# The Great Decoupling

Artificial Intelligence, Human Consciousness, and the Twin Crises of the 21st Century

**Alex Forrester** 

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Alex Forrester
Alex@LongArcStrategies.com
www.LongArcStrategies.com

#### **Prologue**

#### What does it mean to be human?

Our answer determines the way we understand ourselves in the world and in relationship to one another. The question may seem odd—either too abstract or too pedantic to have much relevance to important matters of the day. But, as we shall see, we do not have as firm a grasp on our answer to this question as we may suppose.

In the pages that follow, we will explore the contours of the current debate and see how our default answer to this question is fraying at the seams of a long-held identification of humanity with its intellectual capabilities. A conceptual misunderstanding at the heart of this identification has led to an over-emphasis on rational cognition as the basis of our core identity and a correspondingly incomplete understanding of human consciousness. The existential consequences of such an identification have been well-articulated by generations of modern philosophers, but the shared narrative of ourselves as rational animals and our glorification of a particular transcendental form of intelligence has had dire consequences in the realm of politics and economics that have not been successfully addressed. As we shall see, the 'twin crises' of the 21st century–ecological and economic–bring these tensions into full view.

As we confront the possibility of an economically-driven, planetary-wide ecological disaster in the 21st century we are also brought face-to-face with the emerging threat of artificial intelligence, which represents the eclipse of humanity on the terms of its own self-defined sense of value. Our political response to these threats will rely upon a conception of what it means to be human—a conception whose current articulation we come to find is dangerously ill-suited to the moment.

Can we avoid the temptation of fascism that is latent at the heart of democratic society when confronted by times of acute crisis? We shall see a thread that connects our critique of the philosophical errors of the Enlightenment project to the kind of political dangers that drove the historical cataclysms of the 20th century, and which lead us now in the 21st century into the hands of a new generation of "blind mechanisms" whose operations may drive us into a trans-humanist dystopia.

If we are to avoid the temptation to new forms of fascism, subtle or overt as they may be, and if we are to avert the worst-case scenarios of a planetary 'heat-death' that could witness the mass migration of billions of climate refugees by the end of our century, we will need to counter the political and economic dynamics that are currently pointed in this direction. Doing so requires a fundamental re-valuation of our conception of what it means to be human.

In the dark mirror of our 21st century technological society, we can still see the outline of a human face. We must find a way to call that face our own, before it is too late. As we shall see, this requires a new understanding of human consciousness and a reorientation of our existential condition away from intellectual transcendence and its trans-humanist lure, towards a more earthy, embodied, immanent path of knowing. This immanental path is the fundamental with-ness that is consciousness. We find it evident in its deepest etymological roots and its most intimate epistemological and existential experience as a knowing-with. If we can recover this sense of ourselves, of what it means to be human in this sense, we might come to know ourselves again, or for the first time-but either way, hopefully just in time to be of use, amidst the twin crises of our day.

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#### Chapter 1 - Homo Deus?

gain, the question: What makes us human? In 2011, Noah Yuval Harari wrote a best-selling book *Sapiens*, in which he explored the historical evolution of our species Homo

Sapiens in order to approach the question about what makes humanity distinct within the animal kingdom. In the book he argues that the key differentiator that has enabled humanity to emerge from its small branch on the tree of life into a truly planet-shaping species has been our capacity for fiction, our ability to craft *shared narratives*. By virtue of shared narratives, he explains,

i Harari, Yuval N., et al. *Sapiens: a Brief History of Humankind*. Vintage, 2019, p. 30. "How did Homo sapiens manage to cross this critical threshold, eventually founding cities comprising tens of thousands of inhabitants and empires ruling hundreds of millions? The secret was probably the appearance of fiction. Large numbers of strangers can cooperate successfully by believing in common myths. Any large-scale human cooperation - whether a modern state, a medieval church, an ancient city or an archaic tribe - is rooted in common myths that exist only in people's collective imagination."

the human species has been able to construct self-propagating frameworks of action that extend across time and space in ways that the animal kingdom, despite its rich communicative abilities, has not.<sup>ii</sup>

This thesis, so helpfully provocative in the time of the Anthropocene, diverges from the dominant understanding that has endured through ancient and modern eras. The traditional understanding of what makes us unique has pointed to our cognitive ability—reason, logic, problem solving, tool-making—as the chief characteristic that separates "man" from "beast". So deeply embedded is our association of self and cognition with our exceptional status within the realm of nature that many of our religious and cultural traditions (at least within the Western world) have explicitly pointed to our

ii Ibid., p. 30. "Fiction has enabled us not merely to imagine things, but to do so collectively. We can weave common myths such as the biblical creation story, the Dreamtime myths of Aboriginal Australians, and the nationalist myths of modern states. Such myths give Sapiens the unprecedented ability to cooperate flexibly in large numbers. Ants and bees can also work together in huge numbers, but they do so in a very rigid manner and only with close relatives. Wolves and chimpanzees cooperate far more flexibly than ants, but they can do so only with small numbers of other individuals that they know intimately. Sapiens can cooperate in extremely flexible ways with countless numbers of strangers. That's why Sapiens rule the world, whereas ants eat our leftovers and chimps are locked up in zoos and research laboratories. Any large-scale human cooperation-whether a modern state, a medieval church, an ancient city, or an archaic tribe-is rooted in common myths that exist only in people's collective imagination."

rational capabilities as precisely the thing that we share with the divine nature and which also serves as the primary pathway by which we may come to know and relate with God. In fact, so enthralled has humanity been with the eminently practical power of its own cognitive abilities, that this aspect of our experience has been reverse-projected onto the very image we hold of God. From Plato and Aristotle through the history of Western Christendom and the European tradition, God has been understood not only as omnipotent or omnipresent, but omniscient as well. While not without its own complex contestation, the unification of knowledge as power is a powerful shared narrative in Western philosophy. Any demiurge could organize a world from pre-existing chaos, but only a truly all-powerful being could conceive it into existence from nothing, or so the reasoning goes.

But now here we are in the 21st century and our collective reflections about the nature of God have entered a different phase. As with Laplace, many find no need for the divine hypothesis. And yet, the dominant narrative of our self-regard has not truly shifted. It may no longer be by virtue of our status in the order of God's creation, but we certainly still understand ourselves to be distinct from nature and from the animal kingdom because of our cognitive abilities. And not just *different* 

iii Pierre-Simon Laplace, 18<sup>th</sup> century French scientist and polymath, famously replied in response to an inquiry from Emperor Napoleon about why Laplace's most recent book had made no mention of a divine creator: *Je n'avais pas besoin de cette hypothèse-là*, "I had no need of that hypothesis."

from the rest of the animals, but if we are to be honest: better, more valuable, permanently and rightfully enthroned at the apex of cosmic evolution. In short, we believe ourselves to have transcended our animality and to hold a status of exceptional beings within the natural world.

This conceit goes deep. Our sense of self and our thinking ability were fused long before Descartes' famous *cogito* hypothesis—I think, therefore I am. While alternative paths were taken in the Eastern religions to differentiate cognition from selfhood, this conceit has been the dominant philosophical framework in the Western world for two millennia. Despite fervent critique of its dualism from both religious and secular camps, and the many ceremonial burials of the related "project" of the Enlightenment, the cogito remains our primary cultural paradigm.

The 'cogito paradigm' forms a collective unconscious understanding we hold about ourselves as a species, and it comes down to this belief: We are the exceptional fruit of a cosmic evolution that has reached its peak in the human species. We are the actualization of the deepest eidos of the universe.

For some observers, the implication is clear: Our manifest destiny as a species (having, unfortunately, spoiled our initial nest on planet Earth) is to perpetuate the gift of our embodied self-aware thinking selves throughout the galaxy and beyond. If this sounds hyperbolic, it's worth noting that the richest person on

planet Earth is currently pouring \$1 billion of his fortune every year into a project to ensure precisely this destiny of colonizing the galaxy becomes our species' primary mission. iv

Of course, there *is* much to celebrate about the gift of reason. There is something special about having mental abilities that enable us to behold the wonders of the world with a spirit of awe and curiosity—to peer into the quantum realm, to deduce the distance of stars, to reflect on the distribution of prime numbers and their role in higher mathematics. However, at the dawn of the technological revolution of the 21st century—a revolution that may very well give us the powers to extend our habitat into the stars—there is a specter that haunts our self-assured fortress at the top of the food chain. A threat is emerging, a new claim to the throne, and it very well may signal the end of the reign of Homo sapiens.

"In the early twenty-first century the train of progress is again pulling out of the station—and this will probably be the last train ever to leave the station called Homo sapiens. Those who miss this train will never get a second chance. In order to get a seat on it you need to understand twenty-first century technology, and in particular the powers of biotechnology and computer algorithms. These powers are far more potent than steam and the

<sup>&</sup>lt;sup>iv</sup> Foer, Franklin. "Jeff Bezos's Master Plan." *The Atlantic*, Atlantic Media Company, 8 Nov. 2019, <u>www.theatlantic.com/</u> magazine/archive/2019/11/what-jeff-bezos-wants/598363/.

telegraph, and they will not be used merely for the production of food, textiles, vehicles and weapons. The main products of the twenty-first century will be bodies, brains and minds, and the gap between those who know how to engineer bodies and brains and those who do not...will be bigger than the gap between Sapiens and Neanderthals. In the twenty-first century, those who ride the train of progress will acquire divine abilities of creation and destruction, while those left behind will face extinction."

Extinction. So warns Harari in his follow up book *Homo Deus*, in which he explores the future possibilities for Homo Sapiens. Odd to the ear accustomed to the mounting threat of ecological disaster that we should be confronted by danger from such an unexpected angle. Could it be that, prior to the heat-death of runaway planetary warming, we might stumble head-first into the cold grip of an entirely different type of adversary?

For students of the ecological crisis, there is an important link between these two threats—ecology and economy—the 'twin crises' of the 21st century. Any investigation into the environmental disaster hurtling towards human civilization this century leads straight to the domain of economics, and from there to politics and our deepest-held values in the realms of culture, religion, philosophy, and theology. If such a link between the causes of the 'twin crises' were more fully explored,

<sup>&</sup>lt;sup>v</sup> Harari, Yuval Noah. *Homo Deus: a Brief History of Tomorrow*. Harper Perennial, 2018, p. 271.

could this intersectionality reveal a positive path forward in response to both? After four centuries of progress in science, technology, and economics there is an important new role emerging for the humanities to articulate a new vision, one that can avert disaster and lead in a different direction.

Towards the end of *Homo Deus*, Harari makes a startling statement that indicates just such a path, though he doesn't take up the task of exploring it further because his concern is more politically urgent. For Harari, the looming threat is that of authoritarianism and of technology's potential to accelerate a path of civilizational divide. Following Harari, we need to see the threat he is pointing to and then follow its extended implications. In concert with others who stand at the intersection of ecological, economic, political, philosophical, and theological concerns, and in service to a hope-filled vision for a different kind of planetary *oikonomia*, we must look at both the threat of a technologically-enabled fascism in the 21st century and expose the underlying philosophical errors that feed its strength.

# Chapter 2 - The Eclipse of Humanity

he technological revolution of the 21st century represents, in an ironic twist, an embodied dualism. Simultaneously a harbinger of material abundance and the threat of automated authoritarianism, hyper-intelligent technology is bringing humanity face to face with its own finitude. With each new milestone—the defeat of Chess Grandmaster Gary Kasparov by Deep Blue in 1997, and the rise since then of self-driving cars, autonomous chatbots, and intelligent home assistants—humanity comes closer to a moment in which it is no longer sitting atop the apex of natural evolution, no longer the highest mental expression of the cosmos. In 2016 when IBM's self-taught AI Deep Mind defeated the world champion of Go—a game so complex that its possible combinations exceed the number of

atoms in the universe—the humbled grand champion retired from the game, declaring Deep Mind invincible and saying "Even if I become the number one, there is an entity that cannot be defeated." vi

These are noteworthy developments, and they point to questions that now preoccupy leading governments, economists, and universities around the world. A study in 2013 by Oxford University found that 47% of jobs in the United States were at risk of automation by 2030. VII Prominent philosophers like Nick Bostrom, who wrote the influential book *Superintelligence* in 2014 and now leads the Future of Humanity Institute at Oxford University, are being joined by influential investors and entrepreneurs like Elon Musk who in a 2014 interview

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vi Vincent, James. "Former Go Champion Beaten by DeepMind Retires after Declaring AI Invincible." *The Verge*, The Verge, 27 Nov. 2019, <a href="https://www.theverge.com/2019/11/27/20985260/ai-go-alphago-lee-se-dol-retired-deepmind-defeat">www.theverge.com/2019/11/27/20985260/ai-go-alphago-lee-se-dol-retired-deepmind-defeat</a>.

vii Frey, Carl Benedikt, and Michael A. Osborne. "The Future of Employment: How Susceptible Are Jobs to Computerisation?" *Technological Forecasting and Social Change*, vol. 114, 2017, pp. 254-280., doi:10.1016/j.techfore.2016.08.019. <a href="https://www.oxfordmartin.ox.ac.uk/downloads/academic/">https://www.oxfordmartin.ox.ac.uk/downloads/academic/</a> The Future of Employment.pdf

likened the emergence of artificial intelligence as "summoning the demon".viii

By various names this threat is emerging—hyperintelligence, artificial intelligence, singularity—but at its root it represents an eclipsing of Homo sapiens on the very terrain that we have staked our claims of identity: our intelligence.

Whether hyper-intelligence will ever become conscious in a way we understand humans to be so is an open question. Harari's concern, however, isn't about the existential risk that a hyper-intelligent, conscious digital intelligence might pose to humanity, but rather the ways in which humanity might turn on itself in a type of transhumanist fascism—one that continues to exalt the value of

viii Quoted from an Oct 2014 interview with Elon Musk: "I think we should be very careful about artificial intelligence. If I were to guess like what our biggest existential threat is, it's probably that. So we need to be very careful with the artificial intelligence. Increasingly scientists think there should be some regulatory oversight maybe at the national and international level, just to make sure that we don't do something very foolish. With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like yeah he's sure he can control the demon. Didn't work out." McFarland, Matt. "Elon Musk: 'With Artificial Intelligence We Are Summoning the Demon.'." The Washington Post, WP Company, 24 Oct. 2014, www.washingtonpost.com/news/innovations/wp/ 2014/10/24/elon-musk-with-artificial-intelligence-we-aresummoning-the-demon/.

intelligence even as intelligence becomes increasingly the domain of non-conscious, incorporeal "minds".

"In the past there were many things only humans could do. But now robots and computers are catching up, and may soon outperform humans in most tasks. ...[W]e are on the brink of a momentous revolution. Humans are in danger of losing their economic value because intelligence is decoupling from consciousness." ix

This: The evolutionary *decoupling* of intelligence from consciousness. Could there be a deeper Copernican revolution?

This idea, which Harari does not further pursue in the book except so as to identify the name of the threat, represents the future-forward historical embodiment of a philosophical debate with long roots. The dualistic mind-body framework of Western philosophy, most famously articulated by Descartes in his *Meditations*, conceives of mind as consciousness, seeing them as one and the same. The idea that they could be "decoupled" brings an entirely new viewpoint into our understanding of ourselves and the world.

#### Harari continues:

"This raises a novel question: which of the two is really important, intelligence or consciousness? As long as they went hand in hand, debating their

ix Harari, *Homo Deus*, p. 311.

relative value was just an amusing pastime for philosophers. But in the twenty-first century this is becoming an urgent political and economic issue. And it is sobering to realize that, at least for armies and corporations, the answer is straightforward: intelligence is mandatory but consciousness is optional."x

Armies and corporations don't need the messy mix of human subjectivity to accomplish their aims. They need intelligence and they need physical bodies—but they don't need consciousness. This hasn't been a realistic choice before, but we are at the dawn of a new era of robotics and artificial intelligence, and the unreliable human is looking increasingly less attractive in these areas.

Existential crisis aside, Harari's concern is not with the philosophical implications of what it might mean for us to contemplate a diminished place in the order of things, but rather the implications of what it means if the structure of our economy no longer needs humans as it once has. How will our political and economic systems adapt to a reality in which human beings are no longer a reliably important source of economic value? In a subchapter heading entitled "The Useless Class" Harari writes: "The most important question in twenty-first century economics may well be what to do with all the superfluous people. What will conscious humans do,

x Harari, *Homo Deus*, p. 311.

once we have highly intelligent non-conscious algorithms that can do almost everything better?"xi

This is a legitimate concern. If the value of human labor stops representing a critical component of many economic functions, on what basis does it make sense to publicly subsidize their education, healthcare, or individual housing? Human well-being, at least in a universal sense, starts to look like an increasingly *external* factor to much of our economic engines.

xi Harari, *Homo Deus*, p. 318. He continues: "In the twenty-first century we might witness the creation of a massive new unworking class: people devoid of any economic, political or even artistic value, who contribute nothing to the prosperity, power and glory of society. The 'useless class' will not merely be unemployed—it will be unemployable."

## Chapter 3 - Emergent Externalities

represents something whose costs or benefits are not factored into financial calculations. One well-known example is the way the price for a gallon of gasoline does not include the costs to public health or natural ecosystems that come from its exhaust fumes. The financial consequences of increased respiratory illness, not to mention the billions of dollars in economic damage caused by increased flooding and stronger hurricane seasons on a warming planet, are not included in the cost of driving, and so they are ignored and treated as 'someone else's problem'. These negative costs are 'externalities', as they fall outside the system of measurement.

On the other side, positive externalities exist as well. The economic value produced by natural hydrological

cycles, for example, in producing clean, filtered drinking water available for human and agricultural consumption is a positive externality that is not included in the price of water. Similarly, take the economic value of bees as natural pollinators and their role as a driving force in global ecological fertility through their facilitation of the amorous lives of plants. A 1997 article in Nature estimated the annual value of these and other ecological services add up to \$54,000,000,000,000 per year-that is, \$54 trillion, compared to a global GDP of around \$18 trillion at the time.xii Amazing to think that something so important as to represent three times more financial value than the entire global economy could simultaneously be rendered entirely absent from our political and economic calculations by virtue of our structural inability to incorporate it into our rational system of reckoning. Such is the conceptual power and importance of externalities to our political and economic lives.

As the early 21st century witnesses a mysterious collapse of bee colonies around the world<sup>xiii</sup>, these off-balance sheet liabilities of global capitalism are beginning

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xii Costanza, Robert, et al. "The Value of the World's Ecosystem Services and Natural Capital." Nature, Nature, 15 May 1997, https://web.archive.org/web/20120730185431/http://www.esd.ornl.gov/benefits conference/nature paper.pdf.

xiii Neilson, Susie. "More Bad Buzz For Bees: Record Number Of Honeybee Colonies Died Last Winter." NPR, NPR, 19 June 2019, <a href="https://www.npr.org/sections/thesalt/2019/06/19/733761393/">https://www.npr.org/sections/thesalt/2019/06/19/733761393/</a> more-bad-buzz-for-bees-record-numbers-of-honey-bee-colonies-died-last-winter.

to become more visible. Factors that were once excluded from analysis are, during times of crisis or evolution, now being identified as essential—a word which is in itself becoming deeply resonant during the global COVID-19 pandemic of 2020.xiv

Correspondingly, a critical engagement of "externalities" becomes a way of questioning what other forms of value our economic system may be structurally blind to. It also shows the danger of what happens if something we collectively want to value in society suddenly or gradually loses its functional role in the economic sphere. As Harari worries, the supposedly inherent value of human beings runs a significant risk of becoming an externality once the value of human labor stops serving as an important internal component of our economy.

The concern that Harari is pointing to, therefore, is that the value of humanity, or rather individual humans,

xiv As we observe in our current moment the classification of "essential workers" during the 2020 COVID-19 pandemic also happens to correspond to the lowest paid roles in our economy. See for example the May 2020 article in *The Atlantic*, "Essential, and no longer Disposable" by Ronald Brownstein: "The greatest irony of the coronavirus pandemic may be that many of the American workers now considered the most essential were among those treated as the most disposable before the outbreak began." Brownstein, Ronald. "Essential, and No Longer Disposable." *The Atlantic*, Atlantic Media Company, 7 May 2020, <a href="https://www.theatlantic.com/politics/archive/2020/05/coronavirus-minimum-wage-paid-leave-biden/611281/">https://www.theatlantic.com/politics/archive/2020/05/coronavirus-minimum-wage-paid-leave-biden/611281/</a>.

might become an increasing externality within the 21st century political and economic systems we inhabit. If the value of human labor can be replaced in a far cheaper way by machines that not only can carry out the physical work of 19th and 20th century industrial labor but also the pattern-recognition, decision-making, and communications work of the 21st, then the economic rationale for investing in universal public education, healthcare, and social infrastructure no longer makes as much sense, and the core humanistic structure of modern liberal democratic society loses its economic buttress.

Harari points to the historical alliance between liberalism and capitalism as the direct target of such an unraveling. This alliance he describes as a type of marriage of convenience, in which protecting human rights was understood to be "both a moral imperative and the key to economic growth." However, with the rapidly diminishing role that humans are likely to play in an increasingly automated, digital economy, he sees the case for liberalism to be in jeopardy—by which he means a weakening of the argument for democratic political systems.

"In the twenty-first century," he writes, "liberalism will have a much harder time selling itself." "As the masses lose their economic importance, will the moral argument alone be enough to protect human rights and liberties? Will elites and governments go on valuing every human

xv Harari, *Homo Deus*, p. 311.

being even when it pays no economic dividends?"xvi We will return to this historically-informed suspicion about the role of elites shortly, as we encounter the role that elites played in the rise of fascism in 1930s Europe.

In the meantime, let us recount the threat: The "inalienable rights" championed by modern democratic regimes since the days of the French and American Revolutions may turn out not to be so inalienable once economic productivity no longer requires the general public as a source of mass labor. Faced with such a future, and left to contend for its value without the protection of its more muscular economic ally, 'humanism' is revealed to be resting on far less sure footing than its lofty language suggests. In sum, the argument in favor of the inherent value of each and every person begins to feel more costly to a society in which investment analyses begin, like a 21st century Laplace, to see 'no need' for such a hypothesis.

xvi Ibid., p. 311.

### **Chapter 4 - Auto-Fascism**

f true, this conceptual poverty is a dangerous structural weakness in the very foundation of modern political society. And Harari is not alone in his concern. Theorist and professor of political economy William E. Connolly warns that one of the great dangers of fascism today "resides in the fact that, while extractive capitalism hurtles down its destructive course, several nineteenth- and twentieth-century ideals previously marshaled against it have lost much of their credibility."xvii He believes that an essential task for modern political theory is to rethink, revise, and reconfigure the ideals that have served in the past as a countervailing force against capitalism's self-destructive tendencies. For Connolly this project derives its urgency from the way that climate change is likely to create social and economic pressures that will lead once again to the

xvii Connolly, William E. *Climate Machines, Fascist Drives and Truth*. Duke University Press, 2019, p. 9.

"temptation" xviii of fascism. Certainly, if the influx into Europe of 1.5 million refugees from the 2011 Syrian civil war could influence the re-emergence of far-right political parties as a potent electoral threat across the European continent xix, one can imagine what havoc will be caused by the estimated flight of *two hundred million* climate refugees around the world by 2050.xx

But how could something as palpably menacing as fascism represent a *temptation* we need to guard against? Is this partisan hyperbole, or are we truly vulnerable to the threat of a Franco-style dictatorship taking power in

xviii Ibid., p. 2. "The Trump syndrome is not only destructive because it refuses to address serious injuries and profound issues. It is also dangerous because, as the climate bills become increasingly palpable, fascist temptations will intensify among many whose current denials become more difficult to sustain."

xix Einbinder, Nicole. "How the Far Right Has Reshaped the Refugee Debate in Europe." *PBS*, Public Broadcasting Service, 22 Jan. 2018, <a href="https://www.pbs.org/wgbh/frontline/article/how-the-far-right-has-reshaped-the-refugee-debate-in-europe/">https://www.pbs.org/wgbh/frontline/article/how-the-far-right-has-reshaped-the-refugee-debate-in-europe/</a>.

xx "The U.N. refugee agency (UNHCR) was making plans based on conservative estimates that global warming would force between 200 million and 250 million people from their homes by mid-century, said L. Craig Johnstone, the U.N. Deputy High Commissioner for Refugees." Rowling, Megan. "INTERVIEW-UN Says Climate Change May Uproot 6 Mln Annually." *Reuters*, Thomson Reuters, 8 Dec. 2008, <a href="https://www.reuters.com/article/idUSB362707">https://www.reuters.com/article/idUSB362707</a>. CH .2400. See also the International Organization for Migration (IOM): <a href="https://publications.iom.int/system/files/pdf/mecc">https://publications.iom.int/system/files/pdf/mecc</a> outlook.pdf

such bastions of democratic liberalism as America and Europe?

Connolly takes his point of departure from the classic 1945 analysis by Karl Polyani, who in his book *The Great Transformation*, showed the rise of fascism in 1930s Europe to have functioned as a pressure relief valve for a society whose political and economic systems had become locked into diametrically opposed trajectories. Faced with the inability to resolve economic dilemmas of the period without incurring politically unacceptable levels of social austerity, the gears of representative democracy ground to a halt. The only way out of the impasse was the suspension of political freedom and the establishment of what became known as the 'fascist' state —a largely bloodless coup engineered with the willing assent and cooperation of social elites across the political, academic, and economic spheres. As Polyani explains:

"No complex society could do without functioning legislative and executive bodies of a political kind. A clash of group interests that resulted in paralyzing the organs of industry or state...formed an immediate peril to society....Eventually, the moment would come when both the economic and the political systems were threatened by complete paralysis. Fear would grip the people, and leadership would be thrust upon those who offered

What's so important about Polyani's analysis here is the way it reveals fascism to be a threat from within the dynamics of modern society itself, as a temptation inherent within democratic political order to suspend that order in the face of emergency. The threat is not that of an autocratic "sovereign" who might opportunistically suspend civil rights and establish a dictatorship in the midst of an otherwise democratic state caught in a moment of weakness. Rather, the threat derives from the tendency of an elite class to invite such a sovereign into power in order to engineer a suspension of civic freedoms necessary to achieve otherwise politically unfeasible aims.

This role of the elite is precisely what Polyani documented in Italy, Germany, and other countries in Europe during the 1930s. The elite temptation to fascism stands at the intersection of what Connolly refers to as a

xxi Polanyi, Karl. *The Great Transformation: the Political and Economic Origins of Our Time*. Beacon Press, 2014, p. 244.

xxii See Schmitt, Carl. *Political Theology: Four Chapters on the Concept of Sovereignty*. George D. Schwab, trans. (MIT Press, 1985 / University of Chicago Press; University of Chicago edition, 2004 with an Introduction by Tracy B. Strong. Original publication: 1922, 2nd edn. 1934.

"dark series of resonances" when the interests of the political and economic elites fuse with the disaffections of the working classes to justify a state violence-sponsored resolution to an otherwise intractable political dilemma. In the context of the 21st century's ecological date with destiny, Connolly sees precisely such a recipe, as the political costs of dealing with environmental pressures are likely to generate a similar "clash of group interests" identified by Polyani.

However, as important as this "temptation" of fascism is to be aware of, it is also important not to misinterpret this as the only angle from which fascism may emerge as a threat in the future. As with economics, there is both a supply side and a demand side to every equation, and a careful reading of Polyani also points to another dimension at work.

For Polyani, it was the mechanism of the "self-regulating market" that provided the true supply-side of the equation that led to the self-immolation of 20th century Europe. Indeed, the very purpose of *The Great Transformation* was to analyze how a deeply-held philosophical commitment to the concept of the "self-regulating market" represented the single most important factor that led to the cataclysm—a conflict over what he

xxiii Connolly, William E. "Aspirational Fascism." *Contemporary Condition*, Nov. 2011,

http://contemporarycondition.blogspot.com/2011/09/aspirational-fascism.html.

referred to as "the blind action of soulless institutions." Polyani writes:

"Mankind was in the grip, not of new motives, but of new mechanisms. Briefly, the strain sprang from the zone of the market; from there it spread to the political sphere, thus comprising the whole of society...This explains the almost unbelievable fact that a civilization was being disrupted by the blind action of soulless institutions the only purpose of which was the automatic increase of material welfare."xxiv

The blind action...of soulless institutions. The core message of *The Great Transformation* was this: that the self-regulating market was a blind mechanism to whom political authority had been given because of its claimed ability to maximize prosperity, even though its unconstrained operation meant harm for many parts of the society it was designed to benefit.

As Polyani shows, this drama—which began with the Industrial Revolution and erupted in the 20th century cataclysm—came to center around an artificial device of monetary policy called the Gold Standard. So deep was the commitment among the political and economic elites to the sacrosanctity of the Gold Standard that when faced with the economic crisis of the Great Depression, amidst other stressors, their response was to protect it (the Gold Standard) at all costs, no matter the social impact. The

xxiv Polyani, The Great Transformation, p. 228.

economic suffering that resulted, often to alreadyimpoverished working classes, was treated as an unfortunate but necessary evil. In other words, *an externality*. In the end, the market society 'pattern', as Polyani called it, was a "Procrustean bed" in which the suffering of some was determined to be an acceptable price for maximized prosperity for the rest.

This issue of maximized prosperity was a central point. The key tenet in the mythology of the self-regulating market was that prosperity generated by the market was more than could be achieved through human planning or intention. Further, the prosperity of the market would be maximized to the extent that it was free of the distorting effects that would arise from human political intervention. What was desired was a market based on pure rationality. The market, in this view, is a mass distributed calculating machine capable of achieving a level of efficiency impossible to accomplish in any other way. The belief in a self-regulating market maintained that the value of pure information flowing through what we might now see as the "cloud-computing" activities of the "invisible hand" should not be polluted by distortions from outside its rational order. Doing so would produce skewed results and reduced performance.

These words should resonate: *Information, calculation, rationality*. This was once the work of humans...

The implication is that our blind trust in the analytical capability of computers and algorithms may very well be a modern corollary to the previous century's belief in the self-regulating market. Certainly, these are the characteristics and capabilities that our modern period will likely continue to entrust with authority. And not without good reason, given our long history of war, conflict, and oppression driven by entirely non-rational factors like superstition, race, and religion.

However, we should be very careful to see the lesson and the danger here. Polyani's analysis of the mythology of the self-regulating market-classic as it now is-was not ultimately heeded. The ascendency of neo-liberalism as the dominant theory of political economy for the past fifty years rests very much on this same belief that Polyani so vigorously critiqued. The debate comes down to the question of political interference with dynamics that drive otherwise 'rational' economic calculations from being implemented. The fight over global warming is a fight about precisely this issue, and the fact that even the prospect of an "uninhabitable Earth" xxv would not be able to overcome the neo-liberal objection to political interference with the market should cause grave concern for those who might also simultaneously point to the ways in which the logic circuits and neural networks of

xxv See Wallace-Wells, David. *The Uninhabitable Earth: Life after Warming*. CELA, 2020.

artificially intelligent algorithms are likely to resist interference on precisely the same terms.xxvi

Clearly, the rise of technology is a force that requires careful consideration and intervention in the ways we structure our society in the future. But this public policy decision only makes sense within a conceptual framework that allows for *political intervention* in the design and operation of these tools—a type of intervention that will very likely involve trade-offs in efficiency and performance. This goes against the dominant approach favored by neo-liberal economics, whose default position of non-intervention and corresponding faith in the utilitarian value of maximized

xxvi Of course, that's assuming we can even *comprehend* the operations involved: Researchers in 2017 stopped an experiment after finding that the AI they were training had invented its own language to communicate with other bots, a language the programmers could not understand. (Wilson, Mark. "AI Is Inventing Languages Humans Can't Understand. Should We Stop It?" *Fast Company*, Fast Company, 9 July 2018, www.fastcompany.com/90132632/ai-is-inventing-its-own-perfect-languages-should-we-let-it.)

Furthermore, machine learning algorithms are now so intricately complex that their decision-making processes are hidden within layers of recursive feedback loops, giving rise to an entirely new, digital version of "black boxes". The opacity is structural, unless intentionally designed for transparency—a design feat that is harder than it sounds. (Diakopoulos, Nicholas. "Algorithmic Accountability Reporting: On the Investigation of Black Boxes." *Columbia University Tow Center for Journalism*, 1 Jan. 2014, <a href="www.towcenter.columbia.edu/news/algorithmic-accountability-reporting-investigation-black-boxes.">www.towcenter.columbia.edu/news/algorithmic-accountability-reporting-investigation-black-boxes.</a>)

rationality as maximized prosperity is the shared narrative of our globalized economy in the 21st century. Continuing to take this path is as likely today as it is deeply disturbing.

The point is this: If we continue to hold firm to a valorization of information, calculation, and rationality outside of their social purpose as tools for well-being, and if we continue to believe that it is unwise to impose "subjective" political aims into otherwise well-functioning, rational systems, then we are articulating the case for political authority in the 21st century to be primarily influenced by non-human intelligence. Our philosophical commitments have us walking straight into a future dominated by the same kinds of "soulless" institutions that brought us to the brink of calamity in the 20th century. Only this time, our adversaries will not be other human beings, but rather the "blind mechanisms" themselves.

The modern period was characterized by the belief that rationality was the key to progress and prosperity. Objectivity, science, data—these were embraced as the most trustworthy guides for 'enlightened' policy and decision-making. Of course, it is important to acknowledge that these were being harnessed to resist (and successfully so) the oppressive forces of religious superstition and aristocracy and to facilitate a greater inclusion in the field of politics and economics. However, the tools of liberation ultimately became a force of oppression themselves, as the image of 'rational man' became the mold within which participation was invited.

Elements that fell outside this domain were discounted, either explicitly as irrationality or implicitly as externality. The exclusion of the more "human" element from decision-making, therefore, has been precisely the direction this cultural journey has been pursuing as a conceptual 'north star' for some time now. What sort of dogmatic slumber we must be in then if we mistake the current moment for anything other than a coming-to-fruition of this long-held cultural aspiration?

It comes down to this: When the predictive intelligence capabilities of artificial intelligence overcome the aging world-heavyweight of the 'invisible hand' in a contest of calculating power, to what will we then turn when the scales tip against us in the utility calculations of political economy?

The key theme to remember here has to do with the issue of political authority and how it is granted. We grant authority to what we believe in. The leaders, monarchs, and central bankers of the 20th century believed in the self-regulating market and its incarnation in the form of the Gold Standard. They were willing to kill and be killed for it.

What do we believe in?

# Chapter 5 - Non-Conscious Intelligence

he idea that in the 21st century we might again face the threat of being in the grip of "blind mechanisms" whose sole (soulless) purpose is economic prosperity may sound alarmist to some ears, but Polyani's work stands as a reminder of what can happen when we project superiority onto a system that points to its own rationality and economic logic as justification for autonomy from political interference. Commentators like Harari are pointing to the risk that we would ascribe to intelligent technology a similar superiority, and they want to remind us of the danger of giving unregulated authority to this 'higher' power.

The reason for alarm has to do with the deeply held belief in the superiority of intelligence. One of the strongest objections that the architects of neo-liberal economic philosophy-Hayek, Friedman, von Mises, and others-voiced against the centrally planned economies of socialist states was that there was no intelligence on earth capable of correctly calculating, anticipating, and satisfying the economic needs of complex societies. They pointed, and not without good reason, to the mass suffering imposed upon the populations of China and the USSR "in the grip" of centrally managed economies. These so-called "calculation debates" raged during the 1920s and 1930s among economists debating the merits of socialism and capitalism and whether it could indeed be possible to 'calculate' the dynamics of an optimal economy.xxvii The resolution in favor of market economies as the system that maximized freedom and prosperity seemed settled in many circles by the latter half of the 20th century, in part due to the humble acknowledgement of the limitations of human calculating power. The terms of this debate, however, are now being re-opened in light of the dawn of machine learning, big data, and quantum computing.xxviii What is clear is that the same decisive point that won the first round is likely

xxvii "Every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics." Mises, Ludwig Von. Economic Calculation in the Socialist Commonwealth (1920). Ludwig Von Mises Institute, Auburn University, 2008.

xxviii Some theorists now point to global corporations like Amazon as effectively having already implemented planned economics using their computing power and access to big data. See: Phillips, Leigh; Rozworski, Michal (2019). *The Peoples Republic of Walmart: How the Biggest Corporations are Laying the Foundations for Socialism.* Verso Books.

to win the second. That is, whichever system has the greater rational capabilities will be given the power to govern, the power to decide.

It is the power to decide that makes the difference, and while a veneer of human direction is likely to remain in many spheres, the underlying philosophical adherence to cold rational intelligence, ideally unencumbered by the inefficiencies of the flesh, is also likely to cede increasing authority to machines for decision making in the future. The warning is of an emerging revolution in *autonomous* administration, of an economy constructed upon legal, judicial, administrative, and financial systems comprised of hyper-intelligent self-learning algorithms with the authority to make official decisions. Harari asks us to imagine what it might mean to work for a company led by an algorithm as CEO, or to be sued in court by an AI investor who has purchased your home from foreclosure. This may sound odd, but the legal fiction of corporate personhood is as old as the Roman republic. A corporate entity is a political and economic agent with defined rights, whether owned by human or machine.

In a more extreme form, and yet frighteningly likely to emerge in the near future, is the issue of lethal force in police and military operations. The future of warfare is destined for automation too. The question is: Will it be autonomous? This is a question that is answered not by technology, but by politics. Unfortunately, the political calculus about how and in what way to evaluate the fidelity of intelligent machines' decision-making to our

values—that is, our rapidly-ossifying classical humanist values—has yet to be determined.

This path of inquiry leads us to the crux of the problem: Our philosophical commitments to intelligence and rationality as the highest authority demand an adherence we would be wise to start questioning if we are no longer to be the arbiters and standard-bearers of such intelligence. We are entering precisely such a moment in human history, and we are consequently finding ourselves vulnerable to obsolescence in the economic sphere as well—a sphere in which our value as human labor historically safeguarded our value as political citizens. With this double divergence, we now stand as before a mirror, reduced in stature by our own logic and unable to point to an alternative framework for affirming our own value.

Unless we can come to a new understanding of our value, as humans, in a world increasingly populated by hyperintelligent algorithms, we may paint ourselves into a corner of self-imposed subservience to our own tools of liberation. The subtlety of what this may look like–far more likely the *Brave New World* version of hedonistic amnesia than the *1984* version of authoritarian dystopia,

to quote Neil Postman's prescient comparison<sup>xxix</sup>—should not distract from the monumental challenge it represents. We need a new way of understanding and valuing what it means to be human. It is to that challenge that we now turn.

xxix See Neil Postman, Amusing Ourselves to Death: "What Orwell feared were those who would ban books. What Huxley feared was that there would be no reason to ban a book, for there would be no one who wanted to read one. Orwell feared those who would deprive us of information. Huxley feared those who would give us so much that we would be reduced to passivity and egotism. Orwell feared that the truth would be concealed from us. Huxley feared the truth would be drowned in a sea of irrelevance. Orwell feared we would become a captive culture. Huxley feared we would become a trivial culture, preoccupied with some equivalent of the feelies, the orgy porgy, and the centrifugal bumble puppy. As Huxley remarked in Brave New World Revisited, the civil libertarians and rationalists, who are ever on the alert to oppose tyranny, failed to take into account man's almost infinite appetite for distractions. In 1984, people are controlled by inflicting pain. In Brave New World, they are controlled by inflicting pleasure. In short, Orwell feared that what we fear will ruin us. Huxley feared that our desire will ruin us." Postman, Neil. Amusing Ourselves to Death: Public Discourse in the Age of Showbusiness. Methuen, 2007.

### **Chapter 6 - Know Thyself**

hat is it that makes us human? We started with this question and our trajectory now leads us back. The answer has more than philosophical or religious implications. It also frames the way we understand the *value* of being human. And, even more importantly—the value of human *beings*.

Our answers to these questions will, and do, shape our politics and our economics. They drive our relationships with one another and with the natural world. Our definitions of value may begin in the abstract world of ideas, but they become our direct reality. Ultimately we'll have to live with the consequences if we get it wrong.

But how do we even begin to try to answer such a question?

Anthropology, of course, would be a natural place to start. As the study of how human beings live and relate to one another, anthropology provides a window through which to view patterns and similarities that make us distinct. Harari's claim in *Sapiens* that what makes us distinct within the animal kingdom is our capacity for shared narrative is an important contribution. As we have seen, this offers a critical way forward for human identity in the 21st century, as we witness the eclipse of our claim to intellectual dominance and face the need to find a new way of understanding ourselves in the cosmos.

As a field of scientific observation and analysis, however, anthropology can only offer part of the answer we need. 'What does it mean to be human' is not merely an anthropological question, asked from the outside—it is an existential question, asked from within. It asks about the subjective experience of being ourselves, something for which we do not have adequate language. "Human" is the best word we have for it, and the world of art, religion, and philosophy are among our many sustained avenues of its exploration.

To be human—in the existential sense, in the lived experience of it—what is *that*? And how is it distinct from other ways of being?

Anthropology cannot provide a complete answer. While the idea of "shared narrative" offers a fresh perspective on understanding humans as a species, it leaves the issue of our personal subjective experience of being human un-touched.

Alongside the contribution of anthropology, therefore, we need an approach that helps us to explore the mystery of *personal experience*—the fact that in us, in each of us, the universe has somehow become conscious of itself and can come to know itself through subjective experience.

This idea—that matter, organized and energized correctly, might come to manifest consciousness—exceeds our current frameworks of understanding. We cannot explain it, we cannot even conceive how it could be possible. Philosopher and cognitive scientist David Chalmers famously called it "the hard problem"xxx, and despite all our attempts to map the motions of molecules, atoms, quarks, and the quantum world, we do not have a conceptual framework that makes sense of the idea that matter can become conscious. We cannot reconcile the

xxx See David Chalmers: "It is undeniable that some organisms are subjects of experience. But the question of how it is that these systems are subjects of experience is perplexing. Why is it that when our cognitive systems engage in visual and auditory information-processing, we have visual or auditory experience: the quality of deep blue, the sensation of middle C? How can we explain why there is something it is like to entertain a mental image, or to experience an emotion? It is widely agreed that experience arises from a physical basis, but we have no good explanation of why and how it so arises. Why should physical processing give rise to a rich inner life at all? It seems objectively unreasonable that it should, and yet it does." Chalmers, David J. "Facing Up to the Problem of Consciousness." The Journal of Consciousness Studies, vol. 2, no. 3, Mar. 1995, pp. 3-34., doi:10.1093/acprof:oso/ 9780195311105.003.0001.

It is not the task of this inquiry to dive into the various theories about the nature of consciousness. However, the concept of 'consciousness' has been the unspoken companion in our inquiry thus far. Harari talked of consciousness and intelligence decoupling from one another—consequently, we must ask what each might look like without the other.

Certainly, we know what non-conscious intelligence looks like. We are immersed within it. Non-conscious intelligence monitors our bank transactions, our buying habits, and our credit scores. With over 30 *billion* internet-connected devices now surrounding us in every aspect of our daily lives, the remarkably titled "internet of things" has flickered on in our lifetime, illuminating a new technologically saturated world.xxxi If that's not enough, non-conscious intelligence also drives much of our global economy, with the majority of stock transactions occurring each day now being made by automated trading algorithms.xxxii

xxxi Maaylan, Gilad David. "The IoT Rundown For 2020: Stats, Risks, and Solutions …" Security Today, *Security Today*, 2020, <a href="https://securitytoday.com/Articles/2020/01/13/The-IoT-">https://securitytoday.com/Articles/2020/01/13/The-IoT-</a>

Rundown-for-2020.aspx?Page=2

xxxii Kolakowski, Mark. "How Robots Rule the Stock Market." Investopedia, *Investopedia*, 29 Jan. 2020, www.investopedia.com/news/how-robots-rule-stock-market-spx-djia/.

But if that's what non-conscious intelligence looks like, what can we say about the other side—the nature of consciousness, separated from its embrace with intellect?

## Chapter 7 - The Unknown Something

he task points us straight to our destination.
The identification of consciousness with thought—with the thinking function—is a distinctly modern one. While ancient Greek philosophy contemplated the concept of mind, they had no true word for consciousness.xxxiii The strict unification

wxxiii "To begin with, there is no Greek term that could unquestionably be translated by 'consciousness'. Greek philosophers talk about perceptions (the Greek for perception is <code>aisthêsis</code>), intellectual thought or apprehension (<code>nous</code>), emotion or feeling (<code>pathos</code>), and many other mental processes, but no Greek equivalent exists to refer to the general idea that we are conscious beings." Tuominen, Miira. "Problems with Consciousness" - Appearing in Volume 3, Approaches to Language and Cognition. <code>Varieng - Studies in Variation, Contacts and Change in English, 2009, <a href="www.helsinki.fi/varieng/series/volumes/03/tuominen/">www.helsinki.fi/varieng/series/volumes/03/tuominen/</a>.</code>

of thought and consciousness emerged within the rationalist philosophies of the 17th and 18th century, most prominently in the work of Rene Descartes, Gottfried Leibniz, and John Locke. In his 1640 *Principles of Philosophy*, Descartes set out his definition: "By the word 'thought'...I understand all that of which we are conscious as operating in us."xxxiv Later, in 1641 he articulated his famous statement—"Cogito, ergo sum." *I think, therefore I am.* Nearly 400 years later, this unification is solidly established in the conceptual foundations of our culturally shared narratives.

One can be forgiven, of course, for seeing some merit to this identification. It does seem to make some level of intuitive sense, despite its role as a culturally inherited framework. Furthermore, the very etymology of the word 'consciousness' incorporates *knowing* into its core meaning. Consciousness is derived from the Latin *scire*, "to know". But if consciousness is in its deepest way related to knowing, why would thinking of it as intelligence be problematic?

Could it be that the problem has to do with a misunderstanding of what consciousness *is*?

In the word 'consciousness', we join the Latin verb 'to know' to the prefix *con*-, which means "with".

Consciousness is a *knowing with*. It indicates a relational

xxxiv Descartes, R. 1644/1911. *The Principles of Philosophy*. Translated by E. Haldane and G. Ross. Cambridge: Cambridge University Press.

form as its substrate—the 'with' comes first, and then the knowing. *With-knowing*.

If consciousness is with-knowing, it points to something different than what we typically tend to mean by the word 'intelligence'. At least since the modern era the word 'intelligence' has connoted the possession of knowledge, the ability to analyze, and the power to predict or manipulate. Further, this capacity has been understood as deriving from a very specific kind of knowing—a methodology of *objectivity*, in which a complete separation from the object of study is assumed so as to encompass it from all angles. This conception, arising from the contributions of the rationalist philosophers like Descartes, Kant, and Locke, led to a new, epistemologically-defined conception of self—a conception of self as "Subject".

The Subject, existing in a world of objects, can gain knowledge of the world through reason, but is fundamentally limited in its relationship to those objects. Since objectivity can only be accomplished through complete separation, modern Subject-consciousness required the assumption of an absolute separateness of observer from the observed, representing a fundamental form of isolation at the heart of identity. The philosophy of Immanuel Kant provided the fullest expression of this subject-object dichotomy. In his attempt to secure the possibility for true knowledge against the radical skepticism of David Hume and others, Kant located the Subject, the knowing self, on one side of an impassable gap, with fundamental reality—what he called the *Ding an* 

sich ("thing-in-itself")—on the other. In his 1783 *Prolegomena to Any Future Metaphysics*, Kant describes "objects of sense as mere appearances". He "confesses" that we do not know the things themselves, however "but only know its appearances, viz., the way in which our senses are affected by this unknown something."xxxv This phrase, "the unknown something" captures the problem. We can be secure in our knowledge of the world, in our science and in our reason, but only if the Subject is fundamentally alone, forever cut off from the real world.

The influence of Kant's philosophy would be hard to understate. It served as the necessary foundation for the Enlightenment project of grounding knowledge in reason, and it enabled modern philosophy to confidently and definitively assert statements of truth about the world. However, it came at a cost. Though knowledge gives us contact with the phenomena of the world, we cannot access what Kant called the underlying 'noumena' on the other side of our experience. Epistemologically trapped within our own subjectivity and "affected" by an "unknown something", we must be content with our mental representation of it, since we cannot ever truly access what it, in itself, actually *is*.

Such was the bargain. The Subject found itself confident in its knowledge of the world at the cost of

xxxv Kant, Immanuel. *Prolegomena to Any Future Metaphysics*, §32, A revision of the Paul Carus translation by James Ellington. Indianapolis: Hackett Publishing Company, 1977.

being fundamentally separated from it. And the consequences went both ways-alienation for the separated Subject, and objectification for everything else. We can trace these consequences in both directions. First, it created a fundamental antinomy between mind and matter, with natural world playing the part of matter and consequently the object of, often violently depicted, knowledge. Francis Bacon, who championed the development of the modern scientific method, wrote in his 1623 De Augmentis Scientiarum: "For you have but to follow and as it were hound nature in her wanderings, and you will be able, when you like, to lead and drive her afterwards to the same place again."xxxvi He continues: "Neither ought a man to make scruple of entering and penetrating into these holes and corners, when the inquisition of truth is his sole object." Leibniz approvingly described Bacon's scientific method in terms of torture, with experimentation serving as "the art of inquiry into nature itself and of putting it on the rack."xxxvii

With this attitude towards nature—as an object of knowledge, manipulation, and consumption—it is no wonder that the modern Subject has managed to nearly destroy in just four hundred years of science and industry a planet it has inhabited for over 200,000. When the world around us represents nothing but inert objects present before a transcendent knowing self, the value of

xxxvi Bacon, Francis, *De Augmentis*, The Works of Francis Bacon, Vol. 4, Longmans, Green, Reader, and Dyer, 1858, p. 296.

xxxvii Quoted from *Leibniz: Philosophical Papers and Letters*, trans. By L. E. Loemker, Dordrecht 1969 (Loemker), p. 465.

all that is "Other" is subjugated before my judgment. The case for the inherent value of Nature thus represents exactly the kind of externality we previously discussed.

Thus, we trace the first consequence of modern "Subject-consciousness" as a factor that has contributed to the ecological crisis of our time. However, the second consequence is also as momentous. When early existential philosophers and writers like Soren Kierkegaard, Friedrich Nietzsche, and Fyodor Dostovevsky began to explore what it meant to live from within the place of the "Subject" a new experience of consciousness emerged-that of freedom. But this freedom was not of the easy and pleasant kind, but rather one of terrifying isolation before a dizzving 'abyss'. God was famously "dead" to Nietzsche, but was very much alive to both Kierkegaard and Dostovevsky. Nonetheless, all three wrote of the intensity of facing the absolute freedom of existence. Kierkegaard, in his writings on despair, referred to it as "the sickness unto death".xxxviii

Subsequent twentieth-century existentialist writers like Jean-Paul Sartre and Albert Camus followed the journey of the 'thinking self' to its logical conclusions and found there only an insurmountable abyss and the challenge to find an affirmation of life in the midst of 'nausea' and 'absurdity'. This malady is the second consequence of modern Subjectivity—a form of existential alienation in the face of an inability to come into true relationship with

xxxviii See Kierkegaard, Soren. *The Sickness unto Death*. Penguin, 2008.

the world. The inability of relationship due to the transcendence of the knower and the known.

We can see the critical dimension here as the issue of *separation*. If consciousness in its truest form is understood as *'with knowing'*, the mode of knowledge that we have just explored—the mode that has undergirded the modern world since the dawn of the Enlightenment—has been a repudiation of precisely this with-ness. As a form of epistemological transcendence, the modern world was built on the philosophy of objectivity—on the idealization of 'pure knowledge', uncontaminated by factors that might be shared between the knower and known. Remove the 'con-' from consciousness, and we get to pure knowledge, scire, science.

## Chapter 8 - The View from Nowhere

ut this existential posture of objectivity is as illusory as it is spiritually corrosive. Thomas Nagel referred to it as "the view from nowhere".xxxix We cannot achieve pure objectivity, nor do we—as a species defined by *shared* narratives and *con*-sciousness—actually desire a place of pure separation from the world around us. The philosophical tenets of objectivity, pure reason, absolute truth, appear to the eyes of a *post*-modern world as caricatures, as impressive conceptual constructs whose

xxxix See Nagel, Thomas. *The View from Nowhere*. Oxford University Press, 1989.

exaggerated features are certainly meant to express something, but become quite dangerous if taken too literally. Instead, we seek a very different way of engaging the world—one which emphasizes immanence, embodiment, and mutuality instead of transcendence, incorporeality, and possession. Objective knowledge may have its pragmatic function, but it cannot serve as the foundation of our identity. Ultimately, we can stand four hundred years later and confirm: It is the *cogito* that must be discarded.

In its place, a new understanding of human identityone that reaffirms the core meaning of consciousness as a 'knowing-with'-emerges as the trajectory for a future definition of human experience. A with-ness, integrated into the structure of consciousness and understood to be the substrate of knowledge, is the road not taken by the Enlightenment, but one which can be taken today. As consciousness, knowledge emerges from within relationship, as the result of an immanental form of knowing. This type of relationally-generated consciousness would not stand a priori before the world as transcendent Subject, as Kant's epistemology imagined and as Locke's political philosophy enshrined into our modern democracy. Rather, a con-sciousness emerges from within relationship, always-already contextually bound-an emanation from immanence, rather than transcendence.

This image of consciousness as a form of 'immanental knowing' is not abstraction. Certainly, it isn't 'mere' mysticism, either. Though an entire family of mystical traditions from across the spectrum of human religious

experience attest to consciousness understood in this way, we do not need to rely on religion or spirituality alone to argue for this reorientation of our epistemological frame. Science has already overturned its own objective foundations and no longer makes metaphysical claims to truth.xl The advances in science, math, and logic of the 20th century threw the concept of pure objectivity into the philosophical dustbin. From Einstein's relativity, to Godel's famous 'incompleteness' theorems of logic and mathematics, to Heisenberg's uncertainty principle and Neils Bohr's quantum indeterminacy, the attempt to see the world from "the view from nowhere" has been abandoned.

Even more, a core component of quantum physics now shows that it is our *very participation* in the act of knowing that helps to constitute the reality that forms, as the collapse of quantum particle wave functions depend upon the act of observation itself. The confirmed 'observer effect' of the wave-particle duality of light shows that a photon of light will always pass through the channel of vision selected by the observer. This couldn't be a more direct confirmation of the importance of our understanding of *con*-sciousness as with-knowing, as a knowing-with—a principle as true in the natural world as

xl We recall Wittgenstein's famous phrase here.: "Whereof one cannot speak, thereof one must be silent." See Wittgenstein, Ludwig, *Tractatus Logico-Philosophicus (TLP)*, 1922, C. K. Ogden (trans.), London: Routledge & Kegan Paul. Originally published as "Logisch-Philosophische Abhandlung", in *Annalen der Naturphilosophische*, XIV (3/4), 1921.

the metaphysical...or the existential, or the ethical, or the political.

And yet, the abandonment of objectivity as a philosophical ideal or scientific principle since the early 20th century has not yet resulted in a new paradigm for human identity. In the midst of our new reality of quantum indeterminacy, humanity is still left with an outdated and fraying image of itself as transcendent Subject, as dis-interested knower, as embodied rationality. We do not fundamentally believe in this form of identity, but we do not have an alternate image of ourselves to embrace. And this, as we have explored, is the problem.

In the midst of this existential confusion, it is all the more revealing to see the ways in which the technologically-driven decoupling of consciousness and intelligence now brings the issue to its hour of crisis. When questioning consciousness apart from intelligence, we see that our ideal of reason, of pure logic, of absolute truth-our ideal of objective knowledge gained through the opposite of relationality, of with-ness—was precisely therefore our pursuit of non-conscious intelligence all along. Without quite realizing it, we have been molding ourselves within the graven image of a non-conscious form of intelligence. Seen in this light, the decoupling of consciousness and intelligence is not a new phenomena provoked by an ascendant form of technological cognition, but rather something that had been previously decoupled in our modes of understanding for quite some time. We may have thought of our humanity as unified

consciousness and intelligence, but having neglected what it would mean to pursue knowledge with and through the world, in relationship rather than in isolation, we haven't truly been cultivating *con*-sciousness at all.

It is enough to wonder: Have we ever attempted to actually embody *conscious* intelligence? Is *conscious* intelligence possibly the thing that we are actually now waiting to explore and express for the first time, only being provoked into it by some kind of neo-modern awakening from our 'dogmatic slumbers'?

### **Chapter 9 - A New Perspective**

n contrast to the rationalist doctrine and its existential consequences, we now have the privileged historical perspective to take a different view of what we mean by intelligence and consciousness. We have the opportunity to recover a more original sense of consciousness, one that might be more faithful to its etymological roots as a knowing 'with', and to reveal a new way of understanding what it means to be human. By doing so, we may recover a more original sense of what it means to *know* in the first place, and see thereby the ways in which our understanding of consciousness and intelligence that have dominated Western philosophy, at least for the past four hundred years, is called into question as both an error and a form

of epistemological violence that is hard-wired into our very conception of identity.

From a theological perspective, it is important to point to the ways in which the evolution of the word 'truth' itself has traced this journey over the course of Western philosophy and how the world's religious traditions may serve as an important source of a new understanding, a reservoir of recoverable meaning for a post-modern world in search of a new perspective.

In the 313 Edict of Milan, Emperor Constantine shocked the Roman world by decriminalizing Christianity -a religious sect within the empire that had previously been subject to harsh repression. Following his own dramatic conversion in 312 before the famous battle of the Milvian Bridge, Constantine became a patron of the Church, and set it on a course to become the state religion of the empire, made official by the Edict of Thessalonica in 380. In so doing, Christianity was cast into a new context, no longer as a fringe religious sect of Judaism but rather the ascendant religious authority of an empire. This evolution set the cultural and linguistic context of Christianity onto an entirely new trajectoryone that diverged from its Judaic roots into the Hellenistic culture of the empire. Potentially the most important result of this shift had to do with the evolution in the language, the vocabulary, and the conceptual architecture within which the religious doctrines of Christianity ultimately emerged. Most importantly, this evolution included a fundamental shift in the meaning of

the word 'truth' itself, an evolution that had tremendous consequences for the future of Western philosophy.

While the ancient Biblical word for truth-the Hebrew word emet, which means "faithfulness"-connoted relationality as its fundamental context, the word for truth that would come to dominate Christian theology within the heritage of the Roman empire was different entirely. As opposed to 'faithfulness', the Greek word for truth was aletheia, meaning the disclosure of something "hidden". The differences between the two words could not be more drastic. The biblical *emet*, as faithfulness, can be known only from within relationship, indeed only as relationship. It connotes intimacy, a knowing from within, a knowing with. Emet does not connote something static, absolute, or even something that can be possessed, but rather it describes the quality, the trustworthiness, of a relationship that leaves the alterity of knower and known untouched while inviting both into intimate embrace.

Aletheia, on the other hand, represents something entirely different. Even as a form of speech, *aletheia* represents a noun to *emet's* adverb—a thing, a treasure to be attained, a reward gained through the use of intellect to pierce through the outer layers of something—recall Kant's phenomenon here—into the hidden recesses of the thing-in-itself. The possession of *aletheia* represents precisely the type of knowledge that the modern rationalist philosophies identified as the goal of intellectual pursuit. It also represented precisely the type of knowledge that equipped the state religion of an

empire to hold the keys to salvation with an iron grip. How different the history of the Church may have been if salvation (soteriology) had never been conceived of in epistemological terms!

In this evolution of the shared narrative of 'truth' in the early history of Christianity within the Roman empire we see the seeds of the conceptual framework that led directly to the scholasticism of Thomas Aquinas, the rationalism of Rene Descartes, the transcendentalism of Immanuel Kant, and the disconcerting Sisyphean smile of Albert Camus. In the evolution from *emet* to *aletheia* we see the Greek word for 'truth' in its transcendental splendor supplant the more relational, immanental Hebrew understanding of truth as faithfulness, of truth as a *knowing with*. We would do well to revisit this history.

Today, the philosophers of immanence are far more prominent than in earlier eras of Western philosophy. Spinoza, Whitehead, Levinas, Foucault, Deleuze, Irigaray, Cixous—these are major names in the history of modern philosophy, each of whom have critiqued the dominant mode of knowing through transcendental separation instead of immanent relationality. And yet so very few of these philosophers speak to the shared narrative of spirituality that unites billions of people on planet Earth to this day. If we wish to craft a new narrative that might mobilize humanity to step forward to meet not only its history but its future in order to articulate a new vision of what it means to be human in the first place, we would do well to speak to the deep spiritual longing that exists

within human consciousness—a desire to know, from within, who we are and who we might become.

If we do so, we may cultivate a new model of identity for our hyper-modern, technologically saturated world—one that could be attuned to the intricate intimacies that form the world around us as individuals, and collectively as a species.

By an immanental form of consciousness, as a knowing-with, we might find easier pathways to incorporate externalities that have previously been excluded from our frames of consideration, bringing hope to reconciling economy and ecology and to mending our ethically-fraught *polis* of inter-woven human relationships. As an embodied form of *con-scious* intelligence, we might see in ourselves a new face, of the divine perhaps, but at least of what it means to be human. We could avert an identity crisis that casts us adrift in a trans-humanist techno-rapture of the 'singularity'xli, and other such postmodern abysses. We might even be able to find a new way to engage with technology to unlock its promised abundance, or to facilitate its ability to create abundance for others.

There is no reason that the rise of hyper-intelligence should be anything but a blessing to humanity in the 21st century—especially if technology might actually enable us to intervene and reverse the ecological damage we have

xli See Kurzweil, Ray. *The Singularity Is near: When Humans Transcend Biology*. Duckworth, 2016.

inflicted on the planet since the rise of industrial capitalism began its prosperity-driven planetary death march. The choice is really ours to make, how we want to understand ourselves, what shared narratives we will hold in common about our identity, purpose, and what we hold as value in the world.

We have seen the historical precedent. We have seen the damage done by a blind belief in pure reason. There *is* another way to know. It is built into our very humanity. There is still time to develop a sense of identity more faithfully true to our nature as *con-scious* beings. There is another way to *be-to be human*.

We have but one last generation to figure it out.

#### **About the Author**



Alex Forrester is the cofounder of Rising Tide
Capital, a nationally
recognized nonprofit
organization working at the
intersection of inclusive
economics, social justice,
and entrepreneurship.
Alex is a recipient of the
prestigious Heinz Award
and has been recognized
with Rising Tide Capital at
the White House, United
Nations, World Economic

Forum, CNN Heroes, and

other prominent publications. He received an undergraduate degree in Postmodern Philosophy and Theology from Harvard University, an honorary doctorate from New Jersey City University, and is currently pursuing Masters-level research at Drew Theological Seminary on the role of philosophy and spirituality in aiding the political and economic transformation of our world. He lives in New Jersey with his two sons Noah and James and his beloved wife and partner Alfa Demmellash, with whom he pursues his most important and precious calling: bringing love into the world.

For more information or to contact him, visit <u>www.RisingTideCapital.org</u> or <u>www.LongArcStrategies.com</u>