an increasingly fragmented world.

Starting with the Industrial Revolution and accelerating in the late 20<sup>th</sup> century, societal focus shifted toward personal autonomy and self-expression, values that are celebrated in liberal democracies but that often come at the expense of collective responsibilities. The mass production and marketing of goods has turned consumption into a marker of identity and status. The philosopher Zygmunt Bauman (1925-2017) argued that in a consumer society, individuals are increasingly evaluated based on their purchasing power and possessions, leading to a culture of disposability - not just of goods, but also of values and relationships.<sup>6</sup> This shift has led many thinkers to argue that modern societies suffer from moral and existential vacuums. Without shared purposes or higher ideals, decadence - a focus on pleasure and short-term gratification - often fills the void. In particular, the lack of overarching moral frameworks in contemporary societies has implications on social fragmentation, in which the absence of shared ethical principles increases polarisation and tribalism. Consumerism often neglects long-term sustainability, exacerbating problems related to ecological degradation, while the relentless pursuit of individual success and material wealth often leads to stress, anxiety, and a sense of alienation.

Revisiting the ideas of community and universal ethics may represent a way forward: while Kantian universalism may not fully align with today's pluralistic societies, efforts can be made to rediscover shared values, especially in areas like human rights, environmental stewardship, and global justice. Thinkers like Jürgen Habermas (b 1929) suggest that dialogue and empathy can foster ethical frameworks adaptable to diverse societies without sacrificing moral coherence.<sup>7</sup> Educational reform is indispensable. Fostering a sense of civic duty, critical thinking, and ethical reasoning in education could serve as counterbalance to the excesses of consumerism and individualism.

## ***Anxiety About the Future***

A defining feature of 21<sup>st</sup> century modernity is the dissolution of conventional narratives that previously provided individuals with a sense of identity, community and purpose. This phenomenon is at the root of the pervasive anxiety and loss of meaning in our society, as well as the main justification for the rise of populism in politics.<sup>8</sup> The promises of the 20<sup>th</sup> century to free society from poverty, rigid state control and religious dogma have instead amounted to exaggerated individualism, consumerism and rapid technological development. Rather than fostering greater freedom and authenticity, these developments seem to have eroded a deeper existential meaning. Social media has exacerbated the crisis by reducing human interactions to algorithms that generate profit for multinationals through data collection, as we will discuss later in this book. As a result, many individuals are adrift, questioning the very nature of what it means to be human.

In the face of the weakening of social bonds, rebuilding strong communities based on shared values and meaningful relationships between people is of paramount importance. Volunteering, local activism or the simple act of interacting with others face to face can create spaces where authentic human connections flourish. Belonging to a community gives individuals a sense of togetherness and purpose, which can be a deeply satisfying experience.

Despite the decline of overarching (e.g. religious or ideological) narratives, individuals and communities could work together to create new, meaningful narratives, for example around global challenges such as climate change, social justice or the ethical use of technology. Such narratives have the advantage of bringing people from different backgrounds together. In today's consumer society there is a widespread belief that the acquisition of brands and material goods, rather than conscious consumption, can provide a sense of purpose. Whereas a reduction in the number of material goods and an increased focus on experiences, relationships and personal development can lead to a greater sense of satisfaction.<sup>9</sup>

While in theory the use of social media can facilitate connections, it can simultaneously perpetuate superficial interactions and exacerbate anxiety, particularly among adolescents,<sup>10</sup> through the process of comparison. The development of digital literacy can enable individuals to engage with technology in a conscious manner, thereby avoiding harmful patterns such as compulsive scrolling or the consumption of misinformation. The establishment of boundaries

with regard to technology, such as the implementation of scheduled respites from social media usage, would have the potential to safeguard mental wellbeing.

A return to existential or spiritual questions, whether through religious traditions or secular philosophical inquiry, can offer people a deeper sense of purpose and meaning. Philosophers such as Viktor Frankl (1905-1997) have suggested that meaning is found through engagement with something greater than oneself - whether through love, work, or overcoming adversity.<sup>11</sup>

It is of particular importance that adolescents, who are most exposed to consumerism and social media, should also learn about values that transcend materialism. Young people in particular are influenced by the culture of consumerism, peer pressure and the media, that place a high value on material success. However, adolescence is also a time when young people are searching for meaning and developing their identity, making it a suitable time to introduce deeper values. Adolescents frequently demonstrate a proclivity for narratives that exemplify tangible, relatable scenarios. It is important that they learn about individuals who have chosen to assist others, contribute to their communities, or pursue their passions or ideals, as opposed to focusing solely on financial gain. The life stories of people like Malala Yousafzai (b 1997) or Nelson Mandela (1918-2013), can serve as powerful role models for adolescents. It is crucial to showcase individuals who have devoted their lives to educational, social or environmental causes, and who in addition to gaining profound satisfaction, are celebrated for their beneficial impact on the society.

The rapid pace of technological development, particularly AI, surveillance, and data-driven economies, raises questions about human agency.<sup>12</sup> Emphasising ethics in the creation and use of technology is therefore essential. Greater transparency, regulation, and human-centred design can ensure that technology serves humanity rather than diminishing it. Promoting human dignity in these spaces can uphold what it means to be human. Ultimately, adopting the approach espoused by Camus can facilitate a more liberating outlook on the vicissitudes of life. Existentialist philosophy encourages individuals to assume responsibility for their own lives and to define their own meaning, even in the context of an uncertain world. Those who adopt this perspective may discover a profound sense of personal agency. By fostering deeper human connections, reclaiming purposeful narratives, and engaging mindfully with both consumption and technology, humanity can begin to restore a sense of meaning in our rapidly changing world.



## ***The Denial of Death***

Most people are afraid of dying. The extent of this fear can vary from person to person. In general, a certain amount of fear is healthy, as it makes us careful not to take too many risks. However, in some cases people may have an unhealthy fear of dying. The fact that human behaviour is largely determined by fear of death is the central theme of the philosophy of Ernest Becker (1924-1974), an American cultural anthropologist and writer. Becker argues that the awareness of our mortality, i.e. the knowledge that we will die at some point in the future, gives rise to a pressing existential anxiety that pervades almost every aspect of our lives.<sup>13</sup> To cope with this fear, people develop what Becker calls “death denial”, which involves the construction of complex psychological defences to avoid the realisation of their own mortality.

For Becker, humans have a dual nature: On the one hand, we are physical creatures, bound to biological needs and the inevitability of death, not unlike other animals. On the other hand, we are symbolic creatures, endowed with consciousness, imagination and the ability to transcend mere physical survival through constructs such as culture, science, art, religion and ideology. This duality - being both animals with a survival instinct and creatures capable of contemplating our own death - creates an inherent psychological tension. As we strive to live and find meaning, we are constantly aware, albeit unconsciously, of our impending death. The fear of death is so pervasive and terrifying that most people are unable to face it directly. In order to cope with it, the individual focuses on other aspects of life, pushing the fear of death out of consciousness.

People then cling to belief systems, such as religion, nationalism, or social norms, that offer a sense of purpose, structure and continuity beyond individual life. These belief systems often promise some form of immortality, whether literal (life after death, reincarnation) or symbolic (inheritance, enduring memory, lasting achievements). In one way or another people try to become “heroes”, striving for a significance or greatness that transcends their individual death. This may be through action, creative work or by becoming part of something larger, such as a cause, a religion or a community. By contributing to something long-lasting, people symbolically defeat death by ensuring that they will be remembered or that their influence will endure.

All societies create systems of meaning, such as religions, ideologies or rituals, that help individuals feel connected to something permanent. Becker argues that culture essentially acts as a primary buffer against the fear of death, providing myths and symbols that suggest that human beings are more than mortal beings

destined to disappear without a trace. Creating a sense of self-worth can lead individuals to detach themselves from the reality of their own mortality. In the context of interpersonal relationships, professional endeavours and personal projects, individuals can develop an exaggerated sense of self-worth, which can lead to a sense of invincibility or increased relevance. This ends up denying the ultimate destiny that awaits all living beings.

Religions frequently proffer reassuring accounts of an afterlife or of spiritual continuity, thereby mitigating the distress associated with the idea of death. Political and social ideologies provide individuals with the opportunity to identify with a larger collective, such as the nation or humanity, thereby imparting a sense of belonging to a long-lasting entity. Furthermore, artistic and intellectual pursuits permit individuals to create enduring contributions, thereby ensuring that their legacy persists beyond their mortal existence. These cultural constructs provide individuals with the illusion of meaning and permanence in life, thereby protecting them from the stark reality of their ultimate demise.

One of Becker's most profound insights is his analysis of the human tendency to undertake heroic projects, which he defines as an effort to create meaning and leave a lasting legacy. Individuals are driven by a desire to achieve symbolic immortality, either through creative endeavours, the establishment of social institutions, or by leaving a lasting imprint on society. However, this aspiration for meaning can also give rise to conflict. It is not uncommon for individuals to engage in competitive discourses, in which they assert the superiority of their own projects or worldview. Such discourses can give rise to social conflicts, violence and even wars. Ideologies, religious or political systems that promise the transcendence of death can also result in fanaticism, as individuals are driven to defend these systems at all costs. When individuals are incapable of maintaining their psychological defences against death, they may succumb to the overwhelming terror of mortality. A complete rejection of the concept of death can result in the development of neurosis, anxiety disorders and mental illness, with symptoms including obsessive behaviour, depression or existential crises. Becker posits that a significant proportion of contemporary psychological distress can be attributed to the dissonance between the pursuit of meaning and the inevitability of death.

While acknowledging the role of denial in human psychology, Becker advocates a more authentic approach to death: Rather than avoiding or denying the reality of death altogether, individuals should strive to achieve a state of balance between acknowledging death and pursuing projects that are meaningful to them. In this way, one can face the fear of death while engaging in creative

and meaningful activities. In fact, facing death can give way to a freer and more meaningful existence, where one is not constrained by fear, but rather driven to live fully, as also exemplified by Camus' philosophy.

### ***Hope (and Lack Thereof) in Modern Society***

We live in an era marked by rapid change, widespread uncertainty, and multiple crises - economic, political, environmental, and technological. In this context, hope plays a fundamental role, influencing not only individual wellbeing but also collective movements and global socio-political dynamics. Today, more than ever, hope is a decisive psychological and social force: it is what can enable individuals and communities to face challenges, imagine alternatives, and commit to building a better future.

In a world beset by growing inequalities, hope provides the capacity to resist adversity and the courage not to give up. On a personal level, it contributes to mental health, strengthening resilience and supporting long-term goals. Hope is what drives individuals to pursue their studies, chase professional dreams, and cultivate personal growth, acting as a protective factor against anxiety and depression, and nurturing trust in the possibility of positive change - even in the darkest times.

Research in the field of positive psychology shows a correlation between maintaining hope and high levels of emotional wellbeing and personal fulfilment.<sup>14</sup> But hope is not only a personal resource: it also plays a decisive role in processes of social and political change. It provides the energy needed for collective action, making possible the emergence of movements that oppose oppression and fight for justice. Historically, hope has been a driving force in many key struggles - from civil rights and independence movements to labour battles.

Even today, hope drives activists and ordinary citizens to confront complex challenges such as climate change, racial injustice, and gender inequality. Despite setbacks and slow progress, hopeful individuals persist - because hope enables them to envision and believe in a better future. The pursuit of social justice inspires political engagement, fosters civil dialogue, and sustains calls for reform, even in societies marked by fragile or corrupt institutions. This enduring hope reinforces the belief that human progress, cooperation, and collective action are vital to overcoming the world's most pressing problems.

Hope also plays a central role in scientific and technological progress. The idea that human ingenuity can overcome great challenges inspires the search for

solutions to climate change, such as green technologies, and drives medicine in the fight against disease. Similarly, space exploration reflects the human desire to push beyond known limits in a hopeful search for a better future.

In the economic sphere, hope is linked to social mobility - that is, the possibility of improving one's condition through education and personal effort. Despite growing inequalities and economic instability, many still view education as a path to advancement. Even in the digital economy, the hope for success and financial independence drives innovation, entrepreneurship, and the creation of new enterprises. The active role of young people in social and environmental movements, such as "Fridays for Future," demonstrates how hope can guide choices toward sustainability, prioritising the common good over immediate profit.

By contrast, cynicism - or the absence of hope - stands in the way of progress. While it often emerges as a defence against disappointment, cynicism risks becoming a self-fulfilling prophecy, stalling any possibility of change. When people believe that nothing can improve, they withdraw from civic and political life, weakening democratic institutions. Cynicism breeds mistrust, obstructs collaboration, and deepens social polarization. It can also lead people to dismiss reforms and movements as naïve or hypocritical, helping to preserve an inadequate status quo. On a personal level, excessive cynicism takes a toll on mental health, fostering isolation, pessimism, and a sense of powerlessness that stifles the will to act.

In today's world, cynicism is on the rise, and social media often amplifies it by fuelling distrust toward elites, the media, and institutions. While some scepticism is warranted, excessive cynicism can be corrosive - it leads people to disengage from civic life, weakens democratic participation, and fosters polarization. That is why it is essential to strike a balance between hope and realism. Blind optimism may ignore real problems, but total cynicism paralyses action. A more constructive approach is what we might call "healthy pessimism": a clear-eyed, grounded perspective that acknowledges obstacles without giving up on the possibility of progress. Change is never guaranteed, but it is precisely this uncertainty that makes committed action both urgent and necessary.<sup>15</sup>

Pessimism should not be confused with fatalism. Acknowledging the seriousness of a situation does not necessarily mean surrendering to helplessness. We need to cultivate a "critical hope," based on independent thinking and civic responsibility, which helps prevent complacency and strengthens the demand for transparency, fairness, and innovation. Only by keeping alive this tension

between dream and reality can a society successfully face the global challenges of the modern world.

### ***A Hopeful Future vs. a Chosen Dystopia***

Contemporary society is undergoing a dystopian transformation: with increasing speed, society seems to be moving in a direction where money, power and personal interest are eclipsing the ideals of collective progress and human dignity. Powerful forces driven by wealth, influence and the erosion of democratic values seem to be at work, raising urgent questions about the real trajectory of our societies. The preoccupation with money as the sole arbiter of a person's worth is a dehumanising doctrine. This doctrine serves to reduce the complexity of human identity, which includes creativity, empathy and the ability to make a meaningful contribution, to a mere monetary figure, suggesting that the richer an individual is, the worthier he or she is of living and the more important he or she is to society. This approach, perpetuated by the super-rich and their interests, seems to infiltrate every sphere of society, from politics to science to the arts, distorting priorities and fundamental choices.

A fundamental paradox inherent in populism is that the very individuals most adversely affected by this imbalance, by global inequality, often chose to vote for extremist leaders or parties that perpetuate the very system of inequality itself. The phenomenon is partly attributable to economic desperation and a sense of abandonment by the so-called political elite, which has left individuals vulnerable to populist rhetoric promising change. It is also partly attributable to cultural resentment, with leaders such as Donald Trump (b 1946) channelling grievances into a culture war narrative, thereby distracting from systemic inequality. Unfortunately, in the modern digital age, the dissemination of propaganda has accelerated, and complex issues are simplified for the general public using emotionally charged phrases. The dissemination of disinformation is a key factor in the exacerbation of societal divisions and polarisation.

At the time of writing this, it has been confirmed that Donald Trump has been re-elected as the 47<sup>th</sup> President of the United States. Depending one's political orientation, the re-election of Trump can be interpreted differently. From the perspective of Republican Party voters, the election results signify the triumph of popular common sense, driven by the need to satisfy basic needs and the rejection of the intellectual and media elites. Conversely, the Democratic Party voters interpret the election results as indicative of the "stupidity" of the masses, duped

by a boastful figure who has disregarded their racial and class allegiances. However, a more objective analysis of the results reveals several key insights.

Firstly, there is a notable racialization of American society, as evidenced by the significant voting patterns (91% of black women voted for Kamala Harris; 60% of white men voted for Trump). Secondly, there is a discernible deculturation of the conservative electorate, whereby Republican voters who do not have higher education credentials outnumber Democratic voters by three to one. Thirdly, there is a marked leftism among the Democratic base, as evidenced by the 12 million votes for Biden in 2020 that were cast for Harris in 2024, due to perceived unequivocal support for Israel and a perceived lack of environmental and civic projects.<sup>16</sup> There are indications that the spread of misinformation, often through the social network X, formerly Twitter, owned by Elon Musk (b 1971), who campaigned for Donald Trump, also played a role. Furthermore, this second Trump administration could lead to significant setbacks in crucial areas such as climate agreements, geopolitical stability, and human rights.

Yet, most people fail to see the danger of the current situation because of a kind of historical amnesia - the belief that fascism, authoritarianism and societal collapse are relics of the past. People probably underestimate how easily democratic norms can erode when challenged by strong, charismatic men who exploit fear and division.

In order to counteract the forces propelling us towards a dystopian future, it is imperative that society changes the narrative of wealth, power and human worth, while placing the policies that promote the principles of equality, education and responsibility at the centre of the political debate. Moreover, the survival of the human species depends on the collaboration of the international community to address pressing issues such as climate change, technological ethics and human rights, while at the same time resisting the isolationist tendencies exhibited by leaders like Trump.

Urgent action is required to educate citizens about the issues at stake and empower them to act. Addressing misinformation and propaganda, cultivating critical thinking, and re-establishing the value of empathy and dialogue are all of paramount importance. The stakes are considerable, not only for the US but for the planet as a whole. The failure to address these issues could have catastrophic consequences for humanity. We must recognise that a second opportunity might not come.

## ***Managing the Grief of Doomsday***

Created in 1947 by J. Robert Oppenheimer (1904-1967), the 'father' of the US atomic bomb, and other scientists, the *Doomsday Clock* is updated annually by the *Bulletin of the Atomic Scientists*. Since 2007, it also considers other threats, such as AI and climate change, in addition to the risk of nuclear war. The Doomsday Clock symbolises humanity's proximity to existential risks. In 2025, it signalled that humanity had come even closer to catastrophe in the past year. Warlike trends have continued, and despite the unmistakable danger signals, national leaders and their societies have failed to do what is necessary to change course. As a result, the Doomsday Clock has been moved from 90 to 89 seconds to midnight - the closest it has ever been to disaster. With the world already perilously close to the brink, a shift of even one second must be seen as a sign of extreme danger.

There is a worrying convergence of threats. Nuclear war is the most immediate danger as major powers, such as the US, Russia and China, invest in the expansion and modernisation of their arsenals, risking accidents or miscalculations. Russia's nuclear rhetoric and its policy of "brinkmanship" increase global uncertainty. The interconnected nature of these risks can possibly contribute to a loss of their control. The Doomsday Clock's message is a call to action, emphasising the urgent need for diplomacy, arms control and global cooperation, as humanity's margin for error continues to shrink, while lacking enough concerted efforts to reduce these risks. Confronted with the existential threat posed by "doomsday" a delicate equilibrium must be struck between emotional resilience and constructive action. Allowing despondency to overwhelm can result in paralysis, while the strategic conversion of this energy into activism can effect meaningful change.

First, we must have the courage to acknowledge the gravity of the present moment. This may, of course, make us feel uncomfortable, as it is an intrinsic aspect of human psychology to experience emotions such as sadness, anger and fear in response to perceived existential threats. Indeed, such emotional reactions are the brain's natural response to uncertainty about our future. On the other hand, by engaging in discussions with people who share our concerns about these issues, we can avoid feeling isolated in this endeavour, i.e. building a community can help us find the strength to face the challenges ahead.

In identifying appropriate actions, one may consider personal initiatives such as reducing one's carbon footprint, engaging in political advocacy, and pursuing more training and education on environmental and social issues. It is important

to recognise that every effort, no matter how small, is valuable and should be given due consideration. It is moreover important to discover our strengths and use them to maximise our impact, for example through writing (as I decided to do), or through organisation, innovation or education. Instead of despairing over what has been lost, we should rather consider joining together to preserve what can still be saved. This is very important because small successes in our initiatives can inspire hope in others. The right balance between hope and realism must be reached: optimism in the absence of action is naive, but a combination of realism and hope can be a highly motivating approach.

Because it is psychologically difficult to work towards a goal that we ourselves cannot imagine, we should have as clear a vision as possible of a prosperous and sustainable future that is worth striving for. Most people, whatever their background, care about health, family and leaving a legacy for future generations. Drawing on these values can unite disparate groups to collective action. Harnessing common interests, even across ideological divides, makes change possible. Every person who chooses engagement over apathy increases the chances of a better world in the future. After all, no one can benefit from a degraded and uninhabitable planet.

The human tendency to avoid facing uncomfortable truths, especially existential threats such as climate change, nuclear war or global inequality, is understandable - it is a defence mechanism against overwhelming fear - but unfortunately it also hinders the dialogue and action needed to address these crises. Despite the difficulty of doing so, these existential issues and their impact on the future of humanity should be addressed in a public forum.

To this end, empathy in recognising the discomfort that individuals feel in the face of existential threats is the way forward: we should recognise the legitimacy of these emotions and foster an environment in which individuals feel comfortable expressing their concerns. Rather than focusing exclusively on adversity, the emphasis could be shifted to opportunities for transformation, innovation and collective action. Indeed, people are more likely to get involved when they see practical and achievable steps rather than an overwhelming problem. Moreover, it is important to emphasise that everyone can make a meaningful contribution and that change happens through collective effort, not through lone heroes.

The obstacle we face is that the lack of consensus on the facts hinders the creation of a rational discourse and consequently prevents society from addressing the most pressing issues. A public forum for discussion is particularly necessary today because of the prevailing challenge of the spread of



disinformation on the Internet, which hampers our ability to first understand and then effectively address existential threats. Fostering open dialogue is an on-going process that requires patience and perseverance. By approaching these conversations with compassion, creativity and a focus on solutions, discomfort can gradually be overcome and a culture fostered that more consciously addresses the existential threats facing humanity.

### ***Cosmic Approach to Hope***

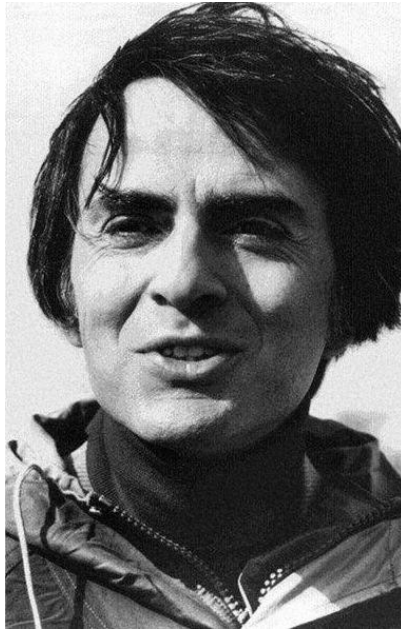
Carl Sagan (1934–1996), astronomer, astrophysicist, and renowned science communicator, held a vision of hope deeply rooted in his “cosmic perspective”. His idea of hope was not based on traditional religious or spiritual principles, but on a profound sense of wonder for the universe and on humanity’s potential to evolve through scientific knowledge, intellectual curiosity, and an awareness of our interconnectedness with the cosmos.

One of the central concepts of his thought was precisely the cosmic perspective the awareness of humanity’s smallness in comparison to the vastness of the universe. Paradoxically, this awareness not only instilled humility in him, but also inspired a deep sense of hope. Realising how small we are should compel us to care for one another and our planet more responsibly.

His famous reflection on the “Pale Blue Dot” - the image of Earth taken by the Voyager 1 spacecraft from six billion kilometres away - is emblematic of this idea. In that tiny speck of dust suspended in the darkness of the cosmos, Sagan saw both the fragility of our condition and the extraordinary uniqueness of life on planet Earth. From this came his hope that humanity could overcome its divisions and its drive toward self-destruction, and instead choose cooperation, science, and care for the fragile world we inhabit. Sagan writes:

*"It has been said that astronomy is a humbling and character-building experience. There is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known."*<sup>17</sup>

By recognising our shared existence on a small and fragile planet, humanity should overcome its divisions and unite as a species in pursuit of the common good. The cosmos, in its vastness, offers - according to Sagan - an antidote to narrow-mindedness and despair. Looking into the immensity of space puts conflicts between nations into perspective and helps to rekindle a sense of collective responsibility and solidarity.



*Figure 6 Carl Sagan in the TV series “Cosmos: A Personal Voyage” (1980).*

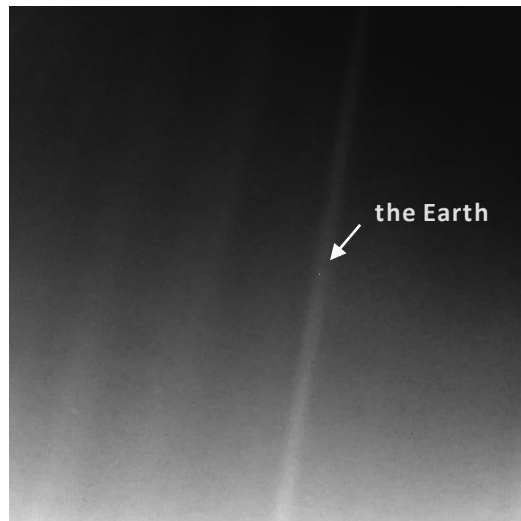
For Sagan, science is not only a tool for understanding the universe but also a path for addressing the challenges of the human condition. Grounded in evidence, constructive scepticism, and curiosity, science is a genuine source of hope. Through rational inquiry, humanity can dispel ignorance and superstition, gain tools to navigate uncertainty, and cultivate a more promising future.<sup>18</sup> In this view, science is not just a means of producing knowledge - it is also a vehicle for emancipation, promoting open-mindedness and paving the way for progress.

A significant part of his vision of hope concerned the search for extra-terrestrial intelligence. Sagan saw this endeavour as both a scientific challenge and a spiritual and philosophical exploration. He imagined that contact with an alien civilization could one day revolutionise our understanding of the role of life and intelligence in the universe, offering new perspectives for addressing issues

## 1. Hope for Humanity

such as war or environmental degradation. Although he was aware of how difficult it would be to establish direct contact with extra-terrestrial life, he believed that the very act of searching encourages humanity to think more broadly and to see itself as part of a cosmic network still waiting to be explored.

Sagan regarded scientific inquiry, contemplation of the cosmos, and the search for other forms of intelligent life as tools for cultivating wonder and a sense of responsibility. For him, hope arose from the awareness that, although we are tiny in the universe, we possess the capacity to understand, to choose, and to improve our future.



*Figure 7 On 14 February 1990, NASA's Voyager 1 captured the Pale Blue Dot, Earth from six billion kilometres away. Carl Sagan wrote in his book, *Pale Blue Dot: A Vision of the Human Future in Space*: "Look again at that dot. That's here. That's home. That's us." (Credit NASA/JPL-Caltech).*

While fully aware of the grave dangers humanity faces - from nuclear war to environmental degradation - Sagan maintained an optimistic vision. He believed that through the advancement of knowledge, cooperation, and a growing awareness of our place in the cosmos, humanity could overcome existential threats and continue to thrive.

Sagan was particularly concerned about the risk of nuclear war and emphasised the urgency of developing a global consciousness and collective action to confront this and other dangers. He pointed out that the technologies capable of destroying civilization, such as nuclear weapons, are products of our intelligence

and creativity. Precisely for this reason, he believed that such ingenuity could be redirected toward peaceful and sustainable purposes.

Sagan celebrated humanity's achievements - in science, art, and exploration - and saw in our ability to learn, innovate, and collaborate the key to building a more just and sustainable future. He believed that by learning from the mistakes of the past, humanity could make better choices. The vastness of space and time, along with the complexity of life, inspired in him a profound sense of wonder that transcended pessimism or despair. For Sagan, the beauty and mystery of the universe were powerful reasons for hope. The very fact that human beings exist on a small planet and are capable of contemplating the stars and exploring the cosmos was, to him, an extraordinary source of inspiration and confidence in humanity's potential to grow, evolve, and eventually reach the stars.<sup>19</sup> This cosmic perspective invites humanity to transcend its limitations, to recognize its place in a greater cosmos, and to attain a deeper understanding of ourselves and the reality that surrounds us.

According to Sagan, applying knowledge, cultivating compassion, and embracing the unity of existence were the keys to building a more peaceful and evolved global community. His call to see humanity as a single species sharing a fragile planet emphasised the urgency of collective action in the face of global challenges. He envisioned a future in which today's conflicts and divisions would be viewed as remnants of a primitive era - just as we now look back on the wars of antiquity.

In his famous piece *The Frontier Is Everywhere*, drawn from *Pale Blue Dot* and also presented as a spoken monologue, Sagan used poetic language to reflect on the potential of space exploration and the responsibility to care for Earth. He emphasised that exploration is part of human nature, and that the "frontier" is no longer just terrestrial, but cosmic. Exploring space is the next step in human evolution, a step necessary for survival beyond the confines of Earth.

The immensity of the cosmos and the smallness of Earth within it make our planet all the more precious. They remind us that "the Earth is our only home," and that we must protect it with urgency and a sense of responsibility. The Pale Blue Dot - the Earth seen from six billion kilometres away - becomes, for Sagan, a symbol of our fragility and interconnectedness, a profound call to care for the planet and for ourselves.

## 2. Knowledge and Expertise

*"The sleep of reason produces monsters."*

Francisco Goya (1746-1826)

Surprising as it may seem, the ability to accumulate and transmit knowledge from one generation to the next is a trait that humans share with other animals. However, although social learning is a phenomenon observed in many species, humans have developed distinctive cognitive and communicative abilities, such as language, writing and symbolic reasoning, which have greatly enhanced the ability to accumulate, process, disseminate, and long-time store knowledge. On the one hand, these capacities have been crucial to the exponential growth of technology and social complexity; on the other hand, they have also been used for dangerous outcomes, as in the emblematic case of the atomic bomb. In other words, the same characteristics that have enabled human progress - competition, ambition and innovation - have also led to conflict and war and contributed to growing inequality. This is because rapid technological progress has not been always matched by an equivalent capacity to regulate it ethically, both morally and practically. In the case of AI, for example, ethical regulation often lags behind technological innovation, as this technology evolves rapidly while ethical oversight and regulatory frameworks struggle to keep pace. This disconnect can lead to unintended consequences, including issues of privacy, bias and misuse of technology. This is particularly evident today in technological developments not only in AI, but also in other fields, such as genetic engineering and autonomous weapons, all areas in which humanity has created increasingly sophisticated

tools, technologies and systems, to the point where these systems exceed human understanding of their implications and long-term consequences, with the result that these technological developments somehow manage to escape our control.

The human ability to gather and store useful information, to pass it on to future generations, and to develop it further to create new information not previously available, is one of the key factors that has made the advent of modern society possible. In this chapter we will explore the origin and evolution of the scientific method, which is used to create knowledge and to distinguish baseless claims from proven facts, and on which all the technological products that surround us and which we use every day are based, from the refrigerator to the television, from the car to the aeroplane to the Internet. Without a coherent and self-consistent approach to the creation and management of knowledge and expertise, none of this would be possible. This also means that our modern way of life in a complex society is not possible without a proper awareness of the limitations and possibilities of technology.

Throughout history, human beings have developed knowledge in areas of abstract thought, such as philosophy and mathematics, as well as in fields with practical applications, such as science and engineering. Following the invention of the personal computer and its proliferation in society in ever more powerful and miniaturised forms (just think of the size and computing power of a typical computer in the 1960s compared to a smart phone today), the 21<sup>st</sup> century has seen the emergence of a new type of interaction between the human brain (the mind) and the software (the algorithms). While the Internet has increased our ability to access and use the knowledge stored in vast databases, it also appears to have decreased our critical thinking skills, mainly due to information overload and the cognitive biases of the human brain.

There is a fundamental distinction between what feels right and what can be demonstrably proven. Gut instincts, shaped by our cognitive biases, often betray us and lead us to accept falsehoods. Likewise, the notion that a widely held belief must be true simply because many people endorse it is a fallacy - mass consensus is no guarantee of accuracy. In this context, modern technology, such as AI, could help us to identify and overcome our cognitive limitations. Unfortunately, all technology has a downside, and AI can also be programmed to subtly exploit our limitations and create dependency or reinforce our biases. All depends on the way the AI has been trained.

In order to overcome the current polarisation of society, it is essential that we embark on a path of consciously adopting the scientific method to distinguish unfounded beliefs from scientifically proven knowledge. The current tendency to

reject expertise, based solely on the suspicion that specialised knowledge is used by so-called *elites* to manipulate the masses, is a suicidal practice in a complex society like the one we live in. After all, no one would board a plane flown by someone who only learned to pilot a week ago - training programmes and hundreds of flight hours are non-negotiable prerequisites for safety. Yet it is a grave error to assume that specialist and lay knowledge carry equal weight, or to mistake “freedom of opinion” for a license to reject vaccination. Believing that tomorrow’s world does not need experts because “all the answers” are online is a dangerous illusion.

Abstract thought is a hallmark of *Homo sapiens*, yet we repeatedly succumb - both as individuals and societies - to favour immediate gains over long-term resilience. In our era, this short sightedness has become pervasive, driving relentless resource exploitation and political decisions that prize short-term economic growth at the expense of Earth’s fragile ecosystems. Ultimately, this may prove our species’ greatest vulnerability - one that could pave the way to our own undoing.

However, humans also demonstrate an impressive capacity to identify significant threats and collaborate to address them. Whether we can ultimately balance technological progress with respect for nature remains uncertain. The defining paradox of our species - our power to innovate and to inflict self-harm - will determine our future, depending on how we confront it in the coming decades. In the following pages, we will explore how reason and the wisdom of past generations can serve the common good - or be warped into instruments of control that endanger our long-term survival.

### ***Conforming to Dogma***

Throughout history, conflicts have often arisen from the interaction between free thinkers and established power. The latter, especially when derived from religion, does not like to be challenged by nonconformists. It brands as heresy any idea that might challenge its authority, typically based on tradition, regardless of whether the idea can be proven to be true or not.

Conflict arises because certain ideas, by their very nature, undermine established narratives including the power hierarchies that those in control rely on to maintain their dominance. There is a larger truth behind this: ideas are powerful, as they can redefine the way societies perceive and organise themselves, as well as how they engage with the world. For this reason, the establishment has often perceived free-thinkers not as individuals with new