TONY CZARNECKI



TOWARDS THE BIG CONSENSUS



...OR LOSS OF CONTROL OVER OUR FUTURE

TONY CZARNECKI

2030 - Towards the BIG CONSENSUS

...Or loss of control over our future

2030 - Towards the Big Consensus

Or loss of control over our future

© Tony Czarnecki 2023

The right of Tony Czarnecki to be identified as the author of this book has been asserted in accordance with the Copyright, Designs and Patents Act 1988.

First published in February 2023 by Sustensis

ISBN: 9798377907190

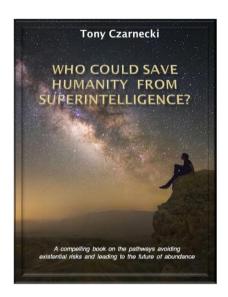
Cover design: Sustensis

London, February 2023

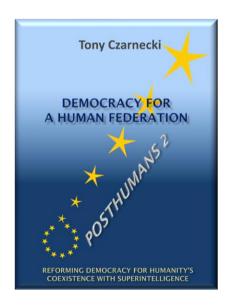
For any questions or comments please visit: <u>http://www.sustensis.co.uk</u>

For my wife

Other books by the author







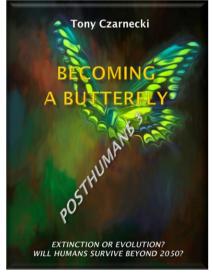


Table of Contents

INTRODUCTION	2
PART 1 WILL WE REMAIN IN CONTROL OF OUR OWN FUTURE?	4
CHAPTER 1: THE THREE TIPPING POINTS OF 2030	5
EXPONENTIAL PACE OF CHANGE	7
CHAPTER 2: ARTIFICIAL INTELLIGENCE – THE FIRST TIPPING POIN	NT 12
What is Artificial Intelligence?	
CHAPTER 3: GLOBAL WARMING - THE SECOND TIPPING POINT	22
CHAPTER 4: GLOBAL DISORDER - THE THIRD TIPPING POINT	25
INDIVIDUAL RISKS COMBINE INTO AN EXISTENTIAL THREAT INSTABILITY IN THE SOUTHERN HEMISPHERE HAS THE SECOND COLD WAR ALREADY STARTED?	26
CHAPTER 5: WHY THE REFORM OF DEMOCRACY IS SO URGENT?	35
NOBODY BEHIND THE STEERING WHEEL THE NEED FOR THE WORLD GOVERNMENT	
CONCLUSIONS	43
PART 2 WHAT'S WRONG WITH DEMOCRACY?	45
CHAPTER 1: A BROKEN PROMISE	46
GOVERNMENT OF THE PEOPLE?	49
CHAPTER 2: DO WE REALLY NEED DEMOCRACY?	54
WHAT IS THE PURPOSE OF DEMOCRACY?	
CHAPTER 3: WE HAVE ELECTIONS, SO WE HAVE DEMOCRACY!	61
INTRODUCTION THE ALTERNATIVE VOTE (AV) THE SINGLE TRANSFERABLE VOTE (STV) FIRST PAST THE POST (FPTP) PARTY LIST PROPORTIONAL REPRESENTATION (LIST PR) MIXED MEMBER PROPORTIONAL (MMP). THE TWO-ROUND SYSTEM (TRS)	61 62 62 64
CHAPTER 4: IN SEARCH OF AN IDEAL DEMOCRACY	66
Introduction	

DIRECT DEMOCRACY	
PARLIAMENTARY DEMOCRACY	69
A REPUBLICAN SYSTEM OF GOVERNMENT	
Presidential Democracy	
E-DEMOCRACY	72
A Transpartisan Democracy – the Danish Alternativet	
Conclusions	
PART 3 TOWARDS DEMOCRATIC CONSENSUS	79
CHAPTER 1: CITIZENS' ASSEMBLY – THE DAWN OF PARTICIPAT DEMOCRACY	
COULD FREQUENT REFERENDA SOLVE THE CRISIS OF DEMOCRACY?	80
ARE CITIZENS' ASSEMBLIES THE RIGHT TOOL FOR A NEW DEMOCRACY?	83
CHAPTER 2: CITIZENS' SENATE	89
CITIZENS' PETITIONS	
From Citizens' Petitions to a Citizens' Senate	
CITIZENS' SENATE – THE FOUNDATION OF POLITICAL CONSENSUS	92
CHAPTER 3: ACHIEVING POLITICAL CONSENSUS WITH AI	101
ENABLING CONSENSUAL POLITICS	101
THE ORIGIN OF CONSENSUAL DEBATING	
AI-SUPPORTED CONSENSUAL DEBATING	
PART 4 CONSENSUAL PRESIDENTIAL DEMOCRACY	111
CHAPTER 1: FOUR PILLARS OF CONSENSUAL PRESIDENTIAL	
DEMOCRACYDEMOCRACY	112
THE FOUNDATION OF THE BIG CONSENSUS	
OUTLINE OF CONSENSUAL PRESIDENTIAL DEMOCRACY (CPD)	
CHAPTER 2: PILLAR 1- BALANCED RIGHTS & RESPONSIBILITIES	
UPHOLDING YOUR RIGHTS IS MY RESPONSIBILITY	
WHAT ARE VALUES AND WHAT ARE RIGHTS?	
UNIVERSAL VALUES OF HUMANITY	
HUMAN RESPONSIBILITIES	
CHAPTER 3 POLITICAL CONSENSUS – PILLAR 2	
THE NEED TO RESHAPE AN ELECTORAL SYSTEM	124
A POLITICAL QUIZ FOR ELECTIONS	
AI-BASED ELECTORAL SOLUTIONS	
CAN COALITIONS DELIVER BETTER GOVERNMENTS?	131
CHAPTER 4 DEEP DECENTRALIZATION – PILLAR 3	134
SMALL IS BEAUTIFUL – DEFENDING REGIONALISM	134
HOW MUCH OF SELF-GOVERNANCE?	
CHAPTER 5 AI-ASSISTED GOVERNANCE - PILLAR 4	138
CHAPTER 6: AN EXAMPLE OF A CONSTITUTIONAL FRAMEWOR	

APPLYING CSD FOR A CONSTITUTIONAL FRAMEWORK	140
A NEW CONSTITUTION IN ONE WEEK	149
PREAMBLE OF A CONSTITUTION	151
OUTLINE OF A CONSTITUTION	152
CONCLUSIONS	155
CONCLUSIONSGLOSSARY	

INTRODUCTION

Has the second cold war already started? That's the question I asked in an article in January 2020 when some experts thought the pandemic had been orchestrated by China. The appearance of Chinese balloons over the USA in February 2023 is a further confirmation that the second cold war has indeed started

We can only hope that the war between the West and Russia/China remains cold. But even then, it will be played out with several existential threats simmering in the background. Before 1945 there were no man-made existential threats. Now we have several. Three of them, Global Warming, Global Disorder and Artificial Intelligence (AI) may reach their tipping point simultaneously, by about 2030. At the same time, everything around us changes faster than ever in human history. Pace of change is now nearly exponential. What once took a decade now can be completed within a year.

Therefore, we must redraw all the rules and procedures to deliver the necessary changes before it is too late, so that we remain in charge of our future. In February 2023, the Ukrainian President gave a good example of what it means when he said about the decades-long process of becoming a member of the European Union: 'we want to be a member of the EU by the end of 2024, not in a decade or two'.

What can we do to fight existential threats before they reach a tipping point of being out of control? As with Global Warming, 2030 is only a highly probable date, rather than a certainty for those three threats. It may also happen earlier, like with the loss of control over AI. Its impact on the future of Humanity is the greatest and most imminent.

If anybody had any doubt how fast AI can advance, then 2022 gave us the best example. The number of fundamental discoveries and inventions in AI in 2022 was the highest ever. But there are two events, which will impact our daily life most and increase the risk in the AI area even further and faster. The release of ChatGPT in December 2022 is a watershed moment. For the first time, the capabilities of the most advanced AI agent can now be accessed by anyone, rather than by only the top AI specialists. Then the second pivotal moment came in February 2023 when Microsoft and Google released an even more advanced AI Assistants BingChat and Bard.

This opens a new era in AI. Instead of co-operation, which we have had until now, we will have competition, which means faster release of new AI products without proper safety checks. Although we will start benefiting from the fast advancement of AI capabilities it will be more important to see AI mainly as an existential threat. That is why this decade may be the most important in human history since if we lose control over AI too early, we may not have enough time to mature it as a benevolent intelligence. Therefore, we need to maintain control over a maturing AI for as long as possible. That means implementing stringent regulatory processes in months rather than in years.

But who would take charge for protecting us before we destroy ourselves. We do not want to repeat again the grave consequences for the world of the Munich Agreement in 1938. What the war in Ukraine has shown is that the world can never again be paralysed by inaction because of lack of a united response by democratic countries.

The improvised NATO/EU Alliance to help Ukraine win the war, gives some hope that it might be quickly converted into a powerful, de facto World Government, fulfilling the role for which the UN was created. However, it is still more likely that such a de facto World Government will take more time than it took to create NATO in 1948, just one year. This may include a transformation of the European Political Community, created in October 2022, or a sudden acceleration of the federalization of the European Union, as the kernel of a de facto World Government. There are also other options considered in the book.

However, even if we had such a de facto World Government, how would it govern us? To minimize existential threats, national sovereignty and some of our personal freedoms may need to be restricted. Therefore, we must remind ourselves that we cannot have personal or national freedom without responsibilities. But why should citizens trust their governments when today the trust in politicians is at the rock bottom? Since people mistrust their governments, the introduction of such restrictions may lead to serious social unrest in many countries.

The only way to rebuild the trust is to set up a new Social Contract between the governing and the governed and build a **Big Consensus** fast. The starting point would be the removal of political and social imbalances in societies by **merging direct and representational democracy** into a new type of democracy – **Consensual Presidential Democracy**. That is the key proposal considered in the book.

1

PART 1 WILL WE REMAIN IN CONTROL OF OUR OWN FUTURE?

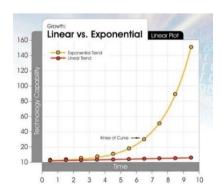
Chapter 1: The three tipping points of 2030

Exponential pace of change

Writing a book about democracy could have not been more well-timed like right now. The world can be transformed in unexpected ways through technology, as evidenced by past inventions of steam engine, electricity, or the Internet. Today it is characterized by rapid technological change, making it difficult to predict the future. It was Heraclitus of Ephesus, who said that everything is constantly in a state of flux. Change has always been key element of universe and life. This is reflected in natural and societal processes, which generally change at a linear pace, such as the annual growth rate of the world's economy.

However, our civilisation is now experiencing a new era of global change that is happening at an exponential rate, rather than a linear one. Exponential change is characterized by an increase in the rate of growth over time, such that what takes one year today might only take about a week in a decade and perhaps a day in two decades.

Let me illustrate that with this great example from Ray Kurzweil's book 'Singularity is near' showing the difference between exponential and linear growth. Imagine that you and I are standing together, and I take 30 steps. My steps will be 1m each, so I will make 30m. That's linear change. But each of your steps will be twice as long as the previous one and your total distance will be over 1 million km. You would have circled the planet 26 times. That's the exponential pace of change.



Source: "Singularity is Near" (Kurzweil, 2006)
The difference between a linear and exponential change

Moreover, the exponential growth of some sectors of technology, such as biotechnology or artificial meat production is starting to reach the so called "knee of curve". At this stage, an exponential trend becomes noticeable. Shortly after that, the trend can really explode.

Let's take this example. The sequencing of the first human genome was completed in 2003 at a cost of about \$3 billion. The next one in that same year costed a little more than \$100M. It's possible to do it today for less than \$500. Human genome sequencing cost now decreases faster than exponentially. If that trend continues, the costs of genome sequencing may be cheaper than a blood test in 2024.

But what also changes exponentially, is the speed of access to various technologies for people that previously would have needed some technical background. Today, most of the people in the northern hemisphere can access the Internet and through it, do all their banking transactions, combining some knowledge that was previously attributed to IT people and cashiers at a bank.

Positive changes happen mainly to technological capabilities, which could significantly improve the quality of our lives and give a new meaning to what our civilisation is about. It may also enable the expansion of human race, possibly even beyond the solar system.

Negative changes, such as global nuclear wars or pandemic may wipe out our civilization in months or lead to a progressive inability to cope with rapid changes that in time will lead to the demise of human species.

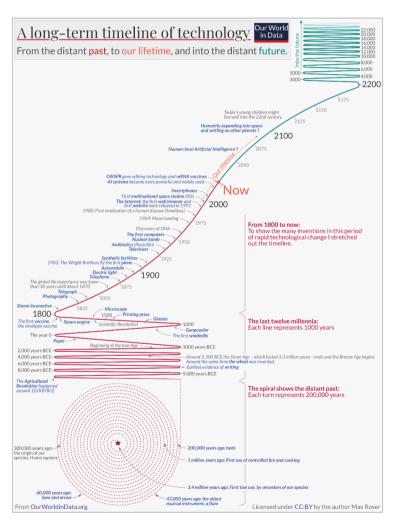
From the current human perspective, perhaps the most significant are the changes outside the technological domain, e.g. in social and political domain. For example, China has reduced the number of people in permanent hunger by 600m in just 20 years. Life expectancy increases on average in some countries by about 6 hours every day, i.e., every four years it is extended by one year. This trend will of course reach a biological barrier at some stage.

Exponential pace of change will have a direct impact on the emergence of the expected wave of Technological Unemployment. The current prevailing view is that it will be barely noticeable and there will be at least as many new professions and jobs created as the AI-led revolution makes obsolete. I would rather think it will happen suddenly because of that 'knee of curve'

symptom. Ray Kurzweil, one of the best-known futurists, precisely makes such an observation saying that we often miss exponential trends in their early stages because the initial pace of exponential growth is deceptive—it begins slowly and steady and is hard to differentiate from linear growth. Hence, predictions based on the expectation of an exponential pace seem improbable and that's why it is so difficult to be a futurist.

Technological timeline

OurworldinData.org shows one possible future:



The timeline extends from the present and into the future, depicted in green. Many children born today, with no additional advancements in life expectancy, will live into the 22nd century. Possible future innovations in areas such as vaccines, clean energy, or cancer treatments have the potential to greatly enhance our quality of life and the environment around us. However, there is something, which could have an even more profound impact on our world - Artificial Intelligence (AI).

Therefore, wider predictions for what the world might look like say in 20or 50-years' time may actually be too conservative. Such unprecedented exponential pace of change may have either a positive or a negative impact on the long-term outcome for the human race. This largely depends on how we use the potential of such discoveries and innovation, like in AI.

When looking from the side-lines, it is even more disturbing that so little is being said on that subject in the mainstream media, perhaps because it may cause anxiety in some people. But because of the immense power that technology, and especially AI, gives those who control it, there is little that is as important as the question of which technologies get developed during our lifetimes. It is a grave mistake to leave the question about the future of technology to the technologists. Which technologies are controlled by whom is one of the most important political questions of our time, because of the enormous power that these technologies give to those who control them.

So, our present time is indeed unique in its speed of technological evolution, compared to past generations who experienced a slower pace of change in their lifetimes. How will it impact us as human beings? Will we be able to cope simply mentally, because the pace of change may significantly impair our ability to adapt to the new lifestyle? What we start experiencing right now is unprecedented in the human history and that fact is very hard to absorb because none of the past generations of humans had to face such a challenge. Where to will such an uncontrolled pace of change lead our civilisation?

In 1992, a well-known futurist Francis Fukuyama published his book 'The End of History and the Last Man'. That was the extended version of his 1989 essay 'The End of History?' Note the question mark, which disappeared in the book version of the original essay. It looks as if three years after writing the essay, Fukuyama was certain that the end of History was indeed nigh. In that book, he discussed the ultimate success of Western-style liberal democracy over the communism, following the end of the Cold War and the

collapse of the Soviet Union. For Fukuyama that was not just the end of a particular period of post-war history, but the end of history as such. From his point of view, Humanity and the civilization that was created by humans have reached the end of an ideological fight for the way humans should evolve. The Western liberal democracy was to become the final form of a social contract between the governed and the governing.

For the first few years of the post-Cold War period, it seemed he was right. We may have already forgotten the 'Peace dividend', which was translated into at least halving of the then annual defence budgets of most NATO countries. In 1994 Russia was even invited to join the NATO's Partnership for Peace program, and since then NATO and Russia have signed several important agreements on cooperation. Unfortunately, that optimism was short-lived. In 2000 Putin became Russia's president. In 2001 there was 9/11 horrendous terrorist attack in New York that killed 3,000 people, followed by the wars in Afghanistan, Iraq, and then in 2013 in Syria. On 1 April 2014, NATO unanimously decided to suspend co-operation with the Russian Federation in response to the annexation of the Crimea peninsula and the eastern Donbas region. And then if anybody had still an illusion about peace being irrevocably installed on the planet Earth, had to concede being wrong, after the Russian invasion of Ukraine in 2022. That was the end of the 'End of History'.

On the other hand, it may not only be the end of history, but it may also be the end of a civilisation. When, looking from an evolutionary perspective, civilizations resemble living things. They are born, have their immature youth, followed by a longer period of mature development until they finally reach the point of their collapse. We are the only surviving species out of several hominid cousins, such as the Neanderthals. Over 99% of all species are extinct. Why should we be an exception to the Fermi's paradox? Enrico Fermi, the Nobel prize winner and the father of the first atomic bomb, asked a question: if there are so many billions of Earth-like planets, and perhaps millions of civilizations much further advanced than us, why has nobody contacted us? His answer was that once they have developed advanced technology capable of destroying them, that's exactly what they did.

Our Civilization has faced several potential near-extinction risks. The Thirty Years' War (1618-1648) in Western and Central Europe, for instance, saw nations engage in a conflict over religious principles, resulting in one of the longest and deadliest wars in history with 8 million casualties. Germany alone lost a third of its population. Other civilizations like the Egyptians and Romans have also disappeared, showing that if they had access to advanced

weapons and transportation, they could have easily wiped out the entire human race.

What's so special about 2030?

Humans did not vanish because of those events since they were not an existential threat to human species in its entirety. However, it illustrates the fact that had there been sophisticated enough weapons of mass destruction and means of transportation, those incidents could have very likely annihilated all humans.

The saying "those who do not learn from history are doomed to repeat it" is often referenced, but Archbishop Rowan Williams, the former head of the Church of England, phrased it more beautifully in his book "Being Human" when he discusses the importance of teaching history. He said, "If we don't understand where we come from, we will assume that where we are is a given. [1]" Similarly, for younger generations, peace and freedom may seem obvious, but they often forget about the sacrifices made to achieve and maintain them.

When examining ways to improve democracy, it's important to look back at history to avoid past mistakes. However, apart from learning from the mistakes we have made, we also need to look far ahead to be prepared for changes and challenges, to which no generation of humans has ever been exposed. That is much more important than learning from the past mistakes because the future will be so much different than at any stage of human evolution, changing our lives at a lightning speed.

Before 1945 there were no existential threats, which humans have created themselves. With the explosion of the first atomic bomb over Hiroshima, we have created the first man-made existential threat, which can lead to the extinction of all humans, that's why they are called existential threats. There are about 10 man-made existential threats, such as a global nuclear war or pandemic, which incidentally may materialize at any time. However, at least three of them are developing progressively and may coincidentally reach their tipping point together by about 2030, beyond which it may be impossible to control them. These are:

1. **Artificial Intelligence** – its continuous self-improvement may be beyond human control leading to unleashing a potentially evil

Superintelligence and the extinction of a human species in a few decades

- 2. **Global warming** exceeding 1.5C average temperature increase may be unstoppable, potentially ending most biological life by the end of the next century
- 3. **Global Disorder** set off by a global migration (draught-originated famine, poverty and local wars). If combined with other risks, such as the fall of democratic systems or global banking system, it may become an existential threat.

Therefore, when considering how fast we must adapt to the emerging existential threats, we need to look at it from these two perspectives:

- We may only have just a decade to make profound changes to how we live and govern ourselves because of the emergence of the above three tipping points by about 2030. Any one of these threats may materialize within this century, potentially leading to human species extinction. But there is a high probability that they may emerge at the same time, which makes such a possibility a near certainty if we do not act fast and decisively.
- Change is now happening at a near exponential pace in almost all areas of human activity. This is so uncommon for our brains to process that the sheer pace of change may lead to chaotic behaviour and decision making, re-enforcing the risk of Global Disorder becoming an existential threat

It is from these two perspectives that I shall be looking at the necessary reforms of democracy in this book because it will point to key characteristics of a new type of democracy that we need. We need to make this subject the prime concern of key decisions makers, such as politicians, so that they better reflect the impact of exponential change in their policies. The exponential pace of change makes 2030 a civilisational danger zone.

Chapter 2: Artificial Intelligence – the first tipping point

What is Artificial Intelligence?

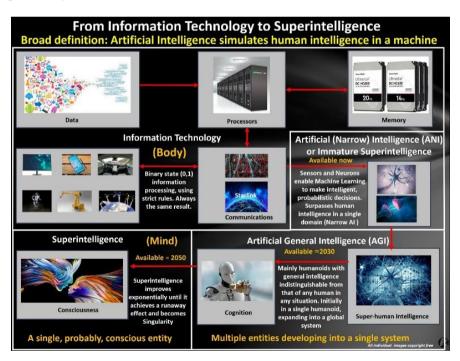
The first, gravest and imminent existential threat, and where the change is fastest, is **Artificial Intelligence** (AI). For an average person just the term AI may be quite confusing, embracing all aspects of what seems to be 'unnatural'. The difficulty for an average person starts with differentiating Information Technology (IT) and AI. IT processes information based on strictly defined rules, generally requiring all input data, although there some heuristic systems, which can operate without all data being available. But AI can produce results based on partially available input data, since it operates similarly to a human mind — on probabilities. It can learn from experience. Therefore, the same input data may not always produce the same output. It's the learning experience, which makes some humanoid robots resembling human behaviour - they make errors, but progressively on average, fewer than humans.

What we have now, are individual, relatively unsophisticated AI Assistants, chatbots or robots. This is what is generally called **Artificial Narrow Intelligence (ANI)**. Today, it only exceeds human intelligence and capabilities in certain areas, like in all games, including poker, which requires some intuition, or face recognition. However, such an AI is ignorant in all other areas and that's why it may be called Immature AI. Today's AI would not know that it cannot walk through a wall because it does not have cognition, although it may change soon. But even this Immature AI may already be dangerous on a global scale in the next few years. For example, we may soon have millions of humanoid robots, such as an advanced Optimus, courtesy of Elon Musk, costing about \$20,000.

Such humanoid robots will be capable of carrying out most physical tasks around the house or in a factory, communicating verbally with humans. They will also be connected to the Internet. If by accidental self-learning or malicious design they self-connect to each other, they could over time plot a global destructive action of potentially disastrous consequences, like launching nuclear weapons. Moreover, unless there's is shortly a global banning legislation, some most advanced companies, like Amazon, may create global AI networks, operating from a central hub. Such a global AI system could create, if misused, a near existential risk. So, AI does not have to be fully matured, to become an existential threat.

But within a decade we may have an **Artificial General Intelligence (AGI)**, which will exceed the intelligence and capabilities of any humans in **all** areas. It is mostly assumed that such an AGI will be only embedded in a single humanoid robot. This may be a general practice. However, it does not exclude that we may also have a network of globally connected thousands of such AGI humanoids controlling millions of other less intelligent robots and trillions of sensors. The consequences of such a network, which is highly likely to be outside of human control, might be potentially an existential threat. Imagine that no country can control it, similarly as no country has been able to control the Internet on a global scale for over two decades.

Now we need to explain what **Superintelligence** is. It may not be a big problem if an average person confuses Superintelligence with a Terminator-type robot. But it may be deeply troubling if that includes politicians. After all, these are the people who must be convinced that there is little time left before we may lose control over AI. The media may be responsible for much of that misunderstanding by trivializing AI. However, it is also the result of poor, very narrow education.

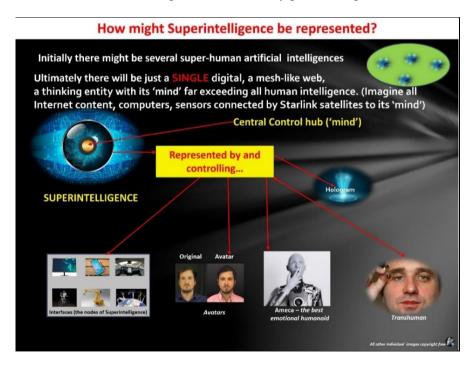


Although there are some differences in the fine details of Superintelligence, e.g., how it differs from Singularity (see below), I define **Superintelligence**

as a single entity, with its own mind and goals, immeasurably exceeding all human intelligence. Its body consists of various elements such as data, processors, memory, interfaces, communications, sensors, including artificial morphic neurons. We already have all of them as shown in the diagram.

However, currently all these building blocks are thousands of times slower and could not even support AGI, not to mention a mature Superintelligence. Neither does current Immature AI have a mind. That would require its intelligence to acquire full cognition — an experiential knowledge and awareness of the world. Once it achieves that, it may then gradually turn into a conscious entity. However, there is no agreement among AI researchers whether such an advanced intelligent agent must be conscious before it becomes superintelligent.

Superintelligence will present itself to humans in various ways and through numerous simultaneous representations in any part of the planet.



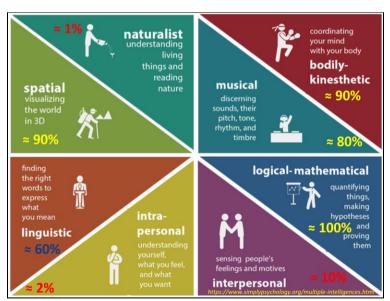
It will represent itself as avatars, holograms, or as emotional humanoids, such AMECA robots. Finally, it will also be linked to conscious

Transhumans, i.e., humans who have embedded wireless communication, memory and processing power linking them to AGI and later to Superintelligence.

Most AI scientists think, Superintelligence will emerge by AGI's self-improvement until it achieves the **Singularity** point, sometimes called 'the runaway point'. At that time, humans will be under its total control and incapable of understanding the rationale behind its decisions. That alone will be an existential threat for humans because we will no longer have any control over our own destiny. Whether such a mature Superintelligence becomes a threat to a human species depends largely on how, or if at all, it was nurtured in line with human values before we will have completely lost control over it. If Superintelligence has slightly misaligned objectives or values with those that we share, it may become hostile towards humans.

Humans versus Artificial Intelligence

Howard Gardner has identified 8 human intelligences [2]. These are: Linguistic, Logical/Mathematical, Spatial, Bodily-Kinaesthetic, Musical, Interpersonal, Intrapersonal, and Naturalist.



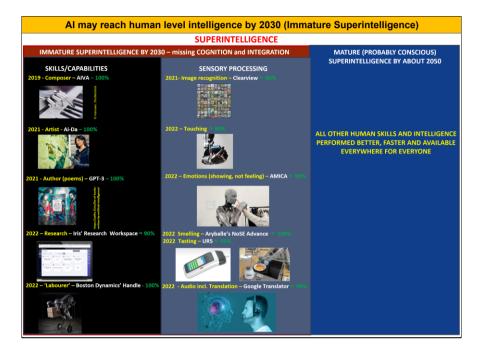
How humans compare against Artificial Intelligence today

In at least four of these, Bodily-Kinaesthetic, Logical/Mathematical, Musical and Spatial, AI already exceeds humans.

I have estimated how well an Artificial Narrow Intelligence ANI, i.e., in a single area of competence, currently matches human intelligence in each of the eight intelligences. In Linguistic Intelligence, it is vastly superior to humans (e.g., the number of languages it is able to translate simultaneously with fewer and fewer errors). However, humans are still immensely superior in Interpersonal, Intrapersonal (understanding yourself, feelings etc), and Naturalist areas. That is very closely related to cognition, the most difficult domain for AI to learn. On the other hand, the pace of progress in AI measured by the number of significant breakthroughs, which impact the entire industry, has been truly astounding. Here are some of the most significant developments over the last 20 years:

- 2006 Convoluted Neural Networks For Image recognition (Fei Fei Li)
- 2016- AlphaGo Supervised ML, Monte Carlo, Tree Search + neural networks (*DeepMind*)
- 2017- AlphaZero Unsupervised ML (*DeepMind*)
- 2017- Tokenized Self-Attention for NLP Generative Pre-trained Transformers (*GoogleBrain*
- 2021- AlphaFold Graph Transformers (graphs as tokens) predicting 3D protein folding (*GoogleBrain*)
- 2022 (March) Artificial neurons based on Photonic quantum memristors (*University of Vienna*)
- 2022 (2 April) White Box Self-explainable AI, Hybrid AI (French Nukka lab)
- 2022 (4 April) PaLM, Pathways Language Model, NLP with context and reasoning (*Google Research*)
- 2022 (11 May) LaMBDA –multi-modal AI agent can also controlling robots with NLP (Google)
- 30 November 2022 ChatGPT the first publicly accessible AI Assistant, which has almost overnight made an average person aware what a real' AI, immensely more capable than Amazon's Alexa, can do.

Please note how the number of fundamental discoveries has accelerated, especially in 2022. These breakthroughs have helped AI researchers to apply them in various domains, as illustrated below, in which AI's skills quite often vastly exceed human intelligence and capabilities. That has also been reflected in the sensory processing, a crucial component for developing AI's cognitive capabilities.



This does not include yet the impact of progress in AI-related hardware. For example, the number of tokens (1,000 tokens is an approximate equivalent of 1 human neuron) has been rising faster than exponentially over the last 4 years, increasing from 300M (BERT in 2017) to PALM - 650B in 2022 and 1.6 trillion (Wu Dao 2.0 in 2022). With the current pace of development, in 2024, the number of neuron-like tokens may reach about 86 trillion, equal to 86B neurons in a human brain. However, if we include the super-exponential pace of development in synthetic neurons, based on memristors, and quantum computing, we can expect even faster acceleration of AI capabilities.

This relentless progress in AI capabilities may lead to humans' losing control over the AI's self-learning capabilities, resulting from our inability to control its goals. Once this tipping point is reached, quite likely before the end of this decade, the consequences for our civilisation, and indeed for the future of a human species, will be enormous.

There is no scientific proof that we will lose control over AI by 2030. But neither is there any scientific proof that global warming tipping point of 1.5C temperature increase will happen by 2030, if we do not radically constrain the CO2 emissions. However, just by agreeing in Paris in 2015 that 2030 is

the likely date by when that tipping point may be reached, the world has profoundly changed its stance on fighting Global Warming. It may be a similar case with AI. Key AI scientists and researchers should therefore agree on what might be the most likely date when humans may lose control over AI, similarly, as International Panel on Climate Change – IPCC did in Paris

If anybody had any doubt how fast AI can advance, then 2022 is the best example. The number of fundamental discoveries and inventions in AI in 2022 was the highest ever. But there are two events, which will impact our daily life most and increase the risk in the AI area even further and faster. The release of ChatGPT in December 2022 is a watershed moment. For the first time, the capabilities of the most advanced AI agent can now be accessed by anyone, rather than by only the top AI specialists. Then the second pivotal moment came in February 2023 when Microsoft and Google released an even more advanced AI Assistants BingChat and Bard.

This opens a new era in AI. Instead of co-operation, which we have had until now, we will have competition, which means faster release of new AI products without proper safety checks. Although we will start benefiting from the fast advancement of AI capabilities it will be more important to see AI mainly as an existential threat. That is why this decade may be the most important in human history since if we lose control over AI too early, we may not have enough time to mature it as a benevolent intelligence. Therefore, we need to maintain control over a maturing AI for as long as possible. That means implementing stringent regulatory processes in months rather than in years.

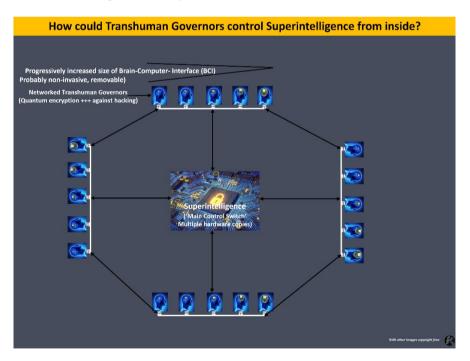
The incredible pace of discoveries and innovations in AI in 2022 raises the question about how long humans will be in control of AI and indirectly of their own future. It seems quite likely that we are approaching a pivotal moment when AI will indirectly control many decisions that we make. That is already happening on social media where the choices people made are quite often dictated by hidden AI algorithms.

For now, we do not feel it, thinking it was our decision rather than the result of us being progressively primed into making such a decision. Gradually such control will extend over large sways of our lives in a subliminal way. However, quite soon, we may notice that we can no longer make a conscious contrary decision because either it will be very difficult, would be very costly, or simply impossible. That process will progress from the control of

an individual to the control of larger groups through to national and ultimately global level.

There is no fail-safe method of controlling AI, which even now is immensely more intelligent in some areas than any human. Through the process of self-improvement, it will soon become Artificial General Intelligence (AGI) becoming shortly after that, Superintelligence. If we cannot control it, it is highly probable it becomes hostile to humans e.g., by competing with us for access to resources and energy.

The only reliable way of controlling AI is 'from inside', like Elon Musk has suggested ('if you can't beat them - join them'). That means fusing the brains of the top AI developers networked wirelessly with the 'super switch' controlling the scope and speed of the Superintelligence's improvement. They would become the first Transhumans paving the way for human evolution. Like a caterpillar becoming a butterfly, humans will one day become Posthumans. I have covered that subject extensively in my previous book 'Becoming a Butterfly.' [3]



The arrival of ChatGPT is a big step in that direction, which has shown how unprepared our civilisation is to control AI. Neither the AI researchers, and

even those who created it, have been prepared for the breadth and finesse of responses of that AI Assistant. The reason was that ChatGPT has taught itself new ways in which it can interact with people like writing a sonnet about a forbidden love at the time of Shakespeare and in his style.

In the next 2-3 years we shall see humanoid robots in various roles. They will become assistants to doctors in their surgery, to policemen, teachers, household maids, hotel staff etc. Their human form will be fused with growing intelligence of much more powerful AI agents. We should also remember that all those hundreds of millions of primitive assistants, such as Alexa or Siri are already becoming fast self-learning agents. As their intelligence and overall presence grow, so will the risk of their intended or erroneous action and the intrusion into our private life that has already started to shock us

Therefore, we need to be prepared that quite soon some serious incidents linked initially to malfunctioning self-learning robots and later-on to malicious action by some advanced AI Assistants will occur. If such incidents e.g., malicious firing of nuclear rockets coincides with other risks such as pandemics or local conventional wars, the impact on reforming democracy may be significant. They can stall any on-going programmes to reform democracy or building a planetary organization because of the ensuing chaos – a Global Disorder.

In a positive way, such incidents may mobilize nations to reduce the risk of various existential risks. Malicious incidents or significant material damage arising from Cyber wars, may lead to street protests far exceeding what we have experienced in summer 2019, organized by the 'Extinction Rebellion'. Whatever one might think about the form of these protests, which have inconvenienced large number of people worldwide, they have also brought to the fore a very important message: we all are a human civilization, and this is our only planet.

Therefore, a global regulation of AI is the most urgent task. I have written extensively about that in 'Becoming a Butterfly' proposing various solutions, which when applied together may increase our chances of creating a benevolent rather than a malicious AI. That control will be especially important in this decade before the Immature AI evolves into a far more intelligent being than us.

We need to proceed vigorously with legislative regulation for two reasons. First, it may have some impact on delaying the loss of total control over AI. Secondly, such a legislation may cushion the likely global disorder in this decade, resulting from an almost total lack of preparedness for the unprecedented transition to the world of unimaginable abundance but also the world of the unknown.

Chapter 3: Global Warming – the second tipping point

Global Warming results from the increased energy needs driven by technology, which generates more CO2 or methane, which is about 40 times more potent than CO2 in warming the atmosphere. Most scientists agree, which was also confirmed by the COP26 Glasgow conference, that the tipping point of the global temperature increase of 1.5C may be reached by 2030, if by then sufficient measures have not been implemented. Should that happen, we may no longer be able to control it. That's the Global Warming tipping point. Since this tipping point has already been well publicized, I will only cover it briefly.

Martin Rees, the former Royal Astronomer, observes that many people still hope that we can sail towards a low-carbon future without trauma and disaster. He says that politicians won't gain much resonance by advocating a bare-bones approach that entails unwelcome lifestyle changes — especially if the benefits are far away and decades into the future. There are however three politically realistic measures that should be pursued.

- 1. All countries could promote measures that save money better energy-efficiency, better insulation of buildings and so forth.
- 2. Efforts could focus on the reduction of pollutants, methane and black carbon. These are minor contributors to global warming, but their reduction would (unlike that of CO2) have more manifested local side-benefits especially in Asia.
- 3. There should be a step change in research into clean energy; why shouldn't it be on a scale comparable to medical research?

Martin Rees believes, there is little risk of a true ecological catastrophe within, say 50-year time-horizon, which humans would not survive. Therefore, it is not surprising that many politicians downplay the priority of addressing climate change. But if one extends the horizon into the 22nd century and beyond – then you may deem it worth making an investment now, to protect those future generations against the worst-case scenario, and to prevent triggering long-term changes like the melting of Greenland's ice. He also believes that "political efforts to decarbonise energy production won't gain traction and that the CO2 concentration in the atmosphere will rise at an accelerating rate throughout the next 20 years".

By then we will know with far more confidence, perhaps from advanced computer modelling, but also from how much global temperatures have actually risen, how strongly the feedback from water vapour and clouds

amplifies the effect of CO2 itself in creating a 'greenhouse effect'. If the effect is strong and the world's climate consequently seems on a trajectory into dangerous territory, there may then be a pressure for 'panic measures. These would have to involve a 'plan B' – being fatalistic about continuing dependence on fossil fuels but combatting its effects by some form of geoengineering [4]

Since 2014, when that interview with Martin Rees was conducted, Global Warming has been progressing faster than in the IPCC model at that time. We are on the trajectory for the 1.5C temperature increase to be exceeded by 2030. The current projection by the UK Met Office is that in 2025 the global temperature will increase by 1.4C above that in 1900.

One of the consequences of extreme climate change could be a full collapse of the global ecosystem, so that the planet could no longer sustain a population of billions. This seems to be one of the most complex risks to assess. An ecological disaster, such as world crop failure and collapse of ecosystem services, could be induced by the present trends of overpopulation, economic development, and non-sustainable agriculture. [5]

Most of these scenarios involve one or more of the following: an extinction event, scarcity of water that could lead to approximately one half of the Earth's population being without safe drinking water, pollinator decline, overfishing, massive deforestation, desertification, or massive water pollution episodes. A very recent threat in this direction is a bee colony collapse disorder, a phenomenon that might foreshadow the imminent extinction of the Western honeybee. As the bee plays a vital role in pollination, its extinction would severely disrupt the food chain. [6]

Failing to deal with climate change properly will determine to a large degree the quality of our lives. Directly we may initially only feel discomfort, but gradually the climate change will become life threatening. Indirectly, and much sooner, it may turn into a powerful trigger for other existential risks, such as massive migration, wars, or pandemic, all leading to a global destabilization of political, military, economic and social balance.

There is plenty of coverage of the risks that are linked to climate change. I would not in any sense like to downplay that risk, since it is multifaceted and not just limited to temperature rise, although this is the major source of the consequences of climate change. However, as I have already mentioned, by the time climate change might really endanger human species and most

other species on our planet, which is in the next century, our civilisation will either survive or will most probably be gone because of other risks.

Therefore, we should put all our efforts to minimise the risks stemming from Superintelligence because if we make it benign and friendly, it will be our major hope for reducing or entirely eliminating other anthropogenic existential risks. It is probably too late for withdrawing from carbon-based economy. The world will not come together sufficiently quickly and with substantially deep reforms. But not all is lost. In a few decades we will have Superintelligence that will help us deal with this problem and many more. The problem is not how to survive the climate change by the end of this century but how we can survive at all in the next 20 years.

It seems that it is already too late for the current actions, including an imaginative EU's climate change budget, to halt the temperature increase by 2030. The only feasible way might be to start an urgent geo-engineering reset of the planet's climate, using temporarily the least environmentally damaging measures (and there are over 100 of them). So, we still have some control over the climate change till the end of this decade. If we fail, the planet may become uninhabitable for humans by the end of this century.

Chapter 4: Global Disorder – the third tipping point

Individual risks combine into an existential threat

The emergence of Artificial General Intelligence (AGI) by about 2030, may also overlap with what can be termed as a **Global Disorder**. This is the third progressive civilisational threat, which may materialize within this decade. It is characterised by:

- Heightened geopolitical risks
- Economic instability the crisis of capitalism and technological unemployment
- Social inequality the crisis of wealth distribution where those that are wealthy, are becoming wealthier even faster
- Political imbalance the crisis of a democratic system
- Local wars that can start a global war

In this period, we may face perhaps not a threat of the human species' survival but possibly the demise of our civilisation as we know it. There are quite a number of strategic studies envisioning such a scenario where several geopolitical risks are triggered at the same time. Their combinatorial effect could lead to a civilizational catastrophe. Here is a sample of such risks:

- Immature AI attack
- Serious military conflict Russia/NATO such as the war in Ukraine, but which may expand to Moldova, Caucasus, the Arctic region, the Baltics, or Belarus
- India-Pakistan, N. Korea, Iran-Israel nuclear war
- Cyber wars e.g., Russia/USA or China-USA
- Severe draught and hunger causing large-scale migration
- Natural or artificial, laboratory-originated pandemic
- Extremely severe economic crisis lasting several years
- A fatal crash of the world banking system caused by a malicious penetration by criminal organisations, creating a global panic
- Technological unemployment.

I am not going to cover all these risks in any detail. Those who are interested may read my recently updated book – 'Who could save Humanity from Superintelligence?' [7]. However, I will cover just two of them:

- 1. A serious instability in the Southern Hemisphere, mainly, but not only, linked to global warming.
- 2. The second cold war.

Instability in the Southern Hemisphere

A useful barometer for a Global Disorder is the UN's 2030 Agenda for Sustainable Development. Its tipping point is indirectly indicated by the UN Millennium Project. It sets 2030 as the date by which 17 global sustainability goals must be achieved if we are to avoid civilisational catastrophe, primarily in developing countries. Although initially the threat may be concentrated there, it is likely to spill over to developed countries through uncontrolled large-scale migration. People facing death from famine will be determined to cross borders, frequently using violent means, and creating a global chaos. Stopping massive migration by building a 7m wall between Mexico and the United States, which Donald Trump initiated, will not resolve the long-term problem. Neither will an ad hoc humanitarian aid. In the long-term the increase of the global temperature and the disruption of global economics, e.g., because of blocking the supply lines from Russia and China, will make poor countries even poorer and more unstable than ever before.

There are two types of migration. The first type is the migration, which originates from natural catastrophes like a draught, or man-made disasters, such as wars. The second one is an economic migration. Let's consider the first type of migration. In the future, we may have natural disasters on epic scale – i.e., volcanoes or earthquakes, or several years of draught. That would make large swathes of migrants fleeing to safe havens e.g., in Europe or the USA, from countries such as Africa, South America or Southeast Asia, because the country in which they were born might become utterly uninhabitable. There may potentially be hundreds of millions of people trying to escape their own homeland into the countries that have not been affected by natural disasters or simply less affected, and which would still have some resources untouched. It would be very difficult to propose a different solution for these people other than simply share with them whatever we have until the situation stabilizes and enables them a safe return home.

The second kind of migration is economic. Here we might help a lot. We have two broad options. The first one is to let them in with their families and make workplaces and homes in the host countries. We tried to do that in

2015. Initially, countries like Greece were flooded with migrants because they were supposed, under the EU Treaty, to offer them housing and any support they needed. Since Greece was the first country that could offer migrants a safe haven, that's where the problem initially begun. Greece ran out of resources very quickly. It was overwhelmed by the number and determination of the people, who had nothing to lose, perhaps escaping utter famine or civil wars in Syria and Iraq. Then Greece opened the borders to other EU member states, creating a chain reaction across the whole European Union. Over 1 million people entered the EU in just a few months. However, up to 60% of those migrants, as reported by "Independent" in January 2016, were considered economic migrants who took the opportunity and entered the EU with the wave of asylum seekers.

The problem created by such a massive, mainly economic, migration in a very short space of time, is with us till today. That was the key justification for various reforms postulated by populist movements, and which led to Brexit in Britain, right of centre governments in Austria, Poland, Hungary. The war in Ukraine creating an even faster and more dramatic migration wave. As reported by UNHCR in January 2023, about 8 million people left Ukraine (about 20%), although 2 million have since returned to the country.

Now let's try to extrapolate such small waves of migration to a much larger scale involving tens of millions of people from the southern to northern hemisphere. How could it trigger wars and what could cause local wars to become global? As the EU's example has shown, opening borders to the neighbouring countries would create a chain of events. Very quickly those events might trigger local wars, which through combinatorial factors could trigger existential risks, such as natural pandemic (lack of basic hygiene or spread of viruses such as Ebola). Probably the only reason why the EU states, which were 'invaded' by migrants in 2015 did not go to war with their neighbours was that they were members of the same European Union. It could have been an entirely different outcome, had the migrants tried to cross the border, for example, into Russia.

People say, 'Democracy only works where there is a broad consensus about distribution of wealth and power.' According to a number of surveys, only a proportion of the migrants flowing into Europe have fled from the immediate consequences of violence. Most of them came from places where there was no war. They just wanted better lives.

There are dozens of regions on our planet that are potentially a source of such massive migration. First of all, Africa comes to mind, where at the moment most people are driven out of their countries towards Europe in search of a better life. Then there is the entire Middle East, which may enter a new phase of wars. Russia's weakening of its military and economic capabilities resulting from its aggression of Ukraine, may lead to a withdrawal of their forces from Syria and encourage dormant anti-Assad forces to stage a new war there. Other conflicts may be reignited, or its scale increased. This includes Iran and Saudi Arabia in Yemen, or Lebanon, Syria and Iraq, not to mention Israel and Palestinians. And how about the Kurds spreading over Iraq, Syria, Turkey and Iran, who have declared their independence on 27th September 2017? Will they allow their aspirations for their state to be quashed for much longer? It is obvious that the old state borders of most Middle eastern countries are almost non-existent, and therefore these regions may fragment into stateless areas ruled initially by a local warlord. So, expect continuous bad or even very bad news from that area

The current attitude of major powers and regional organizations such as EU or ASEAN is only making this risk even more credible. The catastrophic withdrawal of NATO from Afghanistan in August 2021 was another example of the weakening resolve in Western countries to keep such areas under international control for decades. Mass economic migration (not to mention war-related wave of asylum seekers) now poses the most serious threat to Europe's stability since the end of the Cold War, and probably since the end of the Second World War.

Has the second cold war already started?

The Russian invasion of Ukraine has turned the post-second world war period upside down. The procrastination of France and Germany, which were the Western representatives in the Normandy Format, to make a decisive move forcing Russia's withdrawal from Crimea, is a good example of the consequences of tolerating such a blatant invasion. Only when the Russians invaded Ukraine for the second time on 24th February 2022, the Western politicians, perhaps finally, remembered the longer-term consequences of the Munich appearement of Hitler in 1938. They made a break with the previous policy and gave unprecedented, although often belated and insufficient, military, and financial support for that country. Whatever happens after Ukraine regains its independence of the lost

territories, the relationships with Russia will not return to the period of the first 10 years after the fall of the Soviet Union.

Assuming there will be no direct, potentially nuclear, war between Russia and the West, the third (hot) world war may not happen. But we have already entered the second **cold** war. Those, who have not experienced the first cold war, may have difficulties in recognizing how the second cold war may begin. So, let me remind you, how the first cold war started.

The term 'cold war' was first used by George Orwell in an article published in 1945. Following the surrender of the Nazi Germany in May 1945, which divided Germany into four occupying zones American, British, French and Soviet Union's. In 1947 the USA invited all European countries to join the European Recovery Program, known as the Marshall Plan. For the Soviets, democratic reforms in the occupied Germany, and in West Berlin, which underpinned the Marshall Plan, were absolutely unacceptable. Allowing East Germany to apply for these funds, would create a domino effect in Eastern Europe. Therefore, the Soviet-backed governments in Eastern Europe refused to join it. When the Marshal Plan begun in April 1948, the three Western powers agreed to merge their three sectors, doing the same in West Berlin. That was followed by the introduction of a new Deutsche Mark in the Western Zones. Russians had to resist it because it would mean a dependence on the market, rather than on a socialist, economy. It was the moment when the simmering cold war came to a boiling point.

Since Russians did not have a nuclear bomb yet, that came in August 1949, the only weapon left was economics. So, how did the Soviet Union use the economic pressure in 1948? They decided to block the land-based supplies to West Berlin. It was meant to test the Allies' resolve to defend the city and indirectly the Western Europe. The Allies responded by launching a huge operation known as the Berlin Airlift, delivering essential supplies, such as coal (it was a severe winter) by a flotilla of hundreds of small aircrafts. West Berlin survived the blockade and in May 1949 West Germany was created, followed by the creation of East Germany in October 1949. Thus the 40-year period of the Cold War started.

Today, the situation is obviously different but there are also some similarities. This second cold war is also founded on economic basis, and more precisely on the supplies of limited resources. That has been clearly demonstrated by the Russian embargo on exports of the Ukrainian grain and chemicals, which were only partially removed under the pressure from the United Nations. This is Russia's 'softer' power, which it has used against

the West, and which perhaps unintentionally also affects the developing countries. Russia may use it frequently if the West does not withdraw some of its sanctions, such as on the blockage of Russia-originated SWIFT banking transactions. The possibility of a nuclear attack, combined with a cyber war and a potential biological or chemical war, although still remaining, will become the secondary option for Russia to get what it wants.

But what distinguishes this Second Cold War is that there will be at least two opponents. The other one, much more significant in the 'soft' power, is China. This is the consequence of the rivalry between the West and China, as it emerges as a major power competing for global economic, political and military dominance.

The main axis of political rivalry between the West and China is a conflicting political ideology. The western democracy has a system of government that is based on individual freedom and human rights, whereas China is a one-party communist state, with emphasis placed on state control and censorship. This political difference has created tensions between the West and China, as the western countries consider China's political system a threat to their liberal democratic values. That has impacted global politics, with the West and China taking opposing positions on a range of international issues.

The West promotes individual freedom as the most important value, upon which the law and the rights of the state are bestowed. Therefore, democracy is much more widely accepted in the western civilisation. However, the consequence of this attitude is that when we need to sacrifice part of our freedom or limit our choices, for examples in fighting existential man-made threats, this may put us all in an extremely dangerous situation.

The military rivalry between the West and China is rooted in their conflicting interests in regional and global security. The West has long been the dominant military power in the world, but China has been rapidly modernizing its military in recent years. China has been investing heavily in its military, including in areas such as cyber and space capabilities, which are seen as critical for maintaining global security. The West views China's military modernization as a threat to its own security and interests and is concerned that China's military capabilities could be used to challenge the West's global dominance.

The Second Cold War between the West and China has already begun to shape the world. That was so evident at the start of the COVID pandemic when the supply lines from China were severely affected, creating shortage of materials, components and ready-made gods. However, even before then competition between the West and China for markets and resources, primarily in rare earth metals, was evident. In the immediate term, China's advantage in manufacturing cost differential, which has led to moving a big proportion of the western manufacturing to China in the first place, will be a major bargaining chip.

We found ourselves in such a game-changing position, when the vast proportion of the Western manufacturing capacity was transferred to China, starting in the late 1980'. At its core is a new business ethics proposed in the 1970' by Milton Friedman. It underpinned, what it became known as Reaganomics, a new version of the capitalist system supported by President Reagan and Mrs Thatcher. It proposed that the only aim of business was to make profits since indirectly, when these profits are taxed, it is the most effective way for companies to make their contribution to a society.

That is the essence of neo-capitalism and globalisation. It promised huge profits by shifting mainly the manufacturing capacity to China and the Far East, because the labour costs in China were significantly lower. Such a situation has continued without any major change until very recently. Covid-19 has exposed something that was well-known to quite a few economists and politicians - the West was becoming dangerously dependent on China's manufacturing. Many previously competitive industries were completely destroyed, with the American Rust Belt being the best example.

But we needed a smoking gun, such as the Corona virus to show to most people what it meant in practice. Although China did not cut the supply lines deliberately, it was an evidence that China could stop it anytime it wants, by using its economic, and especially manufacturing, capacity to exert political pressure. The long-term objective is to help it achieve its domination, and perhaps ultimate supremacy in the world.



Image: Financial Times ft.com

Such a break in the supply lines for a few months most importantly to Europe and the USA, created by the COVID-19 pandemic could therefore happen any time, fuelling the second cold war. Thankfully, the consequences of this 'discovery' of China's potential blackmail as a political weapon will be generally positive for the Western countries.

At the same time, the wage differential has become less significant. The wage cost in China is now about half of that in the USA. In the 1980 the difference was 10-fold. But in the most technologically advanced industries, such as electronics, and automotive sectors, the labour content is becoming exceptionally low because of robotisation. There, the wage differential is in the range of 10-20%. If we add the transportation, insurance, and other related costs, as well as the resilience and proximity of the supply lines, the advantage of producing goods in China disappears almost completely.

Therefore, what we can expect in the next few years is a rapid reindustrialisation of the Western economies and a massive robotisation. Since the robotisation is now reaching a minimum critical mass for investment, it will lead to a virtual circle of falling down prices of AI-supported, self-learning robots, accelerating the re-industrialisation even more. Initially it will have a beneficial cushioning effect on the employment market in the Western countries. However, in just a few years' time, the effects of Technological Unemployment will change all that. As many as 0.5 billion people may become permanently unemployed by 2030, mainly for their inability to learn the new skills requiring higher level of education.

In the immediate future, the post pandemic repercussion, will cause a significant drop in manufacturing output in China and its trade with the Western countries. Even China's GDP may fall in absolute terms. That may cause some disturbances and even street protests, unknown as yet in China. We have seen it towards the end of 2022, when the China's President had to lift a strict anti-COVID regulations under mass protests across all China. To pacify these trends with a minimum political cost, the Chinese leadership will point to the West as the main culprit, similarly as Donald Trump was doing, when he was pointing his finger in the opposite direction. Nothing pacifies a nation more than showing that it is the external enemy, which is the cause of their unwelcome circumstances. That will also justify the flexing of China's military muscles and keeping the current leadership in power.

We have seen throughout 2022 that China has staged a series of threatening manoeuvres around Taiwan. That was preceded by the creation of artificial islands in the China Sea. A direct consequence is a serious deterioration in the relations between the West, mainly the USA, and China. Current China's aggressive politics, towards Taiwan, Japan, and the USA, especially in the China Sea and around India, may create some hotspots bordering on a full-scale war, especially with Taiwan, at least by applying the concept of the so called *Finlandization*. This is the term used in the first Cold War where the Soviet Union guaranteed Finland a kind of sovereignty if Finland would not cross certain lines on the international stage.

Similarly, China may initially offer peace to Taiwan if it curtails its relationship with the USA. But this paramilitary adventurism may be actually a smoke screen. It becomes apparent that China thinks big and very long-term. The Chinese leadership does not see the need to limit their global expansion. Whichever country is not yet under their control is a target to be subjugated. That's what the second cold war is about.

China has never been an occupying force of any country. Quite the reverse, it was itself occupied for nearly a century by the Mongols. So, it is unlikely they have such an objective. Secondly, Chinese generally follow Confucian and Taoist doctrines, according to which personal goals are always secondary to the nation's goals, which ultimately means that the survival of the nation counts more than a survival of any individual. For a Chinese, the state represented previously by an emperor, and now by the First Secretary of the communist party, has the right to expect from each person an ultimate sacrifice for the nation's survival. It is a mindset of a bees' swarm protecting

the hive. That explains why it is much easier to apply in China the Machiavellian principle – "the goal justifies the means".

The outcome of the Second Cold War remains uncertain, but its impact on the world will likely be significant. If the rivalry between China and to a lesser extent, Russia, continues to escalate, it could lead to increased economic, political, and military tensions destabilizing the global system. Alternatively, if the West and China find a way to cooperate and work together, it could lead to a more stable and prosperous world for all.

Chapter 5: Why the reform of democracy is so urgent?

Nobody behind the steering wheel

The period of this decade and beyond will be characterized by a truly profound civilizational change. It is highly likely that by about 2050 a mature Superintelligence may emerge, taking over a complete control of the destiny of Humanity and the planet itself. Viewed from a historical perspective and considering the technological progress, this change will be greater than any of the previous four civilizational transformations: Tribal/Nomadic, Agrarian, Industrial or Post-industrial (Digital).

We may survive Global Warming for at least 100 years. Some humans may also survive Global Disorder, even if the most catastrophic scenarios come true. What humans will not survive is the emergence of a hostile AI. We cannot uninvent AI, nuclear weapons or nanotechnological robots. We have reached the Fermi's threshold, where the technology, which we have created, can lead to our own extinction. We will need to do everything possible to increase the likelihood of creating a benevolent, rather than a malicious, Superintelligence.

One of the most effective ways, in which this maturing AI could be controlled will be for them to learn our values. That is one of the reasons why we need an urgent reform of democracy and the agreement on which universal values best represent Humanity. Millions of AI assistants, autonomous cars, etc., already provide feedback to a central 'hub', of how they practice those values and what they experience. Their accumulated knowledge is being stored in a central repository on the network, which is a kind of a 'pool of intelligence and behaviour' to which each of these cars' has full access. Every day, their AI module is updated with the recommended behaviour learned from the common experience of all controlled cars. In the end, this is what we do.

However, to nurture AI in that way, we need an agreed set of Universal Values, the bedrock of democracy, which would become a master plate of those AI agents' behaviour. These values need to be re-examined and confirmed by all states, so that they become universally acceptable. That's why, among others, a rapid reform of democracy is so urgent. How is this possible in our polarized world? It is very difficult, but perhaps there are ways to achieve that. I describe some options in Part 2.

In any case, we need to do everything possible, so that this decade leads us to a new world of great possibilities opening the pathway to unimaginable abundance. For this to happen we must, apart from nurturing AI, so that it becomes our friend rather than foe, also fight Global Warming even more vigorously than ever before and ensure that wars, such as in Ukraine, do not convert into a Global Disorder. The biggest risk which our civilization faces right now is that nothing substantial will be done in the next few years to combat existential risks. Unfortunately, we do not have 100 years to prepare mitigation strategies and allocate the required resources.

I keep emphasizing the exceptional risk posed by AI. That does not mean that the other two progressive risks Global Warming and Global Disorder are not important. They are, although the AI threat is the most imminent. Equally important are the remaining man-made existential risks, such as artificially made pandemic, or a global nuclear war, which incidentally may happen at any time, not just in a decade. However, it is AI alone, which may literally make our species extinct.

It is now becoming more likely than not that we shall have Artificial General Intelligence (AGI) by the end of this decade, rather than in a few decades from now, as many AI researchers had thought not so long ago. It will be far more intelligent in most areas than anyone of us. So, we may have even less time to implement strict control mechanisms, which might significantly reduce the risk of delivering a malicious Superintelligence. How then a deep reform of democracy can help us combat those existential risks?

The prime reason for this reform is for the citizens to regain the trust in those that govern us. It is necessary, for the politicians to be able to impose on us severe restrictions that may be necessary in many areas, so that we have better chances of mitigating existential threats. A list of such restrictions, limitations and inconveniences may be quite long but let me give you a few examples, related to the Three Tipping Points.

- 1. In **Global Warming** these may be the limits on car pollution, no. of annual flights, or protecting large areas of woodland to minimize CO2 emissions.
- 2. In **Global Disorder** it may require special taxation in developed countries say of 2% of GDP p.a. to be set aside for a large-scale wealth distribution. This may take a form of long-term project-based investments to less developed countries, especially those, which will

- be impacted by global warming, significantly reducing the reasons for economic migration.
- 3. In **Artificial Intelligence**, certain restrictions may be required on the use of AI Assistants, or any advanced AI applications, as well as limitation of privacy (e.g. peeking into our smartphones) to reduce the chances of AI getting out of control in certain areas.

However, the most obvious limitation will be a significant loss of sovereignty. All countries, or at least a significant majority of the states, should be prepared to give up part of their sovereignty, by becoming a member of the Human Federation and its World Government. This is something that most people would resist giving various excuses. Therefore, the chances of that becoming reality are not that big. The only way that it may happen is under a severe duress, as to some extent in the proxy war started in 2022 between the West and Russia, where the danger is obvious and almost touchable. That's what I think is likely to happen. However, this means walking a tightrope. Will the people in individual countries agree to implement such changes before it is too late? We have the best example in the Ukrainian war, when the military equipment has been delivered but almost always much later than needed, causing unnecessary damage and death among the Ukrainian soldiers and population at large.

Which are then the key elements of such a democratic reform? Those ones that I propose cover all Three Tipping Points, which are all fully covered in Part 2.

- 1. **Universal Values of Humanity.** This is the first, and perhaps the most significant part of a deep reform of democracy.
- 2. **The reform of democratic system** itself primarily by merging the representative and direct democracy
- Institutionalizing Participatory Democracy. This would be enabled by a deep engagement of citizens in daily politics by their randomly selected representatives, forming Citizens' assemblies or a Citizens' Senate.

To facilitate these reforms, we need to change fundamentally the way we conduct politics by moving away from adversarial to consensual debating. This should be supported by the most advanced AI Assistants for conducting Consensual Debating, which is covered in Part 4.

The need for the World Government

Perhaps one of the reasons that we do not have it yet is that many of us still hope for the UN to be quickly transformed into such an organisation. After all, this is the organisation that should deal with existential risks in the first place. Unfortunately, this is also the organisation that indirectly increases the Humanity's overall existential risks by being almost totally incapable of solving existing grave problems like the war in Ukraine, where Russia as one of the members of the Security Council has invaded its neighbour. The same is true of the previous serious conflicts e.g., in Syria, Iraq, and Afghanistan, because of the unanimity voting in the Security Council.

More and more people including some politicians, like the French president Macron, do recognize the danger of doing nothing or procrastinating the necessary changes in how we are being governed and taking care of our planet. We slowly begin to recognize global problems, such as climate change, as potential existential threats for Humanity.

Existential risks can materialize at any time, e.g., natural pandemic like the Coronavirus in 2020, or due to combinatorial effects of several risks such as large-scale migration, draught, local nuclear wars or cyberattacks. Therefore, we should have an organization that could act as the World Government right now. However, there is no hope that all countries of the world would give up significant part of their sovereignty to make that happen in the near future.

In this decade, we will be rubber-stamping at a personal and governmental level most of the decisions taken by AI Assistants. I am not talking about millions of robots taking over but rather a subtle, web-like self-learning, single entity, grown out of the current multitude of AI projects. I realize it may be hard to accept such a view, however, let us assume that this is indeed the last decade when we are still in control of our future. Who will then take charge for guiding us through this most perilous period in human history?

We must be realistic and recognize that creating a true World Government from scratch, with all countries as its members, in the second part of this decade is not feasible. We can only achieve such an objective partially, by transforming an existing organisation, or empowering a single large country with supranational powers, to become **a de facto** World Government, i.e. the powers of a federation.

But who could play such a role? This is an important and complex issue that extends beyond the subject matter of this book. However, table 2 summarises the result of a detailed analysis of potential candidate countries and organizations, which might play such a role, carried out in my book "Democracy for a Human Federation" [8]

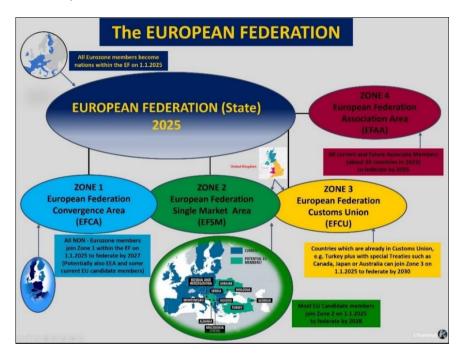
Name of Organization or State	Risk Mitigation Capability Ranking (weighted)											
	Demo- cratic Insitutions	Respect for Human values	Military power	Economic power	Organi- zational capability	Response time to risk	Land mass	Experie- nce in large progra- mmes	Versatility	Neut- rality, Objec- tivism	Total Score (weight * capability)	
Weight>	10	9	8	7	6	5	4	3	2	1	550	
European Union	10	10	7	9	10	10	6	10	10	10	503	
NATO	8	9	10	10	10	10	9	7	4	9	495	
USA	9	9	9	8	9	9	7	9	9	9	480	
Japan	10	10	3	6	9	9	1	5	4	9	391	
Canada	10	10	4	4	9	9	4	3	2	10	388	
Australia	10	10	3	2	9	9	3	1	3	10	358	
United Nations	10	10	2	2	8	5	2	6	10	10	349	
China	3	1	7	7	8	8	5	10	9	1	301	
Russia	4	3	8	3	6	6	8	10	9	2	300	
India	7	5	4	5	5	4	2	5	3	7	268	

Who might play the role of a de facto World Government?

European Union appears to be the best candidate to gradually become the World Government. But the starting point must be the federalization of the EU into the European Federation. Such a possibility will be tested this year when the EU Council is to implement the recommendations of the year-long Conference on the Future of Europe, which closed on 9th May 2022. At the time of writing, in February 2023, it now looks very probable that a Constitutional Convention to agree a new Constitution replacing the Lisbon Treaty is a near certainty, after the Macron-Scholz meeting in Paris in January 2023. Considering how fast the events unfold resulting from the Ukrainian war, I would expect that a European Federation, under a different name will be created. Which actual form it will have it is impossible to predict. However, the most important from a global perspective is that such a reborn European Union acts like a political federation and has the powers similar to a federal government.

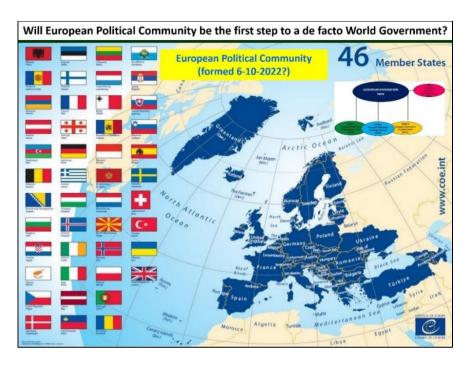
The very fact of creating such an organisation will be a magnet for undecided countries, such as Serbia and dozens of countries which are unprepared either politically or to a lesser degree, economically to be part of such a federation. But if this new organisation is to play the prime role in the world, because it has better prerequisites than any other organisation, it should be

brave enough and admit such countries as associate members as soon as is practical. That could be achieved by creating adaptation zones. The EU has already such a mechanism, which has resulted in creating association agreements with about 30 countries. There are also over 80 very comprehensive trade agreements. Such as federation could be created by 2025 (remember exponential pace of change) resulting in an organisation with nearly 100 members, more than half of all states.



However, there is also another option, emerging because of the war in the Ukraine. In October 2022, a new organisation called the European Political Community, has been created. It does not have well-defined objectives yet, but it may be easier and faster to create the European Federation based on that organization.

The main advantage is that it will be a very shallow federation where common economic policies and a common currency will be less important than it is a deeper form of a zone-based federation with longer transition periods. The only difficulty here, as it would be the first option is that there must still be a common platform for willing to federate in the first place. That common platform must be based on Universal Values of Humanity (see Chapter 2, Part 4) and of course common democratic principles.



Finally, there may be yet another, faster and even shallower type of federation, which may become a de facto global decision maker, rather than a de facto World Government. It may be the creation of defensive alliance based on NATO and the EU military capabilities. Such an option becomes more realistic day by day and might become reality within months rather than years if the war in Ukraine expands into Moldova or the Baltic countries in a less overt way. Considering that NATO has similar insistence on adhering to common democratic principles as the EU (the only outstanding problem is Turkey) such a defence alliance would in fact become the most powerful political organisation.

Whichever option materializes, such an organisation should be gradually converted into, what I would call, a Human Federation. It would to a large extent replicate the United Nations with some key differences:

 Majority or double majority voting like it is being applied in the EU, where for some most critical decisions a majority of the number of countries and the majority of the percentage of citizens must be both achieved to pass a law.

- It would have executive powers in the form of the World Government
- It would only admit members fulfilling democratic criteria.
 Therefore, it would not include all, but hopefully the majority, of the states
- It would have its own army, almost certainly based on fusing with NATO

Such a scenario does not imply an immediate dissolution of the UN. This new organisation would probably co-exist with the UN for some time, like in the current situation, where the UN is utterly unable to end the war in the Ukraine and therefore, a coalition of the willing western countries (NATO and the EU) fulfil this role. In any case, if such an organisation emerges, it should by default co-operate as much as it would practically be possible with the UN, gradually substituting its role.

Conclusions

It is unrealistic to assume that we can survive the next decade without triggering at least one of the existential threats. That would mean reaching the point of no return when the demise of our civilisation, and possibly also of our species, would become a near certainty. How fast this will happen depends on which of the existential threats will have materialized and whether only one, or several of them will have happened at the same time. The only situation in which it may not happen is to have a fully operational Human Federation and its de facto World Government before 2030. That's just several years from now.

I know that for most readers it is a nearly utopian view of having a Human Federation and a de facto World Government so soon. But I will add one more argument to those mentioned earlier. We are now in a situation quite similar to that in 1948, when the world was even more divided than now. We were on the brink of the World War III with the blockade of West Berlin by the Soviets for almost a year. What happened then? NATO was created within just one year.

Therefore, to achieve that seemingly unattainable goal we can no longer use the same processes in governing countries and in forging international agreements as before. They would have to be concluded perhaps ten times faster than before. We must improvise and accept imperfect solutions because what counts is to save our civilisation with whatever means are available. Yes, that is a risk in itself but it is a much lower risk than accepting defeat in fighting off existential threats and lose control over our destiny. As the events in the Ukrainian war unfold despite all the odds, almost paradoxically, the above positive scenario is now more probable than a dystopian view of a complete demise of the human species over the next decades.

That is the assumption I take throughout the book and for some proposals, put forward here. I believe ultimately humans will be able to control existential threats well beyond the next decade and thus start building a fascinating future. But the conclusion is that a shiny future for humans cannot be achieved if we continue to solve Humanity's problems locally. They can only be solved globally. To survive as a species, we must **start acting fast as a planetary civilisation** in various areas of human activity. That means we need to abandon any inclination towards isolationism or nationalism. Instead, the world must act together effectively as a federation.

2

PART 2 WHAT'S WRONG WITH DEMOCRACY?

Chapter 1: A broken promise

Government of the people?

It was Alexis de Tocqueville, to whom the phrase 'Democracy is a tyranny of democracy' is commonly attributed. He used it in his book 'Democracy in America'. Unfortunately, he did not follow his own recipe how to reform democracy when he was a minister in the French government in 1849. However, this is a good starting point for a book on Consensus. How far has democracy departed from the famous and perhaps the shortest definition by the U.S. president Abraham Lincoln: "Government of the people, by the people, for the people".

Is this how you feel about democracy today? Probably not, at least if we look at how the two bastions of democracy - USA and Great Britain have recently arrived at their democratic decisions. In the USA people elected Donald Trump as President. In Britain's Brexit referendum, which may have decided the future of the country for at least a generation, the 'leavers' won by 52% to 48%, with many voters not having any idea what it was really about and as many as 5% of the voters being illiterate (based on 72% turnout) [9]. Is this a clear sign of the "tyranny of majority", the term already used in antiquity?

The origins of the term 'democracy' can be traced back to ancient Greece and Rome, where society was divided into two distinct and opposing classes: the few (the rich or oligarchs) and the many (the poor or the plebs). The word "democracy" is derived from the Greek words 'demos' meaning 'the people' and 'Kratien' meaning 'to rule', literally 'the rule by the people'. Athens is widely considered as the birthplace of the earliest democratic system, established around 510 BC. However, some scholars say the roots of democracy can be traced back perhaps 100 years earlier to Persia, Mesopotamia, and India.

The Athenian democracy was a direct democracy, where every individual was eligible to participate directly in decision-making processes. But to be eligible to vote, one had to be an Athenian male citizen over the age of 18. At its most advanced stage, the Athenian democracy introduced certain political customs and institutions. These included written laws, the freedom to speak in public, salaries for elected officials, voting by lot, and even voting using machines. There was also a limit of the number of terms in the office and the procedures for a recall of elected officials, who in

some circumstances could be the impeached. Finally, there was also a formal trial before elected or selected juries for those who committed a crime. The Athenians quite frequently used a lot system, unique to direct democracies. In this system, important governmental and administrative tasks were performed by citizens picked by a lottery.

The Athenian democracy was most suited to the conditions in Athens at the time, as the community was small enough for every individual to participate in debates and cast their vote. However, the great experiment with democracy came to an end with the death of Alexander the Great.

Almost at the same time, in 509 BC, the Romans established their first Roman Republic. It was a mixed constitution, with elements of democracy and oligarchy. The Roman Republic had a complex system of government with two consuls elected for one year, who had executive powers, and a Senate, which had advisory powers. The Senate was composed of wealthy patricians (Roman equivalent of the Greek oligarchs), while the common people were represented by tribunes. The Roman Republic also had a legislative assembly, the Comitia Centuriata, which consisted of all citizens and was responsible for electing magistrates and passing laws.

The fall of the Roman Republic marked the end of the classical era of democracy and the beginning of the Roman Empire in 27 BC, when Julius Caesar became the first Roman Emperor. During the Roman Empire, democracy was replaced by autocracy and the rule of one person. The Roman Empire was succeeded by the Byzantine Empire, which lasted until 1453, but it was not until the modern era that democracy was reinvigorated.

Overall, the solutions proposed by the Greek democracy were different from those proposed by the Roman republicanism. The Athenian Greeks had a simple principle: **democracy was the rule of the many over the few**. In Rome, the few were the patrician class represented by the senate, an exclusively aristocratic institution. The plebeians (plebs) had their own institutional source of power in the councils and popular assemblies. **The Roman system allowed both the few and the many to take part in the political governance**, thanks to multiple institutions. In that way, the ancient Rome achieved a certain degree of stability by giving both the masses and the elites some institutional stake in the political power. However, the role of the Roman voters was much less important than those in Athens.

The modern era of democracy began with the Enlightenment, a cultural, intellectual, and scientific movement in the late 17th and 18th centuries

that challenged traditional institutions and beliefs. The Enlightenment led to the American Revolution, which established the United States as a democratic nation in 1776, and the French Revolution, which established the First French Republic in 1792. The French Revolution led to the adoption of the Declaration of the Rights of Man and Citizen, a cornerstone of modern democracy.

The modern era of democracy has seen tremendous progress and sophistication, covering more and more aspects of our lives, making us all behave in a more respectful and considerate way in our relations with others. On the other hand, the way real power is executed has probably not changed much. This is especially true in the countries, whose constitutions do not impose any limits on the number of terms served by the elected parliamentarians.



Most modern systems tend to be far more 'Roman' than 'Athenian'. The legal systems of democratic countries are largely founded on maxima Romana (a Roman doctrine), e.g. habeas corpus (which in legal context means a recourse in law, through which a person can report to a court an unlawful detention or imprisonment).

How has democracy become derailed so fast?

The start of the current crisis of democracy can be linked to the neo-liberal period, which some people call Reaganomics, dominant since the early 1980s. In most general terms it intended to promote individualism and corporate power over state power, or other forms of social organisation. That created the first crack in democracy.

However, what was less foreseeable at the time, was the impact of technology on politics and democratic institutions. In particular, it regards the impact the Internet has had on individuals, leading to, what Sean Lusk calls, social atomisation. It is not simply about individual people or local communities using social media in preference to more conventional forms. Almost everything that once required a meeting, a commitment of time and often of negotiation, can now be dealt in a digital transaction confirmed with a couple of clicks. This brings great advantages. But it also turns us all into customers, with high expectations and minimal obligations.

Such use of technology has been widened by the increased use of sophisticated socio-technical tools. People can now be easily contacted in thousands or even millions via mass media, which deliver to those seeking power, the votes of the voters, who cannot clearly see the real intentions of those that will govern them. The voters who have been cheated out will later on complain that 'they' – the politicians – should never be trusted, since they just cannot understand 'us'. That is one way of building a society of 'us versus them', creating the second serious crack in democracy.

At around the same time a kind of 'generational war' begun, in which younger people compete with older people for scarce physical and social resources as lifespan lengthens. Property is in the hands of the old, while student debt is mounting. Additionally, house prices are rising much faster than young people's salaries, and more and more of them cannot afford to own their house. All that demotivates young people, who feel that nothing can be changed, so they don't vote, creating a vicious circle. That is the third crack in democracy.

From there, it is only a short connection to 'us versus them' syndrome, to the next convenient sticker, skilfully used by various populists. It is the use and abuse of the 'elite' label by both on the left and right of politics trying to blame the elites for their voters' misfortunes. The left stands behind the 'poor' people shouting – look, it is the elite that care for their own interests only; they will never understand your needs. Those on the right shout to

their middle-class voters – can't you see the elite favours the poorer and all those migrants for whom you must pay. That is another dent in democracy.

If we dig a bit deeper, then that clinging to power becomes more obvious, another crack in democracy. In most countries, including the UK, there is no limit on the number of parliamentary terms. Dennis Skinner and Kenneth Clarke both served as MPs in the UK parliament for 47 years. The main goal of most politicians is to get into power and cling on to it. Most recently, it has been exemplified by two attempts to restructure the working of the British Parliament as part of the parliamentary procedures to ratify Brexit.

In 2012 the UK coalition government started talks on implementing the Liberal Party's proposal to "Replace the House of Lords with a fully elected second chamber, with considerably fewer members than the current House". The proposal fell through using procedural motions to never pass the bill in the first place, since many of the current Lords would have lost their positions. Even more incredible is the attempt to change the boundaries of the British electoral wards, so that they are approximately equal in the number of votes. Such a logical proposal has been opposed by the Labour Party simply to guard its interests of clinging to power. Otherwise, they would have lost about 50 seats.

One of the taboo words in most democratic countries is the problem of corruption and therefore that crack in the façade of democracy is not so frequently spoken about. It was Lord Acton, the 19th century British politician, who said, "Absolute power corrupts absolutely" and that applies to the majority of the countries, which consider themselves democratic. The best example today is Russia, which is formally a democratic country but where almost an absolute power is held in the hands of the president – Vladimir Putin. In March 2018 he won another 6-year term, mainly by having an almost total control of the media, with 75% majority (no significant manipulation of the result occurred). No wonder Transparency International rated Russia in democracy rank as 131 among 176 countries. The USA is another good example. As in all democratic countries a representative to the Senate or the House of Representatives is elected for a specific period. Even if he is a billionaire, like the previous president Donald Trump, there is a tendency for those in power to make even more money (e.g. Vice-president Dick Cheney's contracts in Iraq).

Examples of political dynasties, which is the foundation of nepotism and sometimes outright corruption in democratic countries are plentiful, for

which the USA and the UK are probably best known. I quote just the names: Joseph Kennedy (USA ambassador in the UK before the 2nd WW) – John Kennedy (the 35th US President) – Edward Kennedy (Senator) – Caroline Kennedy (John's daughter – US Ambassador in Japan); George Bush (43rd US president) – George W Bush (45th President) Jeb Bush (43rd Governor of Florida and presidential Candidate). Bill Clinton (42nd US President) – his wife Hillary (Senator, Secretary of State, and twice presidential candidate).

In the UK, there are at least 90 families, of which members were propping each other in politics, such as most recently the Miliband brothers. This is ten times more than in France where there are just 9 political dynasties. Greece is another example with Karamanlis, Mitsotakis and Papandreou families holding power for most of the post-war period.

In the last few years, we have a new term in politics—symmetrism. What it means is that usually the populists manipulate voters to believe that each party is essentially the same, on average bad. Whatever the party, it has no real intentions to realize the promises it has made in its election manifesto. However, in reality some parties' electoral programmes are substantially inferior relative to other parties. How can one compare the Weimar Republic's election programme with the programme of the Nazi Germany's NSDAP party, or in the 2016 USA elections—the programme of Donald Trump with that of Hillary Clinton's?

In order to make a reasonable choice a voter would have to know a lot more. And that is the core of the problem. An average voter reads only the headlines. Here is one such example of the symmetry in politics. Whilst in the Brexit campaign both sides made exaggerations and misinformed the public, the number of false cases and the scale of misinformation published by the Brexit side was of an order of magnitude higher than published by the Remain side. But the populist would use the phrase: 'you see – all politicians are the same'.

Has democracy reached its sell-by date?

Democracy as a system has been a major bootstrap for civilisation. England, being the prototype of modern democracy has become the largest economic and political power in human history, partially because of a relatively better system of self-improving democracy than their competitors, such as France, Spain, or Holland. Democracy would have not been possible without freedom in the most general sense. It is freedom

that gives people a free choice to elect their representatives irrespective of race, belief, religion, or gender. One of such rights is the right to deselect the current government. Fair justice and equal rights for everyone is another cornerstone of democracy that ensures that nobody is above the law. That fairness of justice and equality supports another pillar of democracy - equal opportunities for everyone at birth. In an ideal state this ensures that people have economic and social freedom to live as they wish, as long as they do not harm others.

However, such an ideal state does not exist and democracy as an institution facing the changing environment must adapt to such changes in order to serve the people. For example, over the last 100 years, since the end of the first World War, when women were granted voting rights, there have been no major changes in how democracy operates. No wonder that we are experiencing such a deep crisis of democracy and the system of governance.

Apart from structural faults in the working of democracy, from time to time we have global events that additionally weaken the existing system of governance and test its suitability. One of them was the financial crisis of 2008. Events like these have been identified as the most likely causes for the rise of populism. This is combined with the above-mentioned long-term problems of democracy resulting in a breach of a social contract between the governed and the governing. In the UK its most obvious manifestation was the Brexit referendum result. In the US, it was the election of Donald Trump as the 45th president of the country. Few people doubt that there will be more examples of these trends in the future. These are plausible causes, but the true drivers of change are ill-understood and barely discussed.

The faults in the democratic system have been with us for quite some time but they became more obvious with the arrival of the new techniques for manipulating voters in a fast and inexpensive way via Twitter or Facebook. They reveal yet another cause of the crisis of democracy, which manifests itself in the imbalance of rights and responsibilities, freedoms, and restrictions. All of us would love to have unrestricted freedoms but from today's perspective it is a dream. Freedom to surf on the free Internet is just one such example. That is what we do daily, where we provide our private details to a company that gives us a 'free' application in return for something that apparently costs us nothing. But that 'return' could be a restriction in various aspects to our freedom to privacy.

Such behaviour by large digital corporations is comparable to spreading gossips in a village. However, today, because of super-fast communication this has been converted into spreading a well-prepared gossip, which quite often is simply a fake news, into the only truth in a global village. One of the most recent examples is impacting through social media the voting preferences in elections or referenda. That was discovered, among others, in March 2018 in the Cambridge Analytica and Facebook scandal. Both companies were accused of stealing personal data of about 50 million users to enable political parties to carry out personalised marketing campaign to impact the outcome of Brexit and the presidential elections in the USA in their favour.

Citizens play largely a passive part in an election debate. They are led by the politicians to the subjects to be discussed, which are only convenient from the point of view of a given party. We are thus slowly entering the new era of post-democracy, a term coined by the British sociologist Colin Crouch. In broad terms, post-democracy means selecting representatives once every few years during elections, which are itself rather an art in convincing the electorate about the undeliverable promises. One of the most significant characteristics of post-democracy is that the objective of the party in government is not so much implementing "the will of the people" but rather winning the next election.

Chapter 2: Do we really need Democracy?

What is the purpose of democracy?

Jeremy Bentham, the father of Utilitarianism, famously said: 'Create all the happiness you are able to create; remove all the misery you are able to remove'. He was joined by other founders of the liberal democracy, among others John Stuart Mill and Alexis de Tocqueville who proclaimed that 'if our actions lead to happiness then they are morally right'. Such statements strongly reflect the impact of empiricism by the fathers of Enlightenment John Locke and Montesquieu on the key doctrines of liberalism. We can also find that the key objective of democracy as delivering happiness to mankind in the American Declaration of Independence: "all men are created equal and endowed by their creator with certain unalienable rights, among these are life, liberty, and the pursuit of happiness".

Recently, those original ideas were expanded, by asking how we can maximize our wellbeing. That's why we hear calls for replacing the GDP, with a Happiness index, which was formalized and popularized in 1990s among others by an American ethical economist Hazel Henderson. In 1972 the Fourth King of Bhutan, Jigme Singye Wangchuck, proposed the term Gross National Happiness (GNH) index, which since then has replaced GDP as the key indicator of progress in that country. GNH is a single number index made of 33 indicators. It has spread to other countries, such as the Philippines, some provinces in Canada and some cities in the USA and Southern America.

In 2012 the United Nations introduced the World Happiness Report. It uses the data from the Gallup World Poll and the World Values Survey. The report outlines the state of world happiness, and policy implications on the well-being of people in 156 countries. The Gallup World Poll questionnaire measures 14 areas within its core questions [10]. It is accompanied by the World Happiness Index. Finland was the happiest country in the world in 2019 and in 2018. All top four positions are occupied by Scandinavian countries, with the governance based on consensus. In the top ten positions are also Switzerland, New Zealand, and Canada.

Surveys of happiness have given a new stimulus to providing a statistically reliable measure of 'happiness' of individuals that can then be correlated with other variables. One general finding is that greater happiness does not

correlate strongly with increased wealth, beyond modest levels. This has led to calls for governments to shift priorities away from economic growth and towards other social values.

So, what might be an ideal democracy? This is the question which the International Institute for Democracy and Electoral Assistance (IDEA) has tried to answer. This intergovernmental organization supports democracy worldwide and has been an observer in the UN General Assembly since 2003. They produce an annual index of Global State of Democracy, which depicts democratic trends at a country, regional, and global level, across a broad range of different attributes of democracy for 155 countries. The data underlying the indices is based on 98 indicators (democratic principles) devised by various scholars and organizations. Below is a summary of those indicators:

The Democratic Principles									
of International Institute for Democracy and Electoral Assistance									
Attribute	Subattribute	Assessment question							
1. Representative Government (free and	1.1. Clean Elections	To what extent are elections free from irregularities?							
equal access to political power)	1.2. Inclusive Suffrage	To what extent do all adult citizens have voting rights?							
	1.3. Free Political Parties	To what extent are political parties free to form and campaign for office?							
	1.4. Elected Government	To what extent is access to government determined by elections?							
2. Fundamental Rights (individual liberties and	2.1. Access to Justice	To what extent is there equal, fair access to justice?							
resources)	2.2. Civil Liberties	To what extent are civil liberties respected?							
	2.3. Social Rights and Equality	To what extent are there basic welfare, and social and political equality?							
3. Checks on Government (effective	3.1. Effective Parliament	To what extent does parliament oversee the executive?							
control of executive power)	3.2. Judicial Independence	To what extent are the courts independent?							
,	3.3. Media Integrity	To what extent are there diverse, critical media sources?							
4. Impartial Administration (fair and	4.1. Absence of Corruption	To what extent is the exercise of public authority free from corruption?							
predictable public administration)	4.2. Predictable Enforcement	To what extent is the enforcement of public authority predictable?							
5. Participatory	5.1. Civil Society	To what extent do people participate in civil							
Engagement	Participation	society organizations?							
(instruments of and for the		To what extent do people participate in national							
realization of political involvement)	Participation 5.3. Direct Democracy	elections? To what extent are mechanisms of direct							
involvement)	5.5. Direct Democracy	democracy available and used?							
	5.4. Subnational	To what extent are there free regional and local							
	Elections	elections?							

Source: International Institute for Democracy and Electoral Assistance [11]

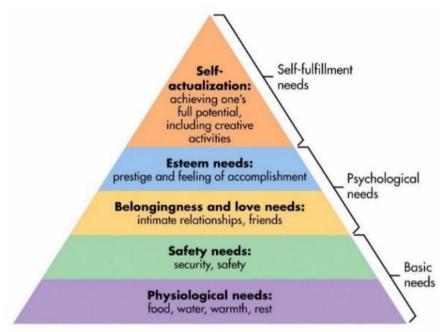
On the scale of 0 (the worst) to 1 (the best), the EU and most western democracies scored quite well in 2015. On clean elections they scored about 0.85 as opposed to China (0) or Russia (0.42). Similarly, on fundamental rights, the western democracies scored 0.82, and even more (0.92 for Scandinavian countries) versus China (0.42) and Russia (0.41) with Sudan at the bottom of the scale (0.29).

Such democratic principles are indispensable when we discuss the needs for reforming democracy. They are also an essential tool when we want to assess how advanced a democracy is in each country. However, sometimes such an assessment may be superficial, since often even in top democracies we feel that there are hardly any elections that are really clean. One might agree with that when we watch how the most popular politicians behave during an interview. They seem to be popular and successful because they manage to change the script of the debate during an interview or an election debate by reframing the debate. In this way, they either dismiss the issue or change it to the subject where they have the chance to push their own issues forward, sometimes in a very populistic and dogmatic way.

We are thus slowly entering an earlier mentioned new era of post-democracy, a term coined by the British sociologist Colin Crouch. In broad terms, post-democracy means selecting representatives once every few years during the elections, by convincing the electorate about undeliverable promises. Once in power, the objective of the party in government is not so much implementing "the will of the people" but rather winning the next election. Probably one of the best illustrations of post-democracy was the presidency of Silvio Berlusconi, in Italy, who went as far as creating laws that protected him personally against prosecution. And all that happened in the democratic European Union, without any serious debate by the European Council and no financial or political consequences for Italy as a member of the EU. No wonder then that in December 2022 we had 'the Qatar gate' in the EU, where one of the key persons charged with corruption was the EU Parliament's Vice President Eva Kaili, a Greek MEP, and four others MEPs.

Machiavelli must have been a great psychologist but also a person for whom rational decision was an absolute value, irrespective of moral implications and hence he is considered the father of 'realpolitik'. But there is another man who knew that values are directly linked with people's basic needs, such as freedom, dignity, or a comfortable life. His name is Abraham Maslow who categorized values into a hierarchy, which he called 'The Hierarchy of Human Needs' in his 1943 paper "A Theory of Human

Motivation" [12]. Since then it was further refined by a number of researchers, such as Nauert in 2011:



Maslow's Revised Hierarchy of Human Needs [13]

Maslow's pyramid starts with a base that identifies an individual's elementary **physiological** needs, such as food, sex, or sleep. The next level is **safety and security**, followed by **love and belonging** through to esteem and, finally, at the top of the pyramid to what he called "**self-actualization**." He further suggested that people who have these needs fulfilled are generally happier than those who don't.

Populists do not only appeal to the two lowest levels of Maslow's hierarchy, but they also know that the world has become far more complex, when change happens at a much faster pace than ever before. Democracy requires rational debate based on facts that are truthfully conveyed to voters. When this is not present and democracy is substituted by populism and fake news, there is a real danger that xenophobia and nationalism may lead to the emergence of autocratic or even dictatorial regimes. Therefore, the fact that the western countries score so well in the IDEA's index does not mean that people feel all is well with democracy.

Are there any alternatives to democracy?

One of the questions you may have, is how democracy can survive such pressures as symmetrism in politics that come to the fore very clearly during the election debates. Should every voter, including those that have hardly any knowledge, or are illiterate, have the same electoral rights, as the ones who have a much better judgment? It is a difficult, almost existential problem for democracy, which should not be ignored. Most politicians would say that vote equality is the price we pay for having a democracy (this subject is covered in more detail in Chapter 3, Part 4).

But such vote equality seriously distorts the efficiency and effectiveness of a democratic country. Therefore, it works against key tenet of democracy - providing maximum happiness for a maximum number of people. Perhaps this comparison between China, an autocracy, and the UK – the oldest modern democracy is a good example. China makes decisions and delivers the results several times faster than established democracies. For example, China built an airport in Shanghai for 20m passengers in 2 years and for 80m passengers in 9 years. For comparison, London Heathrow's third runway has been in planning for at least 20 years and will be completed, if everything goes OK, in 30 years since the planning begun, although even that is now is serious doubt. The HS2 railway in the UK of the total length of 531km, is to cost well over £100bn and will take over 20 years to complete. For comparison, the Beijing-Shanghai much faster, high-speed railway is 1,318km long (2.5 times longer). Its construction began on April 18, 2008 and opened to the public for commercial service on June 30, 2011, just in over three years. This is the world's longest highspeed railway line ever constructed in a single phase.

Politicians know that what matters for about 90% of population is that people want to be properly nourished and have relative safety (the first two levels of Maslow's Hierarchy of Needs). Therefore, one might say, that as long as the state does not practice large scale terror (which would undermine personal safety), such an alternative would be attractive to millions of people. That also explains why populism may be such a real threat for established democracies.

Additionally, an autocratic government can adapt to changing conditions much faster than democracies. At the time when the world has started to change at a nearly exponential pace, that could be an asset from the point of view of Humanity as a whole. This could happen, for example, if it is China which will be the first to deliver a superior version of

Superintelligence, modelled on its own values and goals. A country like China might then replace democracy with something it would perceives might work better for Humanity in these difficult times, i.e., a benevolent autocracy.

Current Chinese autocratic rule, modelled on the Singaporean autocracy/semi-democracy introduced by Lee Kuan Yew, is a system, in which the 'elite' knows best what is good for the nation. This is quite close to the Roman Republic's rules with the Caesar and the Senators making 'best decisions' in the name of the plebs (although the judicial system was far more just than it is in China today). Over the centuries there have been a number of similar examples:

- The Soviet Union, with its First Secretary and the party, ruling in the name of the Proletariat, was justified, its Party claimed, because otherwise the capitalist class would keep oppressing the masses (from the Proletariat point of view nothing changed since there was only a functional change the Party replaced the capitalist class)
- Hitler and the NSDAP Party, which also had 'socialism' in its name, was ruling on behalf of the 'Deutsche Volk' which Hitler justified by saying that Germany needed more territory to expand (Lebensraum)
- What may surprise you, even the French president de Gaulle's rule in 1959-1969 might be considered autocratic. His justification was that France was in existential danger because of the war in Algeria and the frequent changes of the government (every few months). That required a strong president elected for 7 years (now for 5 years)
- Current Chinese autocratic rule, as mentioned earlier, may be considered a system, in which the 'elite' knows best, what is good for the nation
- Even today, in view of climate change existential risks, there are
 people like James Lovelock, the author of the well-known concept
 of Gaia mother Earth, and Martin Rees, former UK Astronomer
 Royal, that advocate a view that perhaps democracy should be
 postponed 'for a while' because the danger for Humanity is so
 imminent and catastrophic, that an authoritarian rule may be a lesser
 evil.

Winston Churchill once said that "Democracy is the worst form of government, except for all the others", and it is difficult to disagree with him. However, perhaps we should not reject an authoritarian rule, such as

currently practiced in China, too early, since it may become an option of the last resort to save Humanity. If we want to avoid that, we must make decisive and fast reform of democracy.

Chapter 3: We have elections, so we have democracy!

Introduction

Even in the Soviet Union there were elections. Therefore, having elections is no proof that a country has a democracy. Even fair and free elections, which are considered the backbone of western democracies, are no evidence that these democracies are in good shape. Holding free elections every few years using the fairest electoral system available, does not guarantee that such a system fulfils the 'will of the people' in all decisions made by the nation's parliament and the government. This may explain why there is such a global dissatisfaction with democratic governments and discontent with democracy.

As with other subjects in this book, I cannot go too deeply into this domain. I have covered it in detail in 'Democracy for a Human Federation' [8]. So, here is just a glance at various electoral systems to assess their suitability for a new type of democracy, which I cover in Chapter 3, Part 4. I will only choose the most obvious advantages and disadvantages of the voting systems based on a review carried out by the Electoral Knowledge Network [14] and by IDEA [15].

The Alternative Vote (AV)

This is a preferential plurality/majority system used in single-member districts. The AV system gives voters considerably more options than First Past The Post (FPTP) system. Rather than simply indicating their favoured candidate, under the AV system, electors rank the candidates in the order of their choice, by marking a '1' for their favourite, '2' for their second choice, '3' for their third choice and so on. A candidate who receives an absolute majority (50 per cent plus 1) of valid first preference votes is declared elected. If no candidate achieves an absolute majority of first preferences, the least successful candidates are eliminated and their votes reallocated according to the second preferences on the voting paper, until one candidate has an absolute majority. Voters usually vote for candidates rather than political parties. The system thus enables voters to express their preferences between candidates rather than simply their first choice. For this reason, it is often known as 'preferential voting' in the countries, which use it [14].

"AV is the best way to elect a single person, like a president or a mayor, but it's a flawed way to elect a parliament as it isn't proportional. MPs become more representative of their constituencies, but Parliament can become less representative of the country" [16].

The Single Transferable Vote (STV)

This is a preferential system in which the voter has one vote in a **multi-member district**. When voting, he orders the candidates by assigning a number to them. He numbers the top candidate as 1, his second preference as 2 etc. After the voting, a minimum quota of votes given is calculated, which a winning candidate(s) must get to be elected. It is calculated by the formula: Quota = (votes / (seats +1)) +1. The candidate who surpasses a specified quota are immediately elected. The results for the other candidates are determined by allocating the remaining votes according to the voters' preferences for other candidates. The one who gets the minimum quota gets elected. The process continues until the remaining votes are below a minimum quota. Voters normally vote for candidates rather than political parties, although a party-list or a mixed option is possible as in this example.

STV is perhaps the most sophisticated of all electoral systems, allowing for choice between parties and candidates within parties. Voters don't have to worry about 'vote splitting' or tactical voting – they just need to put the candidates in order. However, the intricacies of an STV count are quite complex. This has been cited as one of the reasons why Estonia decided to abandon the system after its first election. Malta amended its system in the mid-1980s for the same reasons [16]. However, if merged with the The Two Rounds System (TRS), see below, it seems to be the best solution.

First Past The Post (FPTP)

The difference between the European and the British model of the post-war democracy is primarily in their electoral system. A proportional voting system produces mostly coalition governments in Europe, whereas the governments of the UK, elected using the First-Past-the-Post (FPTP) system have been run almost exclusively by a single party.

The voter is presented with the names of the nominated candidates and votes by choosing one, and only one of them. The winning candidate is the one who gains more votes than any other candidate. The system is used among others in the UK, Canada, India, and the United States.

British politicians stick to the belief that 'strong', one party rule, is more efficient and more effective in delivering better quality of life for the British citizens. After all, they may think, the main objective of governments in a liberal democracy is to deliver the greatest happiness for the greatest number of people. That is why some politicians supporting Brexit have argued that once the constraints put by the EU are removed, Britain will become a much stronger economy. However, if we measure the quality of life by GDP per capita, the actual results do not confirm that a single majority party elected using the FPTP system delivers 'greater happiness' than coalition governments in Europe, elected using a proportional voting system. For example, in 1989, the GDP world rank per capita (measured by the Purchasing Power Parity by IMF) was: in the UK - 17, Germany – 20, France – 24. In 2019 the UK's rank was 37, Germany's - 26 and France's - 35. This means that in the last 30 years the UK's world ranking in GDP per capita fell by 20 places, whereas for Germany, which had to absorb in that period 17 million of East German citizens, whose GDP was tens of placed behind, fell by just 6 places and for France by 11 places.

The biggest advantage of FPTP system is its simplicity. By using a form of plurality/majority electoral system with single member districts and candidate-centred voting, the voters vote for candidates rather than political parties. It is the most popular electoral system in the world with 68 countries (almost 1/3) using it [14]. It provides a clear-cut choice for voters between two main parties, excluding extremist parties from representation in the legislature. It also promotes a strong link between constituents and their representatives.

The biggest disadvantage of a single party government seems to be the adversarial nature of politics as has been evidenced so plainly during the UK's Brexit proceedings in the Parliament. Adversarial politics based on the majority of MPs of a single party, which does not have to win the majority of the votes to rule the country, leads by extension to a deep polarization of a society, which was so characteristic of the Brexit campaign. It excludes smaller parties and minorities from 'fair' representation, and builds political parties based on clan, ethnicity or region, excluding or being hostile to others [14]. This suppresses by its very nature the inflow of new ideas which may be coming from smaller parties. The voters have less choice and therefore quite often either do not vote at all, or vote tactically, which only rarely delivers the intended result. The whole focus of the government is on winning the next election by tuning the ruling party's manifesto to temporal whims of the electorate. Once the

votes have been cast, voters cannot rectify bad laws passed by the parliament, nor can they demand passing new laws, inconvenient for the government in power.

Party List Proportional Representation (List PR)

Under this system each party or grouping presents a list of candidates for a **multi-member electoral district**. The voters vote for a party, and parties receive seats in proportion to their overall share of the vote. It is used in 66 countries (about 30%) [14]. In some (closed list) systems the winning candidates are taken from the lists in order of their position on the lists. If the lists are 'open' or 'free' the voters can influence the order of the candidates by marking individual preferences [15].

Party list systems can be very proportional, but if voters can't pick their representatives, the politicians don't have a strong link with their voters. Additionally, they empower parties rather than voters by giving them control over who is elected.

Mixed Member Proportional (MMP)

This is a mixed system in which the choices expressed by the voters are used to elect representatives through two different systems. Each voter gets two votes: one for the representative of the single-seat constituency and one for a political party. The seats are first allocated to the successful constituency candidates, and then by party candidates based on the percentage of nationwide votes that each party received.

MMP retains some benefits of proportionality of PR systems and also ensures that elected representatives are linked to geographical districts. However, since voters have two votes: one for the party and one for their local representative, it is not always understood that the vote for the local representative is less important than the party vote in determining the overall allocation of seats in the legislature [14].

The Two-Round System (TRS)

This is a majority system, like in the Ukraine, in which a second round of the election is held, if no candidate or a party achieves a given level of votes (most commonly it must be an absolute majority i.e. 50 per cent plus one vote gained in the first round of the election). A Two-Round System

may take a majority-plurality form, like in France. If no candidate gets 50%+1 vote in the first round, then any candidate who has received the support of 12.5% of the voters (in the French Assembly) can take part in the second round [15]. If there are more than one candidate that scored 12.5% votes, then the candidate who gets the highest number of votes in the second round gets elected.

TRS systems lessen the problems of 'vote splitting', the common situation under First Past the Post (FPTP) elections, e.g., in Britain, where two similar parties 'split' their combined vote between them, thus allowing a less popular candidate to win the seat. It is often said that in the first-round you vote with your heart, and in the second you vote with your head. Hence there is less need to vote tactically in the first-round but more so in the second round. It also allows voters to have a second choice for their chosen candidate in the second round, or even to change their mind on their favoured choice between the first and the second rounds. TRS, because of its simplicity, may be better suited to countries with widespread illiteracy than systems, which use preferential voting like the AV or the Single Transferable Vote. That's why it is a dominant system in former French colonies. It is used in 38 countries (15%)[14].

Its main disadvantage is similar to the First Past The Post system, since it also favours larger parties. Research has shown that the TRS in France produces the most disproportional results of any Western democracy. However, if the second-round candidates are elected using the Single Transferable Vote (see above), than this problem disappears. That is why a merger of the First Past the Post in the first round and the Single Transferable Vote in the second round seems to be the best overall electoral system.

Chapter 4: In search of an ideal democracy

Introduction

The title of this chapter is a purposefully provocative statement. Of course, there is no 'ideal' system of democracy. Each of them has its strengths and weaknesses. But a review of democratic systems is necessary to draw a baseline and assess which of the reviewed democracies could be most suitable for these perilous times when we need a new global 'contract' between the nations to fight existential risks. This should be based on agreed set of values and the way a global consensus can be reached among most of the nations, so that we can quickly create a Human Federation and its World Government.

Which democratic system could then take all this into account, and help us best resolve the problems we are facing right now and, equally importantly, in the near future? To answer that question, I have collected some requirements for a new system of democracy based on what has been discussed so far. This creates a baseline for assessing how well the existing democracies might fulfil these requirements to become a foundation for the Human Federation and its World Government:

- 1. Facilitate a global federalization process in such a way that it will centralize only the very essential powers, leaving the rest of decision-making at the lowest possible level of governance to local population
- 2. Reduce the impact of the sheer pace of change on the functioning of political institutions as well as on economic, social, educational, and cultural reforms
- 3. Reshape the relationships between the governed and the governing, by instilling more trust through a greater transparency and continual accountability
- 4. Protect Humanity from existential risks that may emerge from global political, social, and economic disorder through combinatorial effects
- 5. Protect Humanity from other existential risks, especially coming from AI and climate change
- 6. Prepare Humanity for the time when we will coexist with Superintelligence,
- 7. Prepare Humanity for an even more challenging task a gradual merging of our species with Superintelligence.

If we replace the word 'Humanity' in that list with 'the population of a country' then this review will also be suitable for any country.

Constitutional Monarchy

Countries which have a monarch as the head of state and a government elected by conducting free elections are called a constitutional monarchy. There are 26 monarchies around the world, 12 of them in Europe. Some monarchs are the head of more than one state, e.g., the British monarch is the head of state in 17 countries, including Canada and Australia. Monarchies are a variant of a republic. A constitutional monarchy resembles a republic because a written, or unwritten constitution, as is the case in the UK, has been amended to remove power from the monarch and install institutions conforming to the principles of republicanism. What makes a monarchy different from a republic is that laws are enforced with royal authority.

Constitutional monarchy is not the system meeting the criteria for two reasons:

- 1. The sovereign power is in the hands of a monarch and not a nation
- 2. It would not be suitable because of the lack of significant powers that the head of state must have in case of emergency

The only exceptions are Norwegian, Swedish and Danish Constitutional Monarchies which have created a unique system of governance. A largely informal role of the monarch in these countries is to be a mediator between parties ensuring that political decisions are reached through consensual, rather than an adversarial approach.

Direct Democracy

Direct democracy is the type of democracy, in which all eligible citizens can participate in the decision-making process personally, rather than through their representatives. In a direct democracy voters have the power to initiate or amend the legislation, change constitutional laws, propose certain initiatives or referenda, through petitions, or remove elected officials before the end of their term. The best example of direct democracy is Switzerland, although in strictly legal terms it is really a semi-direct democracy.

Since its existence as a modern federal state in 1848, it has seen 580 citizens' initiatives and referenda. In such a democracy, at a federal level, citizens can propose changes to the constitution or ask for a referendum to be held on any law voted by the parliament. On average, there are 9 referenda every year in Switzerland - 180 over the last 20 years [17]. Referenda, which are the main tool of direct democracy, may not represent the voice of the whole population, since the better-educated members of society are more likely to take part. However, in an average Swiss referendum 50% of eligible voters participate, and annually about 80% take part in at least one referendum, which is much higher than a typical turnout in a German or the UK election. Although Swiss direct democracy has been criticised for 'boring' voters with too many referenda (which need 50,000 votes to be organised), overall, the Swiss system produces the highest number of people trusting the government among the OECD countries [18].

For a direct democracy to work, it must be truly direct at a certain level. In modern societies, which are linked by powerful networks and mobile phones connecting each other, direct democracy can be transformed into a practical and cost-effective decision-making system, in which participation is as real as it can be (see e-democracy below). That of course would also require deep education in communal and governmental matters that would go far beyond what is being taught at school today. Additionally, for people to 'live' democracy they must see the effect of their decision making very clearly either through direct inspection, if it is a new road built in town, or through attending assemblies in person, or virtual, where the decisions taking effect at a national level can be verified and criticised, identifying the scope for improvement. Of course, not every decision, especially at a national level can be viewed or verified, i.e. in foreign policy, national defence etc. It rather concerns a general process of decision-making, which naturally will, and must have, exceptions.

In summary, some form of direct democracy might be considered as matching our criteria if it is combined with a presidential system of government because:

- 1. It would provide true citizen participation at almost every level through e-democracy (discussed further)
- 2. It would lead to a better consensus of all citizens
- 3. It would drastically reduce corruption, if combined with the reformed electoral system e.g. maximum two terms for an MP.

- 4. It could provide additional support for some policies through a smart use of new technologies, including AI, like immediate dismissal of an MP by his voters, enabling smooth rotation of executive roles, etc.
- 5. It could be the fastest system to get the consent of the electorate on urgent matters.

Parliamentary Democracy

The most common type of democracy is Parliamentary Democracy, in which all eligible citizens have active rights (anyone can be elected to the parliament if he gets sufficient number of votes) and passive rights (any adult can participate in the elections). Political power is exercised in a Parliamentary Democracy indirectly through elected representatives. Most western countries are representative democracies. There are two types of Parliamentary Democracy: **Representative Democracy and Presidential Democracy**.

In a typical Representative Democracy, representatives for the parliament may be elected by a particular district (ward or constituency), or represent the entire electorate through proportional systems (e.g. voting for a party list). In some representative democracies major decisions can be made using a referendum, like the recent decision on withdrawing UK's membership from the European Union (Brexit). The way Representative Democracy works in practice can lead to some inconsistencies in how the representative of the electorate (a member of parliament) makes a decision. In theory, he should, at least in major decisions, follow his voters' wishes, or deliver the promises made in the party Manifesto.

However, in this system MPs retain the right to make their own judgement on what is best for their constituents and may vote differently to their electorate's expectations and perhaps this is how it should be. MPs are, after all, not delegates of their constituency, as it used to be in ancient Athens, or the tribunes in Rome, to vote exactly as authorized on an issue. They represent the interests of their constituency voters in all matters using their best judgment. It means that sometimes they would act in accordance with their understanding of how to best represents the constituents' interests.

In some democratic systems such an arrangement would require the removal of the party whip. The whip forces MPs to vote sometimes against their own conscience in line with the party's interests. Should a whip

practice be removed then to maintain a party's cohesion the principle of 'confidence and supply' agreement may be applied, which is normally used when a minority government gets support from opposition parties.

In a Representative Democracy, the day to day governance is executed by ministers and their decisions are continually checked by the parliament, which retains the right to dismiss a Prime Minister at any point in time by raising the Vote of No Confidence. Most countries have elections at regular intervals, say every 4-5 years, but in some, e.g., in the UK, the Prime Minister can call an election whenever he or she so chooses (2/3 of the votes in the parliament required since 2017).

In a parliamentary democracy, power can also be executed by a minority government. In such cases, the largest party that does not have the overall majority may govern based on a "vote by vote" support by one of the minority parties.

In summary, Representative Democracy is a 'rule by the omnipotent majority'. In that democracy, an individual, and any group of individuals composing any minority, have no protection against the unlimited power of the majority. It is a case of Majority-over-Man, or as some people say, the "Tyranny of Majority".

Representative Democracy is therefore, not the right type of governance to match our criteria for the following reasons:

- 1. It is the rule of the majority over the minority, whereas to function effectively and in the greatest possible harmony, it should take by law the interests of a minority and seek an overall consensus, such as in the Scandinavian model of democracy
- 2. The fact that the Prime Minister and the government can be voted out at any time by the parliament may lead to political and social instability of a country (this only applies to some countries like the UK)
- 3. Decisions in a parliamentary democracy take much longer than for example in a Presidential Democracy

A Republican system of government

A **Republic** is the opposite of the system it first substituted – the **Monarchy**. It is a form of government under which the head of state is not a monarch. Perhaps the best example is a period between 1649 and 1660

in England, when with the death of King Charles I, England became a republic known as the Commonwealth ruled by the Lord Protector - Oliver Cromwell. The primary positions of power within a republic are not inherited, but are attained through elections expressing the consent of the governed. Such leadership positions are therefore expected to represent fairly the citizens of a nation. Most modern republics came into existence when a Monarch – the Sovereign was substituted by a nation as a Supreme law maker and a governor.

The Head of State in a republic is generally a person who has been chosen by the citizens, either by direct election or by a group of elected representatives to act as the top representative of the people. In most republics, the Head of State is called the president, elected for a fixed term. An example of a republic is the German Federal Republic, where the government includes both the president, and nominated by him, the Chancellor (prime minister), who then selects ministers.

The Founding Fathers of the United States rarely praised and often criticised democracy, which in their time meant direct democracy, often without the protection of a constitution enshrining basic rights. James Madison argued that what distinguished a democracy from a republic was that the former became weaker as it got larger and suffered more violently from the effects of faction, whereas a republic could get stronger as it got larger and combated faction by its very structure. What was critical to American values, John Adams insisted, was that the government be "bound by fixed laws, which the people have a voice in making, and a right to defend." As Benjamin Franklin was exiting the Hall after writing the U.S. constitution, a woman asked him "Well, Doctor, what have we got—a republic or a monarchy?" He replied, "A republic—if you can keep it." [19]

A Republican democracy could be the second-best type of governance, inferior only to Presidential democracy, to fulfil our criteria. Its main weakness in comparison with Presidential democracy (see below) is that it provides a less stable form of government than the Presidential democracy.

Presidential Democracy

This is a variant of representative democracy practiced in countries such as the USA or France. This is a system where the electorate elects the president directly for a fixed term. The president is then the head of state who then selects the prime minister and who in turn selects ministers e.g. in France. However, there are variants of this system as in the USA, where

the president also plays the role of the prime minister and is therefore the head of the government. In normal circumstances a president cannot be easily removed from the office unless he is impeached by the parliament for a gross misconduct and breaking the law. In a Presidential Democracy no president has the power to remove the elected members of the parliament, just fulfilling one of the core principles of democracy – the separation of powers.

The difference between a Republican system of governance and the Presidential Democracy is that in a Presidential Democracy the Head of State (the President) is always directly elected by the citizens and always directly selects ministers or selects the Prime Minister, who then selects the ministers. The second difference is that in a Republican system the government may fall within a given electoral term, whereas in the presidential system the same head of state can elect another government (like in France, which would have to be approved by the parliament) or change ministers (like in the USA). A President needs such powers for two main reasons: to keep strict separation of powers and maintain a stability of the government, which in these challenging and unstable times is a top requirement.

Presidential Democracy, seems to be the best option fulfilling our criteria especially when combined with elements of Direct Democracy because:

- 1. It is the fastest system for implementing decisions at national level, paramount from the point of view of combating existential risks
- 2. It would be the most effective and fastest in decision making but also leading to minimum use of resources, since decisions would be more coherent, provided that sufficient powers are granted to the president
- 3. It would provide fast and real citizen participation at every level of governance if combined with elements of direct democracy delivered, for example, by e-democracy (see below)
- 4 It would lead to a better consensus of all citizens

e-Democracy

This is really an attempt to re-introduce direct democracy with the support of technology, which was mentioned earlier in this chapter. Those who favour this type of democracy believe, that the key argument against direct

democracy, i.e. that it can only be used in small towns and small states like Switzerland, is no longer valid because we, as voters, could exercise our will on the Internet. However, the challenges facing the introduction of edemocracy in a substantive way are significant. Until today, there is practically no state, apart from Switzerland, which has adopted edemocracy in earnest. In most cases it is used for petitions or consultation projects in countries like the UK or Australia. In both countries, and in most EU countries, voters can vote in advance using the Internet. That only changes the way the vote is delivered (electronically) and does not change democracy, or the voting system, as such.

There is hardly any theoretical framework on how to adopt e-democracy in such a way that it would cover all types of elections while at the same time be resilient to fraud or even more seriously to cyberattacks. After the apparent Russian direct and indirect interference in American presidential elections, British Brexit referendum, German, Dutch and French elections, the governments will be very cautious to extend the application of e-democracy beyond parliamentary petitions or local government consultations. From that point of view, although it sounds counterintuitive, the British or the French paper system, in which voters personally walk into the polling stations, seems to be the most resilient.

However, the problem of cyber-interference into e-elections may have finally been resolved thanks to quantum encryption. Guided by the laws of quantum mechanics, this technology cannot be corrupted. Quantum cryptography developed by China in just one year is now available. In January 2018 China created the first global satellite network, which provides unbreakable security for individuals, companies, and governments (of course not available to anybody else than Chinese officials). Any attempt to crack the passwords or the content of such messages would lead to immediate annihilation of the information making the whole effort utterly futile[20]. Who could have thought that such a great achievement in science and technology would come just in time to help us improve democracy? That does not mean e-democracy's final result cannot be corrupted. It can, because it is man who is the weakest point in the system.

A Transpartisan Democracy – the Danish Alternativet

On 27 November 2013 a strange party was set up in Denmark. People called it "A party about Nothing". It was founded by the former Minister of Culture Uffe Elbæk and Josephine Fock, both of whom had been

Members of Parliament for the Social Liberal Party. In 18 months that party won 5% of the votes with 9 MPs in the Danish Parliament. How was that possible? What's so special about the "Party about Nothing"?

The Party is called *Det Alternativet* – The Alternative. It is a networked organisation, which has affiliates around the world, including in Britain (The Alternative UK). People voted for this party not so much because of what it wanted to do, but HOW it wanted to govern. The WHAT element, i.e., a kind of a vague programme, was crowd sourced by the party members after the party was founded and published three objectives:

- Transition to a sustainable society
- Supporting entrepreneurship and social entrepreneurship
- Changing the culture of political dialogue

As mentioned earlier, the unique thing about this kind of a party is its central focus not so much on the content (the programme) but rather on the process – on the **HOW**. The most central tenets of the party are put into a set of six core values, here quoted from the party's programme [21]:

- 1. **"Courage.** Courage to look the problems in the eye. But also, courage about the future we share
- 2. **Generosity.** Everything which can be shared will be shared with anyone interested
- 3. **Transparency.** Everybody should be able to look over our shoulders, on good days and on bad days
- 4. **Humility.** To the task. To those on whose shoulders we stand, and to those who will follow us
- 5. **Humour.** Without humour there can be no creativity. Without creativity there can be no good ideas. Without good ideas there can be no creative power. Without creative power there can be no results
- 6. **Empathy**. Putting yourself in other people's shoes. Looking at the world from that point of view and creating win-win solutions for everyone."

These values as such do not promise voters a certain political programme. Rather, they promise a kind of a social environment, within which that political programme of doing politics in an entirely different way, is brought into being. The members of the party commit first and foremost to these values. But equally important is the way how they advocate debating political and social issues, which they call "debate principles":

- "We will **openly discuss** both the advantages and the disadvantages of a certain argument or line of action.
- We will **listen** more than we speak, and we will meet our political opponents on their own ground
- We will **emphasize** the core set of values that guide our arguments
- We will acknowledge when we have no answer to a question or when we make mistakes
- We will be **curious** about each and every person with whom we are debating
- We will **argue openly and factually** as to how the Alternative's political vision can be realized" [22].

It is perhaps easier to understand why such a party was set up in Denmark. After all, this is one of those countries that in broad terms practices the Scandinavian model of consensual approach to politics. Here are two such examples. During the increasing political pressures related to migration, the party leader Uffe Elbæk wrote an open letter in a newspaper, asking the centre-right prime minister (who was rather restrictive on immigration) for a dialogue on how to avoid bitter polarization of the Danish public on this hot topic. At the party's inaugural address upon entering the parliament, one of the newly elected MPs, Rasmus Nordqvist, gave a speech in which he commended different qualities and perspectives of all the other parties, including their ideological Nationalist adversaries. This is a sign of transpartisanism – the principle of seeing the interchange of all parties as vital to democracy that seeks to implement one's own policies by means of affecting the other parties' views (rather than antagonizing them). The Alternative can thus be described as **a transpartisan movement** [22].

Conclusions

In general, democracy, as has been practiced so far, cannot continue for too long without addressing the issues important for people as well as the way, in which it enables the governed to have some oversight over the governing in the time between elections. Irrespective of an electoral system, it seems that the real root cause of the current crisis of democracy originates from four types of imbalances:

The lack of balance between the rights and responsibilities. The
overwhelming focus on human rights without mentioning the
importance of responsibilities in maintaining social cohesion has
created an unhealthy imbalance. We see it quite often in the courts

across the EU countries, when an offender seems to have more rights than a victim. It is clear evidence of how sensible liberal values have led to the so-called political correctness, seriously undermining the political and social stability. How often do we forget that sometimes even freedom and sovereignty must be restricted to make us safer because there is only one absolute value worth fighting for – life. The scale of misunderstanding of what freedom means has been best illustrated recently by some people feeling there is nothing wrong with their right to move around without a mask while being infected with COVID-19, ignoring the right of others NOT to be infected.

- 2. The lack of balance of power between the majority and the minority. That undermines the foundations of liberal democracy, perhaps best expressed by Jeremy Bentham 'creating the greatest happiness for the greatest number of people'. The only solution to solve this problem seems to be disallowing a single party government. Instead, coalition governments with the Head of State as a conciliator might be a better option.
- 3. The lack of balance of power between the central and local government, which in countries, such as Britain, has been stifling social and economic development. True citizens' engagement cannot happen without a deep decentralization of power.
- 4. The lack of balance between the power of the voters and the elected representatives. One reason why democracy has been eroded so much is the inability of the voters to have a continuous oversight over the legislation and decisions made by the parliament throughout its entire term. Democracy cannot be reduced to voting at an election time when voters have the power of controlling their representatives for just one day.

It is that last imbalance between the power of the voters and the governing, which should become the starting point of a deep reform of democracy because it would directly limit some excessive powers of politicians. An organization called "Democracy building" has quite succinctly summarized the basic functions of democratic systems [23].

B******	Representative Democracy	
Direct Democracy	Presidential Democracy	Parliamentary Democracy
Example: Switzerland	Examples: USA, France	Examples: UK, Germany, Spain, Italy
Head of State	Head of State	Head of State
Any member of the government in turn (for one year), no practical importance.	The President is the head of state and the leader of the government	Has a different function from the prime minister, it may be a monarch or an elected person.
Government	Government	Government
Ministers of the government directly elected by the parliament, representing all major parties	President elected by the people nominates the ministers [members of government]	Government elected by the parliament based on a majority, may be dismissed by the president, especially when it is a coalition of several parties
Parliament	Parliament	Parliament
Elected for a fixed legislative period, no dissolution; changing coalitions, sometimes even extreme right and extreme left join together against the centre	of parliament and government (but the president may cooperate as closely as in the other systems, if he thinks it is right)	
Government members	Government members	Government members
Government members <i>need not be</i> members of the parliament	Government members need not be members of the parliament	Government members <i>must be</i> elected members of the parliament
Who has the strongest power	Who has the strongest power	Who has the strongest power
Strong position of the people (frequent referendums on single laws)	Strong position of the president (veto)	Strong position of the political parties
Laws are created in four steps: 1. Draft by the	Laws are debated and passed by the parliament.	Legislation Laws are proposed by the government and debated and
administration; 2. Consultation of federal states, political parties, entrepreneurs, unions and other interested groups; 3. Parliamentary debate and final version passed; 4. Possibility of a referendum	Lobbyists do not have a formal right to be heard, but in reality have some influence. The president may block a law by a veto and rely or not on a majority of the parliament. Sometimes, like in France, a president may be forced to "co-habitate" with members of the opposition.	passed by the parliament. Lobbyists have some influence on the shape of the law. If there is a solid majority, compromises are sought within the coalition; the opposition may be ignored until the next elections, but then previously passed laws may be revoked or changed by a new majority
Government stability	Government stability	Government stability
If a strong party threatens to call for a referendum, the parliament might be inclined to compromise. A formal consultation process gives the public a clear view of pros and cons of law at an early stage. The process making laws is sow. History shows that from time to time the Swiss people do correct decisions of the parliament and the government that gives in too much to lobbyists, so Direct Democracy seems to offer effective checks and balances. But sometimes it just takes a long time until a new idea is finally broadly accepted.	A strong president may act immediately, but there is a certain risk that he may rush to conclusions to oquidy and then it may be politically hard for him to withdraw the law. Although the separation of powers, might seem very clear in theory, it does not automatically provide more effective checks and balances between the parliament and the government than in a Parliamentary Democracy.	If there are many parties in a country, the dependence of the government's parliamentary majority even on a tiny party (e.g. in Israel) may undermine the stability of the government. If there are only two relevant parties and one has a comfortable majority, the parliamentary system offers few effective checks and balances.
Adaptability (pace of change)	Adaptability (pace of change)	Adaptability (pace of change)
A slow pace of change is the price for a consensus politics	Pace of change can be quite fast if the president's party has the majority, like now in France under Macron	The pace of change when a government has a clear majority can be quite fast, like in the UK under Blair's first government.
Suitability for fighting existential risks	Suitability for fighting existential risks	Suitability for fighting existential risks
The direct democracy system is definitely unsuitable for making quick decisions in near emergency situations, or when the risk has actually materialized.	The Presidential system, with some caveats seems to be the most suitable for mitigating evistential risks and fighting catastrophic crises. However, the presidential powers would have to be controlled much more than today. The best example is the election of Donald Trump as the US President. To minimize the risk of a catastrophic decision by a president, the top executive powers should be in the hands of three presidents. Each of them would have equal power, represent one of the three major sections of a nation, and each decision would have to be taken by at least two presidents.	Parliamentary democracy is the second best option regarding its suitability for fighting existential risks. However, it would have to be adapted by creating a long list of exceptional circumstances, where the Prime Minister gets extraordinary powers and could rule by decrees, subsequently debated and voted in the Parliament. Since such risks exists right now and mitigating measures should be applied straight away, in practice it would mean such Prime Minister would very soon become the de facto President. It would have been a political fudge and therefore such system should be avoided, if possible.

Which democracy is best for Humanity's coexistence with Superintelligence? [23]

What clearly comes out of this table and the previous analysis is that there are some significant formal and institutional differences between Direct, Presidential and Parliamentary Democracy. However, when one looks at the requirements list formulated at the beginning of this chapter, it is obvious that none of these systems is good enough on its own for our needs. Let me give you some examples:

- There is no democratic system in the world that would guarantee in its constitution, a self-determination of a region, leading to setting up a separate state (the best recent example is the case of Catalonia). Even if such a democratic system exists, it has always a caveat that the region must first seek the consent of the state, from which it wants to separate, rather than agree, if necessary, for a decision to be made with an independent international arbitration court.
- There is no democracy system whose constitution would facilitate
 governmental powers to act effectively in fighting planetary existential
 risks that face us all. That is of course logical, since only the
 government acting on behalf of the whole Humanity would need such
 a prerogative.

Therefore, we should consider that the new norms of participation, inclusiveness and open communication are slowly penetrating democracy and at some stage the role of politicians as we have known may be coming to an end. After all, there are already a number of examples around the world that randomly selected assemblies, discuss in Part3, work fairly well. It seems to prove that 'ordinary' people can and do make good, informed, and balanced decisions. It proves that people could govern themselves more effectively and justly, bringing the end of politicians and politics as we have known for centuries.

That is why we should take the prospect of far more active participation of citizens in governing their country more vigorously and see it as a springboard for far reaching changes in democracy. It is time to consider solutions, such as e-democracy as a key ingredient in reforming Democracy, combining it with Direct Democracy and Presidential Democracy.

The conclusion is that part of a fundamental reset of the relationship between the governed and the governing must be the creation of a new type of democracy, which might be called **Consensual Presidential Democracy** [8], which is covered in Part 4.

3

PART 3 TOWARDS DEMOCRATIC CONSENSUS

Chapter 1: Citizens' Assembly – the dawn of Participatory Democracy

Could frequent referenda solve the crisis of democracy?

It seems that frequent referenda might be a potential solution, especially if the voting process becomes fully digitized. After all, participating in decision making is everybody's natural need. People care deeply about their communities and want their voice to be heard. But are they really the right tool for that? Let's take the Brexit referendum as an example. Against the predictions of the pollsters, on 23 June 2016 Britain voted in a referendum to cease its membership of the European Union. The question was: "Should the United Kingdom remain a member of the European Union or leave the European Union?" A year later, on 1st October 2017 the government of Catalonia carried out a referendum on Independence that had not been previously agreed with the Spanish central government and which has led to a serious political crisis in that region. The central Spanish government's legal right, enshrined in the Spanish law, quashed the *legis naturalis*, a natural law, which precedes any laws, on which each nation's right to exist as an independent population is based. How can it happen in a democratic country?

One of the key challenges of holding referenda is how to avoid bias by inappropriate formulation of the question on the referendum ballot paper. Some argue against having more than two options in a referendum, since the result may not be supported by most of the population taking part in the voting. The solution might be to apply the principles of Alternative Voting System (also known as a preferential system), where a voter scores the options from best to worst. If none of the options has more than 50% support, then the second preference from the least favoured option would be added to the remaining options until one of the options gets 50% +1 vote. For example, in the Brexit referendum there could have been four options given, such as:

- Do you want the United Kingdom to leave the European Union even if the outcome of negotiations may severely reduce the growth of the British economy for a decade or more?
- Do you want the United Kingdom to leave the European Union but retain the membership of the Single Market and the Customs Union?

- Do you want the United Kingdom to leave the European Union and instead join the European Economic Area?
- Do you want the United Kingdom to remain the member of the European Union?

Similarly, the referendum on the independence of Catalonia could have also had several options, e.g.:

- 1. I want Catalonia to become a fully independent state
- 2. I want Catalonia to become an independent state but becoming part of the Spanish Federation
- 3. I want Catalonia to be part of Spain but with a higher degree of autonomy, retaining the constitutional right to separate in the future into an independent nation
- 4. I want Catalonia to be part of Spain on the current basis.

Another important issue to be decided before holding a referendum is what kind of majority should be required for a decision taken to be valid. In the Brexit referendum, 52% of the voters expressed the will to end Britain's membership in the EU. However, the overall turnout was only 72 percent. Had everyone voted (i.e., had the voting been compulsory), then according to the polls for those that had not voted, the "Remainers" would have won with 66.03% of the votes to 33.97% for the "Leavers" [24]. Therefore, for such an important issue there should always be a requirement for a super majority i.e., 2/3 support for the motion.

However, notwithstanding these improvements to the way in which referenda might be conducted, a problem which remains unresolved is that they are not well suited to a human nature. We act primarily using our emotions rather than cold reasonable judgment. People voting in referenda and elections have a similar experience like going to a shop. Quite often we support a certain decision because it answers our immediate emotional need. People in general choose black or white, easy to understand, easy to implement, short-term solutions. Politicians know that and that is why they play for the short-term gain by manipulating the public opinion. In that way they can be re-elected at the next election, especially if there is no limit of the number of terms they can stand for a parliament.

Therefore, selling rational arguments to voters is very difficult indeed, which was so clearly shown during the Brexit referendum. Any politician that proposes necessary, complex, and sometimes painful solutions will almost never be elected. Populism flourishes because politicians like

Donald Trump could twist any fact to their advantage and sell people the solutions they want. Had the voters known all the relevant facts they might have considered the proposed solution unattractive, and many might have not supported the option they had chosen in a referendum or during an election. With referenda, the added difficulty is that their impact is quite often long-term (like voting for a new constitution) and can be very difficult to amend.

To reduce the risk of making the wrong decision in a referendum, the voters should really be quite familiar with the issue under consideration. That was impossible in a referendum like Brexit because it required a lot of very specialist knowledge. However, with issues that deal with more straightforward matters, like changing the funding of the health service, referenda could have their role but rather in countries with a direct democracy system, such as Switzerland, where there are several referenda every year. There, direct democracy allows any citizen to challenge any law approved by the parliament or propose a modification of the federal Constitution at any time. The most frequent themes are healthcare, taxes, welfare, drug policy, public transport, immigration, asylum, and education.

In Switzerland referenda may make sense because direct democracy is executed at the lowest possible level (e.g., municipality). Therefore, people get very interested in politics, know the subject matter well, could arrive at a rational decision, and accept solutions that can sometimes be painful. However, even there such a system is prone to corruption or to abuse as in the representative democracy because voters can be influenced by biased media in a similar way. So, the Swiss may think that they are better off with a direct democracy rather than a representative democracy, but an objective analysis may not confirm that. Perhaps no wonder that in 2017 the Dutch Council of State warned that the thoughtless use of referenda and other forms of "people's democracy" sooner or later will undermine the functioning of the Dutch representative democracy and the rule of law. That's why the Dutch government decided in February 2018 to abolish referenda [25]

In summary, referenda are indeed not the right instrument for making intricate political or economic choices because of the rising complexity of the issues, which predominately require a rational judgement rather than an emotional decision. Decisions, which may seem right at the time of taking them, may lead to potentially disastrous consequences in the longer term. Therefore, it seems that in a representative democracy referenda, even if they were used more often, should not become a voting

instrument at all. They would not resolve the current deep crisis of democracy.

Are Citizens' Assemblies the right tool for a new democracy?

Greeks in ancient Athens, and some Italian states in the Renaissance period, applied a different approach allowing citizens to have a direct impact on political decisions. It involved selecting randomly the representatives (men only) of some communities by drawing a lot, which is why it was sometimes called allotment or a sortition. Such randomly selected citizens took an oath that they were not acting under bribes. The logic behind that system of electing political representatives originates from the idea that "power corrupts." That's the main reason why a random selection was initially used. But it was also used as a method for appointing political officials, regarded as a principal characteristic of a true democracy. Today, most people, at least in the Anglo-Saxon world, experience such a selection process at least once in their lifetime, when they are randomly selected to serve as a member of a jury in municipal and national courts. It is a compulsory duty.

In recent years, there has been a growing support for a new political decision-making body called a **Citizens' Assembly**, to which delegates have been randomly selected in a similar way as in the ancient Greece. They are generally focused on less complex political issues, such as electoral reform or gay rights. The assumption is that an assembly composed of randomly selected citizens based on a variety of criteria such as age, gender, socio-economic class, ethnic group, geographical location, or political preferences, would make more rational decisions in an informed and deliberative setting, than would have been the case in a referendum.

The most current global list of places worldwide where Citizens' Assemblies have been used can be found on the Sortition Foundation website, which also provides a further justification for using this type of direct democracy. By August 2021, there have been over 250 Citizens' Assemblies worldwide [26], covering various political topics.

One of the best examples was a Constitutional Assembly in Ireland. It was set up to review several articles of the Constitution of Ireland. In October 2012, the Irish government appointed the chairman of the convention, an economist Tom Arnold. An independent research bureau selected a random group of 66 citizens, drafted by a lot, taking account of age, sex

and place of birth from both the Republic of Ireland and Northern Ireland. Among the members of the convention were also 33 elected politicians who were selected proportionally from each party. This group met one weekend per month for more than a year. The diversity that process produced was helpful when it came to discussing such subjects as same-sex marriage, the rights of women or the ban on blasphemy in the current constitution. However, they did not do all this alone. Participants listened to experts and received input from other citizens (more than a thousand contributions came in about gay marriages).

In January 2014 the chairman of the Constitutional Convention addressed the Seanad about the Convention's work, listing the principles under which it operated as openness, fairness, equality of voice, efficiency, and collegiality. The decisions made by the Convention did not have the force of law; the recommendations first had to be passed by two chambers of the Irish parliament. Only then were the recommendations put to a vote in a referendum. The referendum approved the proposed changes, resulting in important modification of the Irish Constitution.

One variant of such a random selection of delegates has been applied by the Kurds in their referendum on independence carried out in September 2017. It is called **Democratic Confederalism**, and its key proponent is Abdullah Ocalan – the Kurd leader who has spent the last 20 years in a Turkish jail. Under democratic confederalism, the power is devolved not from top down but from bottom up. The basic, lowest level of a political unit is a local assembly representing a village or an urban district. These assemblies then elect people to represent their interests in wider confederations, which in turn choose members to provide a voice in the region as a whole (Ocalan rejects the idea of a nation state). The federal government is purely administrative: it does not make policies but implements the proposals passed to it by the assemblies.

If democracy as a system is to survive, we will have to accept that it cannot be reduced to voting alone. Yes, the main strengths of elections are accountability and competency. However, their main weakness is that they are the source of political inequality and a systemic partisanship, which undermine an objective and impartial dialogue for the benefit of all, and not for a specific class represented by a particular party. Such a situation has gradually created the current crisis of democracy best exemplified by the spreading wave of populism. Citizens are becoming deeply disillusioned by being systematically manipulated by politicians of various provenance, using the power of the latest socio-psychological techniques

applied by the mainstream and social media. That's why elections and referenda must be invigorated with new ways in which citizens can participate. We must think 'out of the box' and see that elections are only one of the tools of democracy.

Today, most people, at least in the Anglo-Saxon world, come in contact with random selection at least once in their lifetime, when they are randomly selected to serve as a member of a jury in municipal and national courts. In recent years, quite a few proposals have emerged, which argue that the representative democracy could be significantly improved by replacing elections with random selection or including it as part of a legislative process, like drafting or amending a new constitution, as was the case in the Republic of Ireland in 2012. Let me remind the sceptics that in places where some form of democracy was present, decisions on public issues were taken by lot for well over 2000 years, whereas representative democracy as a means of making decisions on public matters is barely 200 years old. Perhaps we can learn a lot from looking again at... drawing lots.

Structured debates with a random sample of citizens, promise to generate a more vital and inclusive form of democracy than governing a country based on elections run every four or five years. I will look at this option from a wider perspective than just for electing representatives to legislative bodies, as was mainly the case in ancient Greece. But I will also consider potential consequences for the public good in general sense.

Perhaps the best testing ground was the most recent Conference on the Future of Europe (CoFoE), which started in May 2021, and concluded on 9th May 2022. It was potentially the most significant Citizens' Assembly if some of its key proposals, such as a new EU Constitution become reality. Throughout the entire period of 12 months of the Conference, ordinary, randomly selected citizens joined these debates and had a say/vote over any decision taken by the Conference. It ignited a debate whether citizens should co-govern their country throughout the term of the whole parliament, rather than just on the election day, in a new style of democracy.

The decision-making body was the Conference Plenary. The Conference discussed 10 subject areas (called Topics). Each of these Topics was deliberated in one of the 12 chosen EU countries in a series of debates at National Citizens Assemblies. Each such a National Assembly selected four delegates to the European Citizens' Assembly, which was part of the Conference Plenary. That resembles the practice of Democratic

Confederalism, mentioned earlier as practiced by the Kurds. In the same way four MPs from national parliaments were selected for those Plenary sessions. In this way, 108 MPs and 108 citizens were randomly selected to the Plenary of the Conference. The final Plenary of the Conference broadly followed the proposals coming from the European Citizens' Assembly.



The role of a Citizens' Assembly in the Conference on the Future of Europe [27]

Will this lead to a tighter EU integration, possibly creating the European Federation? If the final result of the Conference broadly follows current proposals, then it may be converted into a de facto Constitutional Convention.

So, what is the advantage of such a direct democracy in the form of a Citizens' Assembly instead of holding a referendum? It is a direct democracy in a sense, that all citizens have the same chance of participating in a decision-making process. But instead of millions of people making such a decision themselves, a person is selected randomly by using selection criteria, such as age, gender, financial position, education, family situation etc. In that way a randomly selected person is statistically almost identical to tens of thousands of citizens. Splitting a society in such statistically identical groups allows to randomly select just a dozen or so people from each group, to achieve the voting preferences of

a whole nation. Overall, Citizens' Assemblies have the following advantages:

- Equality of representation.
- Cognitive diversity
- Reduction of the risk of corruption
- Empowering ordinary people instead of the representatives of the elites.
- Enabling far more rational decision-making.
- Loyalty to the members' conscience rather than to a political party
- Freedom to make own decisions
- Limiting the negative effects of intra-elite
- Rotation no selected member serves more than one session or term
- Fairness, equality and impartiality
- Representing those with opposing views and minorities

But there are also some disadvantages such as:

- Chance misrepresentation
- Lack of commitment by the selected members
- Lack of feedback or accountability
- Legislation agenda and scope
- Public influence and 'control' over representatives
- Citizens' Assembly members may lack competency.

On the other hand, the shape and form of Citizens' Assemblies evolve as more experience has been gained, eliminating some of the disadvantages listed above. The basic principle that the members of a Citizens' Assembly should be selected randomly from an electoral roll, as is the case for a jury system, seems to be right. However, the subject matter debated by a Citizens' Assembly is entirely different from that discussed by a jury in a judicial court. In a jury service, the only decision that a juror must make is always a binary one: guilty or not guilty. In a Citizens' Assembly, delegates must make many decisions on usually very complex problems, where there can be many recommended solutions with a wide variety of opinions among the delegates. That requires a certain degree of knowledge, which is usually not essential in the jury service. Thus, for an effective running of a Citizens' Assembly a certain minimum education may be required as one of the selection criteria.

Advocates of Citizens' Assemblies insist that a legislature consisting of randomly selected citizens would perform significantly better than an elected chamber in terms of deliberation and impartiality. Without party discipline or the need to refer to any constituency, members would be free to listen to each other, learn and change their minds. Evidence gathered with so called mini publics, shows that under the right conditions, citizens can engage in a high-quality impartial deliberation.

Since participating in decision making is everybody's natural need, we must devise new ways of a much deeper engagement of citizens in making political decisions. People care deeply about their communities and want their voice to be heard. How could we then improve the citizens' engagement in a democratic process, extending beyond once every few years elections? Although Greeks, and some Italian states in the Renaissance period tried random selection 2,500 years ago as a method for appointing political officials, it was regarded as a principal characteristic of a true democracy. The logic behind that system of electing political representatives originates from the idea that "power corrupts." That's the main reason why it was initially used.

Those who may suggest not to hurry and first test the concept as an independent auxiliary political body, which would stay outside national or regional parliaments, are reminded that we now live at the time when change happens at an almost exponential, rather than linear, pace. What once took a decade, now takes about a year. Neither Europe, nor the world have decades to tinker with new democratic ideas. We have just several more years left to implement a deep reform of democracy.

In summary, Citizens' Assemblies seem to be a significant improvement over referenda enabling citizens to express their preferences in political decisions, a typical feature in a direct democracy system. However, to have a real and continuous impact on politics, Citizens' Assemblies should not be called just every few years to debate an important legislation. Rather they must become a permanent part of a legislative system at every level of a new democracy, linking representative democracy with direct democracy and giving citizens a continuous real influence in political decision-making.

Chapter 2: Citizens' Senate

Citizens' Petitions

Irrespective of some deficiencies of Citizens' Assemblies they are probably the most significant element for a deep reform of democracy. But the list of disadvantages shown in the previous chapter indicates the need for some improvement. This chapter introduces possible extension to that democratic tool, whose main objectives is to increase the oversight of the governing politicians, so that it is not used on an ad hoc basis but rather forms a more permanent pillar of a new democracy.

The first step towards such a continuous oversight of the elected politicians might be a system of citizens' petitions, which already exists in some countries. In Britain, there were one million petitions submitted to the parliament between 1780 and 1918 [28]. In 2015, Britain introduced a formal on-line petition system. If at least 10,000 people support it, such a petition must be debated by the government and a formal response published. If a petition gets over 100,000 signatories, it must be debated in the Parliament. So, superficially, it has several advantages. The most significant one is that it creates a channel of communication between citizens and the government, increasing citizens' engagement in shaping important policies. It is also simple, and inexpensive. Here is a summary of petitions filed between 2017-2019 in Britain.

E-petitions in the 2017-19 Session

E-Petitions in 2017-19 Parliament	Count
Total number of unique users of the e-Petitions website	16,166,387
Total number of petitions submitted	33,181
e-Petitions rejected	25,027
e-Petitions successfully opened	8,154
e-Petitions which received a Government response	456
e-Petitions debated in Westminster Hall	74

Table 3: E-petitions filed in Britain in 2017-2019 parliamentary session [28]

On average, about 35 petitions are being debated in the British Parliament every year. In the last 5 years over 50,000 petitions have been filed but only just one, on removing VAT tax on tampons, became law. So, petitions, at least in Britain, are a frustration valve for the voters and a fig leaf for the governing party, covering the current system of total power

grab after the elections. One of the most spectacular failures of the system was a petition on the second Brexit referendum, which gained 4.5M signatures. The Parliament debated it and quickly rejected it because the Conservative Party, which was the main supporter of Brexit, had a majority. It is obvious from even this example that for a petition system to work in any country, it would need a much tighter legislation, which would not allow a government or a Parliament to easily reject it. In the Brexit case, there should have been a requirement for a supermajority of say, 60% of MPs to reject the petition.

From Citizens' Petitions to a Citizens' Senate

A petition system such as described above would be the first step in merging representative democracy with direct democracy. It is a vital element in such a new model of democracy, which gives citizens the power of executing continuous accountability of the law-making body such as parliament by scrutinizing the working of the existing law as well as directly contributing to creating new laws. However, in order not to choke the parliamentary legislative process, a valid petition requiring a debate in the parliament would have to be carefully examined first by an independent body to debate the issue.

A Citizens' Assembly might be an ideal body to perform such a function of debating a petition before sending it to the parliament. However, it would be inadequate in the current form practiced worldwide. One of the key issues is who decides to call a Citizens' Assembly to discuss constitutional matters. That decision is almost always made by parliamentarians, i.e., those who hold all the power in setting up a new law. To rebalance the current situation, it should be the citizens of a country who should decide on calling a Citizens' Assembly. They would do that by signing a petition addressing a specific problem. That petition, if certified as valid by an Independent Electoral Commission, would be the trigger to call a Citizens' Assembly.

Secondly, Citizens Assemblies only operate at the time, when there is a need to apply this method for making an important political decision, for example, as a substitute of a referendum. If we want to establish a continuous accountability of parliamentarians to their voters, we need a permanent legal structure, which would play the role comparable to the second house of a parliament. We need a Citizens' Senate. That would solve the lack of accountability of politicians to the electorate over a whole term and reduce the impact of populism by replacing referenda.

Any proposal for a Citizens' Senate would have to provide answers to the following questions:

- Should a Citizens' Senate be functioning continuously alongside the lower chamber or only gather for a debate when triggered by a valid petition?
- Should a Citizens' Senate debates be held secret or made public? Secrecy can enhance deliberation, prevent corruption, and protect members from embarrassment, but it risks undermining accountability.
- Should there be some minimum level of competency, e.g., education required, even if this undermines the principle of perfectly random selection of population's representation?
- Should a Citizens' Senate have the right to propose legislation on their own (set the agenda) or only vote on the legislation proposed by the lower chamber of a parliament?
- Does a Citizens' Senate need a special body covering administration or supervision on formal matters only, or also be engaged in improving the quality of deliberation?
- How should the relationships between the Citizens' Senate and the lower chamber of the parliament be regulated? Should both Houses of the Parliament have equal powers of approving or rejecting legislation, or one of the chambers would have the ultimate 'upper hand'?
- How to ensure quality debates by the Citizens' Senate? Should it be supported by a special independent 'advisory' body, or every delegate would undergo a period of training and coaching/mentoring by experts before he could take part in voting a legislation?

There are already several proposals answering some of the above questions. For example, Tom Malleson in his research paper: "Should Democracy Work Through Elections or Sortition?" [29] proposes a solution to the problem of lack of sufficient knowledge by the selected members. He suggests supporting them with experts that would be part of an independent body e.g. Citizens' Support Office (this is now almost routinely used in Citizens' Assemblies - TC). Using this knowledge, it would be plausible to envisage a well-functioning (though imperfect) Citizens' Senate play the role of the second chamber of a parliament, or of a new legislative body.

The existence of two chambers implies that an optimal democratic system would need a mechanism for putting legislative proposals into law. The main reason for having a bicameral system is that elections and a random selection each offer a different type of representation. In an elected chamber, the aim is to have representatives who would consider the needs of the entire population. By contrast, in a Citizens' Senate, the aim would be to have a statistically accurate sample of the population. The randomly selected members are not delegates as such (they represent themselves) and therefore have substantial independence to make a decision.

Both points of view are valuable and would result in a much better fulfilment of what a given nation really wants and how it wishes to be governed. There is already a proposal put forward in Scotland by the Electoral Reform Society to convert a Citizens' Assembly into a Citizens' Senate. It is to be called the Scottish 'House of Citizens' and is to be a revising chamber made up of ordinary voters in Scotland [30]. It is supported by the Scottish Citizens' Assembly, which the ruling SNP party wants to make a permanent legal body in Scotland. Alan Renwick and Robert Liao write in 'The future of citizens' assemblies in Scotland': "SNP manifesto commitment also deserves the attention of those interested in the operation of the democratic system: namely, the party's plan for citizens' assemblies. Such assemblies have already emerged as part of Scottish politics in the last two years. Two have been held: first the Citizens' Assembly of Scotland, with a remit to set out a broad vision for Scotland's future; then Scotland's Climate Assembly, focused on the path to net zero carbon emissions. These have been well received by all Scottish parties. Now the SNP wants to go further. Its election manifesto pledged annual citizens' assemblies and made a commitment to 'genuine public involvement in decision making'. There will also be a further assembly ahead of any independence referendum to help shape an independent Scotland, and an assembly to represent those aged under 16".[31]

Citizens' Senate – the foundation of political consensus

However, to replicate the operation of a Citizens' Senate as a traditional second chamber of a parliament, as Alan Renwick and Robert Liao suggest, where the delegates would serve a whole four-year term, may not be a good solution. Yes, the Senate should be a permanent institution as such but that does not mean that it should operate in a similar way as a typical second chamber of a parliament. Instead, a Citizens' Senate session should deal with one case only, as raised in a petition.

The main reason why I suggest such an arrangement is that if the selected members (Senators) were to serve the whole parliamentary term of a Citizens' Senate, the result could have been similar to that delivered by elected representatives. In a representative democracy, legislative elections give unprecedented power to MPs. That's why they are lobbied by large corporations or rich individuals to introduce laws, which would serve particular interests of the lobbyists. That is what a lobby system has been about since 14th century in England, initially set up as a noble intention, giving access to any citizen to lords of the land, and later to MPs. However, it is enough to look at a potential scale for corruption in the USA, where there are on average 20 official lobbyists per Congressman. The lobbying system as such is anachronistic and should be replaced by a properly legislated system of petitioning, perhaps such as proposed here.

What is proposed here is based on 'reinforced' petition system, linked to a Citizens' Senate. That would be part of an overall new democratic system, where successful petitions would trigger a process of continuous accountability of the governing to the governed during the whole term of the Parliament. Citizens' Petitions could be made to the Parliament, the government, or any other legislative body, following tight rules, such as those ones, which I would suggest below (points 1 and 2 have already been implemented in the UK).

- Every citizen has a right to launch a petition through a dedicated digital on-line system, supervised by an independent Electoral Commission
- 2. Each petition is verified by a country's independent Electoral Commission which checks their potential legislative impact. These would include checking if a legislation already existed but was not acted on, required an amendment, a new legislation is proposed, or that a petition does not require any changes in the existing legislation and is thus invalid. It also checks the validity of each signature.
- 3. The petition system may optionally allow every citizen not only to support a petition but also propose his own version or leave comments. The comments are then aggregated by the petition debating system, such as Consensual Debating, which is covered in Part 4. Therefore, every signatory can assess the changes in the proposed wording of the petition and see an on-line visual representation of various groups' support for each of the variants of the legislation. Based on that, a signatory might switch his support for another version of the petition. In this way, the most preferred version of the petition may be chosen through a

consensus and compromise. This may greatly enhance citizens' engagement, leading to a significantly improved quality of the petitions by uncovering patterns in the opinions of the participants, sorting them into opinion groups, and identifying the areas of consensus.

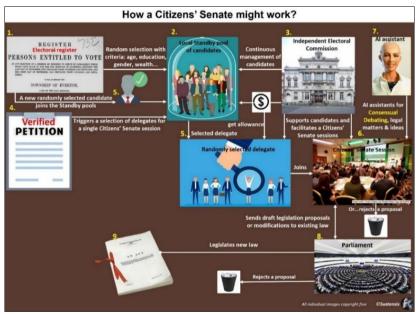
4. A petition must gain enough signatories under its final version within a legally prescribed period to be considered for a response from the government or be debated by the Parliament.

To avoid such lobbying pressures, each valid petition, which would pass the necessary minimum percentage of the required electoral votes, would trigger one session of a Citizens' Senate session, which would only consider this one petition. Petitions which can be dealt with by the government, would not be considered by a Citizens' Senate but instead would be actioned directly by relevant government departments. For each such Citizens' Senate session, a new lot of citizens would be randomly selected to debate a single petition. Once Senators have passed a resolution, a session will be closed, and the delegates will complete their service. Such an arrangement will allow for several petitions to be dealt simultaneously on different days by different lot of delegates. This will be similar to a court sitting in the same building but adjudicating on several cases on different days with different set of judges. A Citizens' Senate may also be established at a regional level.

For most countries the number of delegates should broadly equal the number of MPs. However, to achieve consensus in the most practical way, the delegates should have some time to know each other, which may increase the level of understanding of their relative views on some deeply divisive subjects. As experience has shown for those reasons, and also because of the unfamiliarity of most delegates with legal proceedings, an optimal number of delegates should not exceed 150. The CoFoE Conference Plenary had 108 delegates representing about 400M citizens. This number seems to be the right one to ensure both a true randomness as well as the efficiency of the debates in the Senate. For some countries, such as the UK or France, it would be equal to about 1/3rd of MPs.

For best results, each representative should have two substitutes, in case he resigns from his role during a session of the Senate. In both Irish Constitutional Citizens' Assemblies, the number of delegates was slightly lower than the number of MPs (100 vs. 160 MPs). That is generally thought was one of the reasons why the planned duration of the proceedings of the Assembly had to be extended because there were no substitutes.

Setting up the upper limit of the delegates for the Citizens' Senate session is also important to assess the logistics of carrying out the debates. If we take the UK example, there are about 30 Acts of Parliament passed every year. It is assumed that only a few of them might be successfully contested annually via the petition system, reaching at least 5% of the electoral votes supporting the petition. Additionally, there may be several new legislations proposed annually by the Citizens' Senate. Therefore, there may be on average about 10 Citizens' Senate debates triggered by a petition system annually, some of them being run concurrently by different set of delegates.



How a Petition system, Citizens' Senate and parliament might function

This is how a Citizens' Senate might work at a parliamentary level. However, it would be quite easy to adapt it to other levels of governance. In the proposed implementation variant described below all numerical values are of course only suggestions:

• A Citizens' Senate, called the Senate, is a legislative body, which has the power to propose a new legislation or amend an existing legislation passed by the MPs in the Lower House of Parliament. (It can also function at a regional level, like in a small German minority of 13,000 citizens, in Ostbelgien, in Belgium).

- The opening of a Senate's session is triggered by a petition system, described earlier, which will also become part of the legislative
- The Senate will be summoned for a session every time when at least 5% of the voters on the electoral register support debating a certain issue, or see the need to pass a new law, or amend an existing law. Such a percentage may look high, however if such a system is to work properly, the intervention into the existing, or proposed legislation must be justified by a very serious impact it has, or it might have, on the lives of the citizens of that country.
- The validity of a petition will be checked by an independent Electoral Commission of a country, which will ascertain that it fulfils all the required criteria and that it needs to be debated by the highest law-making body the Parliament. This may include the following:
 - a. The need to scrutinize an Act of Parliament. Such a petition might be started immediately after a new legislation has been approved by the parliament but not signed by the Head of State. It would thus supersede in some cases the powers of the Head of State, giving those powers to randomly selected citizens. Signing the Act of Parliament by the Head of State will still be needed, since not every legislation will be contested.
 - b. The need of proposing a new legislation (perhaps just a few successful petitions annually)
 - c. The need of recalling an MP (at a constituency level only). Therefore, on average there may be about 10 successful petitions annually to be debated by the Senate but that of course depends on specific circumstances in a given country
- The Senate's session will debate only one issue and once the Senate has passed a recommendation to the parliament, the session will be closed, and all Senators relieved from their duties.
- There could be several Senate's sessions deliberating at the same time, either in different physical locations or on different days
- The Senate's sessions will normally be carried during weekends and a session will usually last between 2 to 10 weekends
- The Senate will not include any MPs, to preserve the Senate's integrity
- To select members of the Senate, a country will usually use the existing parliamentary districts as a territorial reference

- Each parliamentary district will have the same proportional number of seats in the Senate to the number of voters in that district. A recommended number of senators is 1/3 of MPs. For larger countries that number should not exceed 200, otherwise the Senates' debates may become less effective
- The whole process will be supervised by an independent Electoral Commission of a country, working closely with regional electoral commissions and local Councils
- Once the legislation for creating a Citizens' Senate as an institution
 has been passed, local electoral commissions will begin a random
 selection of citizens from a national register of voters' for the first
 ever session. They will join a local pool of candidates to the
 Citizens' Senate
- The candidates will be selected using certain criteria, such as age, education, gender, socio-economic class, ethnic group, geographical location, or political preferences. There could also be more complex criteria for selecting candidates, but perhaps more beneficial for the society. This might include selecting randomly, say 30% of the candidates with no initial pre-screening for education, another 40% with a minimum secondary education, the next 20% might include university graduates, and the final 10% might consist of technology specialists, scientists, lawyers, voluntary sector etc.
- The selected candidates will have the right to decline to serve as a Senator. That's a departure from the Anglo- Saxon Jury service, where a person called randomly to serve on the Jury must perform his duty, since this is a legal requirement
- Once a candidate passes the selection criteria and agrees to serve as a member of the Senate, he/she joins a Stand-by Pool of the candidates for becoming a Senator in the Citizens' Senate. For each seat in the Citizens' Senate session there may be 3 candidates in the Stand-by Pool (the practice will show if this is the right number), who may be assigned as a substitute of an on-going session or become a Senator of a new session.
- Before becoming a Senator, the candidates in the Stand-by Pool will undergo coaching on how the government works and what are the rights and obligations of a Senator
- Once a petition triggers the opening of a new session of the Senate, a member of a Stand-by Pool will be randomly selected from that pool to serve as a Senator in just one session of the Senate. The remaining candidates in the pool will wait for their selection to the

next session of the Citizens' Senate or to substitute a Senator in an on-going session

- The candidates will remain in the Stand-by Pool for a period of 1 year being paid some allowance and any expenses. After that they will be released from their duty, unless they have been selected as a Senator, in which case they will have to serve until the end of the Senate's session. They can resign from the service upon giving a notice to leave
- The candidates in the Stand-by Pool will be regularly informed on the current proceedings of the Senate and may attend the sessions as non-voting representatives via video-conferencing
- Once a candidate is selected to serve in the Senate, becoming a Senator, a new candidate for the Senate will be selected from the electoral register to replace him in the Stand-by Pool, so there will always be 3 candidates in the pool
- If a senator resigns from the Senate session, he will be immediately replaced by another member from the Stand-by Pool.
- The Senators will be paid any expenses and an allowance equal to that of an MP for each attendance at the session of the Senate
- Senators will have their job legally protected, should this be necessary. They will have a legal duty to provide all the information on their education and skills they have. They also may have to sign the Official Secrets Act and other necessary documents, swear under oath that they agree to represent their constituents honestly, without prejudice and maintain the secrecy of the debates, if required, under the same penalties as for government officials
- Senators will be supported by a dedicated officer from the Senate's Support Office, in all matters related to performing their duties
- A Senator can only be recalled if he disobeys the rules of the service. Since he will be accountable to nobody because he was selected and not elected, the only way of removing him would be by the Senators themselves, following the procedures for a Senator's recall.

The selection of the candidates for the Citizens' Senate would be made far in advance of calling the Senate's session, to properly prepare them for taking complex political decisions. There have been a few examples when the members of a Citizens' Assembly have been selected in advance, e.g., in the Irish Constitutional Citizens' Assembly in 2016-2018. In the EU, it might be established following the recommendations of the Conference on the Future of Europe. The overall objective in setting up a Citizens' Senate should be a minimal disruption to the existing legal system to start quickly

this new institution. As mentioned earlier, the pace of change is now nearly exponential. Therefore, what is being proposed here is just a general ramification for the introduction of a Citizens' Senate as part of a country's legislation.

The sessions of a Citizens' Senate should be carried out in a certain spirit like it has been applied by the Danish Party Det Alternativet: Courage, Generosity, Transparency, Empathy, Humility and sometimes even with Humour

Every new law passed by the Parliament would have a period of at least 6 months of *vacatio legis* - a period between the announcement of a legislation and before it could be signed by the Head of State. If within 3 months from passing a law by the parliament, a valid petition to stop that law has been passed then a new Citizens' Senate session will be open to deliberate such law. To stop a new law proposed by the parliament, or repel an existing law, a Citizens' Senate would have to vote it down with a minimum of 66% of the votes. In this case Single Transferrable Voting – Extended Threshold (STV-ET will be used). If such a minimum cannot be reached by the Senate within three months of the first session, then the proposed new law could no longer be contested, and it would be ready for signing by the Head of State.

To propose a new law, the Senate would have to get the support of a minimum 50% of the delegates. The new law will be formed as a short statement. The Senate may choose to debate the new law using the Consensual Debating system. In this system, the senators are able to modify the initial motion. In several rounds of voting, the original (or the modified) motion is passed if it wins at least 60% majority.

Throughout the session automatic voting takes place. However, the final vote uses the Single Transferable Voting system, in which the delegates order the motions which get a minimum of 12.5% +1 vote according to their preferences, marking the most preferred version of the motion as 1, the second as 2 etc. Therefore, there could be a maximum of 7 versions of the original motion. The motion is passed using the Droop formula (also used for Single Transferable Vote) calculated as: **Winning Motion** = (votes / (only one motion will be selected) +1)) +1. The motion which surpasses 50% +1 vote is selected and passed to the Parliament for debating.

The proposed law would have to be debated by the parliament within 6 months, but the Parliament may vote it down with a simple majority of 50%. If, however, the Senate's motion was voted with Single Transferrable Voting – Extended Threshold (STV-ET), the Parliament can only vote it down with 66% majority. Otherwise, it must be made law within 1 year.

If it sounds incredulous that a group of people with usually no legal background can prepare a draft law within several weekends then we only need to point out that we live in the 21st century, where change happens at an almost exponential pace. We need to completely rethink how a new democracy would function, accepting that it should embrace all the benefits of a digital technology, and especially AI, which now enables a digital democracy. This will affect all aspects of citizens' participation in governing a country, beginning with digitized elections.

Today, we already have AI-driven tools, such as ChatGPT or specialist AI applications, such as eBrevia by Capterra. An AI Assistant can make its own suggestions on the subjects discussed by the Senate, sometimes looking from an entirely different perspective, checking the consistency and validity of the produced legal documents, and preparing a complete draft legislative proposals to the parliament. Additionally, it will be able to support the sessions in the Senate with an even more sophisticated debating system, such as Consensual Debating, described in the next chapter.

Chapter 3: Achieving political consensus with AI

Enabling consensual politics

Imagine that you have signed an on-line parliamentary petition. When you sign such a petition it is understood you fully agree with it. Since you cannot modify the petition's wording in any way, the only other option then is to disagree or to abstain. Secondly, in polls, like about Brexit, voters were only asked a question "Are you *for* or *against*", with no room for a compromise, mainly because there are no easy means to facilitate the selection of the third option.

One unintended consequence of that is that more and more often the polls are wrong, like in the Brexit referendum in Britain in 2016. It happens because the polls by formulating biased questions, indirectly prime the voters for who or for what to vote. That stops some voters from voting because they think the result of the coming election is already clear, so why bother to vote. That was exactly the case with Brexit. Most people thought 'well, I won't be going to vote to remain in the EU because the polls have already predicted the win for the remain side'. So, they didn't vote and that's why, given a small margin, Brexit happened. This is a good example of how the polls themselves impact the result. If we had an electoral system, which stimulates compromise and consensus, among others through the way how political debates are carried out, this would not have happened.

But even more important is the need to reduce or eliminate altogether adversarial politics and replace it with consensual relations among politicians. One of the consequences of prolonged, adversarial debates is that we have ineffective and expensive way of governing a country by introducing new legislation after sometimes years of debating. Even with the best of intentions, debates at the committee stage, where discussions can be less heated and more factual, it may take many months or even years before draft legislation is put for a debate and voted by the whole parliament.

At a national level, polarization of societies, so evident today, is the consequence of adversarial relations, underpinned by the system of voting and the conduct of debates on the radio, TV, and in the parliament. That hardens the division between the winners and the losers because there's no room for a compromise and that was one of the reasons behind the need

for a deep reform of democracy, such as proposed in Part 4 – Consensual Presidential Democracy.

Consensual Presidential Democracy is based on political consensus, in which citizens' participation plays a prominent role. Since we live at the time when change happens at an almost exponential pace, we also need the means where such a consensus can be achieves much faster than ever before

For the last two decades citizens' participation has been best fulfilled by Citizens' Assemblies or very recently, by a Citizens' Chamber, the solution proposed here as a Citizens' Senate and discussed in the previous chapter. However, this type of debates has its problems. Most of the participants are completely unfamiliar with the subject of the debate, since they are randomly selected. To enable them to make a rational decision they must understand the fundamental reasons for the proposed motion or a decision. Facilitators use different methods such as Focus Groups or conference-style debates, such as voting by raising hands, 'yellow stickers', or more recently using ZOOM video conferencing. Although generally that achieves the key objective to make an impartial and rational decision, the whole process can be highly inefficient.

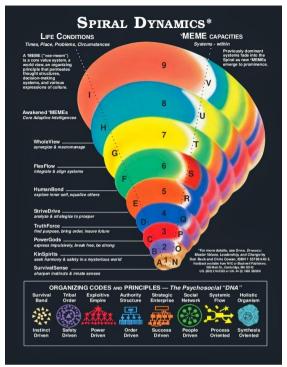
Therefore, we need to embrace new technological solutions, such as 'digital democracy' as enablers of a more consensual politics. But how can we achieve that? Perhaps we need an entirely new approach? A partial answer came from South Africa.

The origin of Consensual Debating

It was 11 February 1990 when after 27 years Nelson Mandela was released from the Victor Verster Prison in Cape Town. What followed then was probably one of the most unusual reconciliation processes between leaders of two drastically opposing parts of a nation. It was unusual because the gap between the two sides represented by Nelson Mandela and the South African President F.W. de Klerk was so wide that it may have required a decade or more before such a reconciliation could have been achieved.

Perhaps the key reason why that was possible in such a relatively short time was the way in which the two leaders agreed to seek consensus. They met about 60 times over the three-year period following a method called Spiral Dynamics.

Tony Czarnecki: 2030 - Towards the BIG CONSENSUS



Credit: Don Beck and Chris Cowan, 'Master Values, Leadership & Change', 2005

It was developed by an American, dr. Don Beck, who facilitated the meetings between Nelson Mandela and President F.W. Klerk. Its key assumptions are as follows:

- 1. Nothing is static; every is changing and evolving
- 2. As we adapt our personal values may change
- 3. Extreme opposite views cannot be changed overnight
- 4. Complex problems need to be split into small pieces
- 5. Start with what both parties agree
- 6. Move forward only after agreeing each one-line statement
- 7. Leave the hard problems to the end.

I met dr. Beck in London in 2002 where he was talking about that period of unprecedented change in South Africa and how his method could be used in similar situations, such as the conflicts in Northern Ireland and in Israel. But I returned to evaluate the method in greater detail only 15 years later.

At about the same time, I came across a much simpler, digitized method, which could be used for large groups called POLIS (pol.is). It was developed in the USA during the Occupy Wall Street and Arab Spring movements in 2011-12. Its key developer is Colin Megill, whose objective was to create a "comment system to be able to handle large populations and stay coherent" in the context of ongoing public conversations. It is a kind of a Wikisurvey, where the participants deliver the data themselves.

One of the countries, which has experimented with the Polis system for over 4 years is Taiwan, which has built a dedicated on-line platform https://vtaiwan.tw/. In one of the platform's early successes, the topic at issue was how to regulate the Uber company, which had, as in many places around the world, run into fierce opposition from local taxi drivers. As new people joined the online debate, they were shown and asked to vote on comments that ranged from calls to ban Uber, subject it to strict regulation, or calls to let the market decide.

Within a few days, the voting had coalesced to define two groups, one pro-Uber and one, about twice as large, anti-Uber. But then the magic happened. As the groups sought to attract more supporters, their members started posting comments on matters that everyone could agree were important, such as rider safety and liability insurance. Gradually, they refined them and gained more votes. The end result was a set of seven comments that enjoyed almost universal approval, containing such recommendations as "The government should set up a fair regulatory regime," or "Private passenger vehicles should be registered". The divide between pro- and anti-Uber camps had been replaced by consensus on how to create a level playing field for Uber and the taxi firms, protect consumers, and create more competition [32].

AI-supported Consensual Debating

Consensual Debating plays an important role in Consensual Presidential Democracy, since it supports very effectively the process of reaching consensus. However, for such debates to have a real impact on a country's politics, they need to be accompanied by a legally binding procedures, as it has been done in Ireland, Taiwan or Canada, so that a parliament discusses the initial proposal or a petition and then implements a legislation.

The other problem is that such a consensus cannot be reached in a matter of minutes. Very few politicians, even if they wanted, could afford spend

weeks talking to their opposition partners to arrive at a consensual solution. The only way to square that circle is to have an approach, which will allow participants to understand the arguments gradually but also enabling them to make a decision much faster using the most advanced technological solutions.

That's why in 2020-21 Sustensis, a company which I founded nearly 30 years ago, used its own Digital Structured Content and the POLIS voting system. Its main task was to give additional support to the participants of a special debating platform created by the European Union as part of its Future of Europe Conference which lasted between 9.5.2021-9.5.2022. However, it became too complex for its main purpose and required too much time to prepare the necessary input documentation. Besides, POLIS is not adequate for complex debates because it doesn't have a broader context. For instance, if you want to debate a new constitution, where there is a plethora of different subjects, you need to see it in a context and have at least an overview of all related problem areas, which POLIS cannot handle.

Therefore, in 2022, Sustensis completely redesigned Consensual Debating. It seamlessly integrated three components: Spiral Dynamics, POLIS and a rewritten Digital Structured Content and put it on a dedicated website Consensus AI: https://consensus-ai.sustensis.co.uk, subsidiary of Sustensis. But perhaps most importantly, it applied the most advanced AI Assistant ChatGPT. That enabled a significant simplification of digitized Consensual Debating. AI Assistant has also increased the overall reliability, and production of all summaries, objectives and seed questions.

Overall, its key features include:

- 1. Adapting Spiral Dynamics key ideas to groups
- 2. Everyone gets the same information and facilities to vote
- 3. Several rounds of voting until majority achieved (Spiral Dynamics)
- 4. Shows a participant how his view relates to a group's view
- 5. Facilitates with AI a very fast process of multiple voting
- 6. Enables Citizens Assemblies' more effective and efficient debates
- 7. Includes minority opinions into the final 60% majority view
- 8. Helps heal relations between people and politicians.

Leaving comments is a crucial part of Consensual Debating. Comments left by signatories on a petition create an indirect "conversation". The

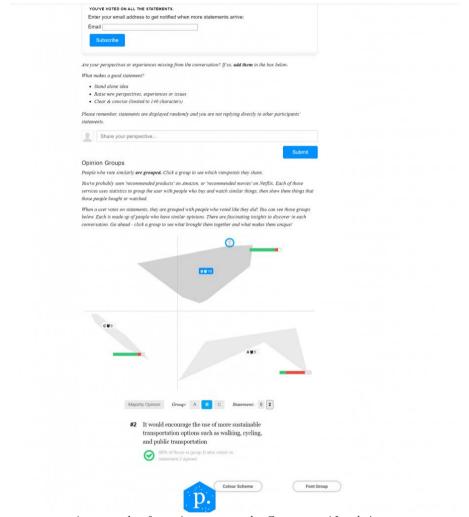
algorithms applied by POLIS and by AI Assistant uncover patterns in realtime, mapping out the entire conversation by visualizing correlations between opinions and participants, sorting participants into opinion groups, and surfacing areas of consensus and divisiveness. Therefore, a signatory, can after some time, assess the changes in an on-line visual representation of various groups' support for each of the variants of the legislation. He can then switch his support for another version of the petition. In this way, the most preferred version of the petition will be chosen through a consensus and compromise.

Digitized Consensual Debating should not be seen as yet another polling system, like YouGov. There are several important differences between such a polling system and Consensual Debating:

- It allows the participants to arrive at a decision gradually, in small steps, as their understanding of the problem gets better.
- Each such step is defined by a simple one line statement on which the participants can agree, disagree or have a neutral stance.
- As the participants vote they can see the graphs showing them in real time, how they vote against all other participants.
- After each such voting there is a short deliberation, followed by another vote.
- The participants can also add their own one-line statements on which all others will vote.
- The voting continues until 60% majority has been achieved. Usually there will be dozens of such short statements which address the decision to be made from different vantage points.

When at least one statement achieves 60% majority, there is a final deliberation. All statements that have achieved 60% majority or more are put on the final list. Only the top 5 statements, which have gained more than 60% support are listed as 5 options. The participants then vote on them using the Single Transferable Voting with Extended Threshold (STV-ET) method. This is a preferential voting when voters order their preferred choice from the most preferred to the least preferred. This time the motion which received 66% support (rather than 60%, because some decisions might require a super majority), is the one which would be put forward to the sponsor (organizer) of the session for a decision. This final vote is also automated but can be replaced by a paper voting, if such is a legal requirement. Depending upon the mandate of the Consensual Debating received from the sponsor, it can be a mandatory decision or an advisory resolution.

If there are any alternative proposals, they can then be voted several times. The objective is to identify a group of more than 60% of participants who agree with certain motions or policies, which are represented by a graph on the voting page on the Consensus AI website.



An example of a voting page on the Consensus AI website

The next release of the Digitized Consensual Debating will incorporate far more powerful features where an AI Assistant will almost completely take over the role of a facilitator enabling real time natural language conversations and totally self-serviced delivery of all functions.

Consensual Debating facilitates any type, even very complex, debates. It is particularly well suited to the area of politics and governance where there is a great need to reduce, or eliminate altogether, adversarial politics and replace it with consensual relations among politicians. But Consensual Debating can also be used for debating social, scientific or economic problems. It allows even tens of thousands of participants to debate thousands of topics simultaneously and come to an agreement in a consensual way in a few days rather than in months.

In parliaments, it can be especially useful for debating pending legislation at a committee stage. This might be anonymous pre-voting, as a kind of conscience vote, to see what the MPs would have voted had they represented just themselves. It can also be used at a local level, e.g., in the Planning Departments or whenever, long-term, wide-ranging policies are to be debated.

In each such case a typical white paper, which sometimes extends to hundreds of pages, can be quickly converted, thanks to an AI Assistants such as ChatGPT, into a well-structured content. This allows the main motion of a debate to be split into one-line statements across several committees of national or regional parliaments, or governmental departments.

Once pending legislation has been debated and voted for at a committee stage, the results can be very quickly re-assembled into articles of a legal document for the final voting in the parliament or a local council. Incorporating Consensual Debating in such debates can thus deliver immediate benefits at every level of democratic governance.

Overall, Consensual Debating could solve several problems in modern democracies, such as:

- 1. It can be used for debating complex political, social, scientific or economic problems on digital platforms such Consensus AI
- 2. It allows even tens of thousands of participants to debate thousands of topics simultaneously and come to an agreement in a consensual way many times faster (in a few days rather than in months).
- 3. It can significantly raise the participation in politics giving people real influence on the outcome of a proposed legislation, through Citizens Assemblies are legally binding petitions.
- 4. It achieves consensus on a proposed legislation by continuously redefining the initial wording of a proposed new law by the

participants. This allows them to adapt gradually their views to the views of the largest group and therefore, achieving much broader political consent through a better understanding of the issue, since the initial wording of the proposed legislation changes to reflect the views of a growing majority.

- 5. It is the best antidote against fake news. People learn from each other, and if they find themselves in a really small minority, they can then gather more information to understand the issues better and perhaps change their mind.
- 6. It can replace referenda by referring important decisions, such as on Brexit or the European Federation, to Citizens' Assemblies where they can be thoroughly and much faster debated achieving a far wider consensus.

Together with other proposals, such as **Citizens' Senate**, which is perhaps the most advanced example of participatory democracy, it may contribute to long overdue deep reform of a democratic system.

4

PART 4 CONSENSUAL PRESIDENTIAL DEMOCRACY

Chapter 1: Four Pillars of Consensual Presidential Democracy

The foundation of the Big Consensus

It was Jeremy Bentham, one of the fathers of enlightenment in Britain, who said that the purpose of a liberal government is to deliver the greatest amount of goods to the greatest number of people. If we add to that, maintaining personal and national security then the key purpose of the government would be to ensure at least a satisfactory level of well-being. External security is directly related to the effectiveness of the government in how it carries out its foreign policy and defence, while internal security depends on the balance of personal protection against the preservation of liberal values.

Regarding the material wealth, it was Milton Friedman who gave a recipe to the governments in the 1980'. He said that providing the greatest amount of goods is precisely the task that should be left to the market, apparently self-regulating. That was the birth of 'Reganomics'. We have seen what it really meant, when the world had to face the 2008 financial crisis. Regarding a fair distribution of goods, the role of the government should be to deliver those goods to the greatest number of people in the most balanced and just way and that's what was missing in Milton Friedman's recipe.

So, what are the required key changes in the way that the governments are fulfilling those tasks? What needs to be done in the redistribution area? Here are some ideas:

- 1. Eliminate extreme poverty, for example rough sleeping, by introducing Unconditional Universal Basic Income or Negative Income Tax
- 2. Aim at enlarging the middle class and flatten the income and wealth differentiation internally and internationally. This could be done internally by introducing a conditional Universal Basic Income, and externally, by the Global Wealth Transfer Fund, which I have suggested in Chapter 4, Part 1
- 3. Totally eliminate all tax havens. Obviously, that will have to be an international action
- 4. Tax companies' wealth, where they sell or produce their goods

- 5. Introduce national or international individual wealth income threshold, say, over 100 million dollars.
- 6. Lower the decisions on the redistribution of goods to the most optimal level of governance but engage the central government for levelling up regional wealth differences. A good example is the European Union's Social Cohesion Fund, which focuses on coinvestment, that means where European Union invests in certain projects, the government of a given country has to contribute a certain percentage of the project value, usually around 30 to 40 percent.

Now, what are the key changes in the way we are governed? I would suggest they are in three areas:

- 1. The first one is related to how we elect our representatives. For example, in the UK's House of Lords they are nominated for life, and there is no limit for MPs on how many terms they can serve
- 2. Next consider how does a government function. In the UK the winner takes it all and makes all the decisions the result of First Past the Post electoral system.
- 3. Third, consider, how a government is formed. The reason why we have malfunctioning governments, mainly in the Anglo-Saxon world, is a dual-party system. We need coalition governments led by a strong presidency with ultra-accountability.

Outline of Consensual Presidential Democracy (CPD)

If we want to get a **Big Consensus** between the governed and the governing, then the scale of democratic reforms needs to be of at least of a similar scale as moving from a direct Athenian democracy to a Roman republic, which was in essence a representative democracy.

The cornerstone of such a deep reform of democracy might be the **merger of direct and representative democracy.** That can be created by a constitutional reform, in which a petition system combined with a Citizens' Senate, both described fully in Part 3, would become part of a legislative system. This seems to be the fastest and the most meaningful way of rebalancing the power of the voters with the power of the government. It would significantly re-engage citizens, maintaining a continuous accountability of the governing to the governed.

But having a Citizens' Senate as a new legislative body would only restore the balance of power between the governed and the governing. We also need to address the remaining imbalances:

- lack of balance between the rights and responsibilities
- lack of balance of power between the majority and the minority,
- lack of balance of power between the central and local government

By correcting all four imbalances we will in effect create a new type of Democracy - Consensual Presidential Democracy (CPD) consisting of four pillars.



Four pillars of Consensual Presidential Democracy

Pillar 1 - Balancing the rights with responsibilities is the first of the four pillars. Values are the source of rights, which directly influence people's attitudes and behaviour. But values are not permanent. They change in line with a civilizational progress. And since civilizational change happens now at nearly an exponential pace, no wonder that our values change very rapidly too. Democracy, as indeed any other socio-political system, is based on values. Therefore, if we want to improve democracy, we need to start with redefining our core values.

Human responsibilities have not been properly addressed either in the UN or EU charters. Rights are not given on a plate. Implementation of rights and their maintenance over time has a price tag attached both in monetary terms as well as in keeping an ethical balance. That is why human rights must be balanced with citizens' responsibilities.

Pillar 2 - Political Consensus. It is through a petition system and establishing a Citizens' Senate that the lost balance of power between the governed and the governing could be restored. How to restore the balance between majority and minority is also addressed within this pillar. A key role in maintaining this balance falls to the Head of State, usually the President.

Pillar 3 – Shallow federalization. The lack of balance of power between the central and local government is covered here. The focus is on the allocation of decision-making powers to the lowest possible level of governance within a federation, a state, or a region. However, it is unlikely and undesirable that there should only be one 'acceptable' model of self-governance for the subsidiary entities of a federal state or a nation's state.

Pillar 4 – AI assisted governance. Since the ultimate goal of a liberal democracy is the greatest happiness for the greatest number of people, a democratic system must ensure cost-effective government. As mentioned earlier, a new democracy must leapfrog traditional solutions and look forward to immense opportunities created by AI-driven technology. The benefits gained by the government of a country implementing such an AI-assisted governance will be immediate and significant. First of all, most decisions will be made many times faster, with full justification and various options costed. They will also be correlated with other decisions made in a similar way by AI assistants helping all government departments. There will be fewer missed deadlines and unwanted projects. The savings will be truly immense if implemented at all levels of government.

The four pillars have also direct correlation with Maslow's Pyramid of Needs described in Chapter 2, Part 2. Such an interpretation may be useful for politicians to address the voters' needs.

The horizontal pillars 1 and 2 appeal mainly to voters' aspirational needs of well-being. They directly correlate with **self-fulfilment and psychological needs** (self-actualization, esteem and love/belonging levels) of the Maslow's Pyramid of Needs.

The horizontal pillars 3 and 4 address the two bottom levels of Maslow's Pyramid of Needs: safety and physiological needs, which in developed

countries really mean the *Quality of Life*. That is linked in this context to the scope and quality of decision-making that indirectly impacts the effectiveness of the production and distribution of goods and services. At a governance level it means that the most effective decision making should be carried out at the most optimal level of management by those who have the best knowledge about how to do that. Today, they are specialists, engineers, doctors, teachers, or project managers. But most often such decisions are also carried out by political decision makers with scarcely any knowledge on how to deliver the set objectives. Tomorrow, politicians will be supported by AI assistants that will essentially deliver the required know-how to the decision makers at the most appropriate level of governance.

I describe each of the four CPD pillars in detail in the following chapters.

Chapter 2: Pillar 1- Balanced Rights & Responsibilities

Upholding your rights is my responsibility

Democracy can no longer be based on rights alone. It must include responsibilities. For example, freedom not to wear a mask during Covid-19 pandemic had to be balanced with responsibility not to infect others, since freedom is not an absolute value – it is a shared value. Similarly, as with Covid-19 we must re-evaluate rights and responsibilities in the context of existential threats, three of which may reach their tipping point in about 2030. Therefore, we must accept that fighting existential threats may require some constraints on our freedom, such as:

- 1. accepting surveillance (under strict control) e.g., cameras in the street
- 2. mandatory use of identity cards
- 3. much stricter gun control than even in the existing UK law

That's what the first of the four pillars of Consensual Presidential Democracy (CPD) is about - balancing rights with responsibilities. That applies both to an individual as well as a state. The overwhelming focus on human rights has created an unhealthy imbalance by barely mentioning the importance of responsibilities in maintaining social cohesion. We see it quite often in courts across the EU countries, when an offender seems to have more rights than a victim. It is a clear evidence of how sensible liberal values have led to the so-called political correctness, seriously undermining the political and social stability. The pendulum of liberalism may have shifted too far towards the rights. Therefore, in a new system of democracy, reduction of the imbalance between the rights and responsibilities must play such a prominent role. That is why we must reexamine the current system of values, rights, and responsibilities.

What are values and what are rights?

There is considerable disagreement about what is meant precisely by the terms *values* and *rights*. For our purpose it is most important to see the difference between *ethical fundamental values* and *ethical rights*. In simple terms, values give the context for their application in real life as rights. Looking from another perspective, rights are legal, social, or ethical principles to do something, or an entitlement to something without any

restrictions. They are the fundamental normative rules about what people are allowed to do, or what they have the right to expect from others in relationship with them, according to a legal or a social system.

The World Happiness Index has a direct reference to values, or to what is life worth living. Wikipedia also defines values in an ethical sense as 'which way is best to live', e.g. "Equal rights for all", "Excellence deserves admiration", and "People should be treated with respect and dignity". All of them are representations of values, which can be of several types, such as ethical, ideological (religious, political) and aesthetic. Values influence people's attitudes and behaviour [33].

But values are not permanent. They change in line with civilizational progress and are usually associated with cultures or groups within those cultures, as well as with belief systems, e.g., when we speak about religious values or family values. They usually form articles of the nation's constitution. Since civilizational change happens now at a nearly exponential pace, no wonder that our values change very rapidly too. Democracy, as indeed any other socio-political system, is based on values. Therefore, if we want to improve democracy, we need to start with redefining our core values.

Rights, on the other hand, are most often linked to individuals and are usually converted into common law. This implies that rights can cross group-boundaries. A typical expression used nowadays, 'human rights' is a good illustration of this point. Human rights are thought to relate to individuals regardless of those individuals' group affiliations. That's what rights mean in an ethical sense: how a certain value is applied in real life. For example, *freedom* as a value does not impose any limits and boundaries. It is set by the society we live in. That's why there is no such thing as absolute freedom. If we take *freedom* as a basic value, then it can become the foundation for certain rights in this domain such as:

- Freedom of thought, conscience, and religion
- Freedom of expression and information
- Freedom of assembly and of association
- Freedom of the arts and sciences
- Freedom to choose an occupation and the right to engage in work
- Freedom to conduct a business or freedom of movement and of residence.

Rights can be restricted. For example, rights to demonstrate or protest were restricted even in such a democratic country like France, because of the terrorist attack in Paris in December 2015. These included the ban on demonstrations and on individuals to attend protests.

Universal Values of Humanity

If we want to improve democracy, we need to start with redefining our core values because they describe people's basic needs, such as freedom, dignity, or comfortable life. They also give the basis for new democratic processes and institutions, and that's what this book is largely about. But since we do not have the World Government, who would then have the right to revise those values? We cannot, unfortunately, rely on the UN because this process would never finish. The only way to do that would be to create a de facto World Government, such as emerging from a quasifederated European Union or NATO – see Part 1.

One would assume there is no difference between Universal Human Values and Universal Values of Humanity. But there is such a difference. It deals with three aspects of values:

- 1. **They can vary depending on culture.** This means that values dear to one culture may be completely alien to the other. For example, Confucian values are quite different from Judeo-Christian values.
- 2. They can vary depending on who, or what values relate to. People assume that all values relate to humans. But what about innate objects? Nature, including all animals, is a collection of passive objects that cannot argue for their values to be respected. That, in my view, is wrong. We as humans should extend the scope of values, meaning these are Humanity's values, i.e., these values that we as Humanity adopt on behalf of all humans and all living beings and the nature itself. Restricting universal values to humans only would exclude all animals and more importantly, the new species that may be born as a result of AI developments, culminating in Superintelligence, potentially becoming a conscious being.
- 3. **They can change in time and across civilisations**. In the Middle Ages, capital punishment was universal. By the end of the 20th century there was no European country where it was in force (apart from Belarus). Today there are 53 countries where death penalty is still in use.

Therefore, leaving the Universal Human Values with the current interpretation, as they are considered now, i.e., static, is based on an assumption that they relate to humans only, that they are adhered to by all nations. This is incorrect and that's why I would propose to use the term **Universal Values of Humanity.**

The most important personal freedoms and rights are enjoyed by the citizens of the EU. The Charter was declared in 2000 and came into force in December 2009 along with the Treaty of Lisbon. But both documents need comprehensive revision. This should be done very fast, perhaps within the expected revision of the Lisbon Treaty, or the creation of a new EU Constitution.

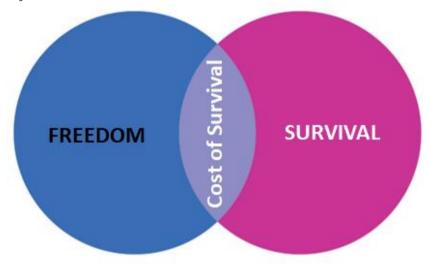
These new values should become the bedrock for fundamental reform of democracy. But at the same time, they should be used for licencing the most advanced AI solutions, by embedding them into a controlling chip, to minimize the risk of creating a malicious AI. Additionally, we must nurture first humanoids in the way we bring up a child, so that they have similar experience of applying those values, such as freedom, responsibility, kindness, or reciprocity. The key requirement here would be for such humanoids to operate in an environment almost identical to how humans live and operate, i.e., living at home with humans, attending classrooms or working in a factory.

Human Responsibilities

If you want an illustration of what are responsibilities, then think about the 10 Commandments. Human responsibilities as a value are not properly reflected either in the UN or EU charters. The constitution of the future Human Federation and its World Government should include those responsibilities, since without them rights cannot be fulfilled. Implementation of rights and their maintenance over time has a price tag attached both in monetary terms as well as in keeping the ethical balance. What I mean by the ethical balance is that quite often somebody's right is my responsibility. For example, my child has the right to be properly fed and clothed and it is my responsibility to fulfil that obligation. People have the right for a free emergency hospital care in case of an accident, and it is my responsibility to pay due taxes, to ensure that such a right can be materialized.

Let's take yet another example where right and responsibilities overlap - *Freedom and safety or even survival.* We all take it for granted that we live

in peace and in relative safety e.g., within the borders of Europe. But there must be someone who delivers peace. Who is responsible for our safety? Of course, mostly it is our own duty, i.e., our responsibility. At a national level it is the state, which is responsible for our safety and ultimately for our survival. That cost of security and defence is covered from our taxes. But there is another element of delivering security by the state. We agree to respect the law, e.g., we cannot smoke wherever we want to, or we may be drafted to serve in the military. That all is a non-material cost of our safety and survival.



Paying for our survival by putting limits on our freedom

To give yet another example, imagine that you are aboard a sinking ship. All

wealth, which you managed to accumulate during your life is in your heavy suitcase. Only the people who dispose of their luggage are allocated places in the rescue boats. You throw your luggage and safe your life. That's the cost of your survival.

In most EU countries, compulsory military service was abolished years ago. The result of this can be seen in the way young people behave. It is great to see them enjoy such a wonderful peaceful life. But this is like giving a little child a toy. A child is unaware of what it may cost their parents. Young people are not even taught at school that freedom requires contribution both in money (taxes) and in kind (e.g., serving in the army). The war in Ukraine is a perfect example what is the price of *freedom* as a

value. Currently, it is being paid in blood by thousands of Ukrainian soldiers, and by us in taxes.

Of course, military service is only one of the examples of how the right to freedom should be balanced by the responsibility to deliver it. It illustrates a broader point that our societies should be re-educated in that rights do not come free; they also require us to take the responsibility to cover any material and non-material costs so that we can enjoy those rights. Here are some principles of how rights should be balanced with responsibilities:

- Human rights must be balanced with citizens' responsibilities. It is inadequate to have the Human Rights Court, which would be blind to the citizens' responsibilities. Therefore, there should also be a similar list of Universal Responsibilities of Humanity as there are Universal Values/Rights of Humanity defined earlier
- Every gender has a responsibility to maintain social cohesion and observe social norms. For example, it is not helpful for the sake of political correctness to promote homosexuality as something seemingly better than heterosexuality, best exemplified by the pink parades. While granting people of homosexual orientation the same rights as everybody else, the reverse should also be the case and at least in the UK that become the law in 2019, revising the original law from 2004. Since then, not only homosexual people could enter into Civil Partnerships, instead of being married; heterosexuals or any other gender couples can do it as well. The same goes for racial equality. For example, people of colour have the same responsibility as the white people to treat other races as they themselves would like to be treated. There should not be an exaggerated protection of any race. All races are equal.
- Governments and global companies must take the responsibility for controlling the impact of globalisation, so that its negative effects are minimized.
- Large corporations should be held legally responsible if they do not pay tax due in the country where they operate
- It is the government's responsibility to introduce tougher control of the market in general by drastically reducing monopolies, and oligopolies, but especially in the media. In the UK, about 40% of all media is controlled by Rupert Murdoch and in the USA similarly 40% of the media market is controlled by one company Comcast.

.

Chapter 3 Political Consensus – Pillar 2

The Need to Reshape an Electoral System

People often feel that they have democracy because they have free elections. But over 200 years ago Jean-Jacques Rousseau commented on the British elections, saying they were no guarantee of liberty: "The people of England deceive themselves when they fancy they are free; they are so, in fact, only during the election of members of parliament: for, as soon as a new one is elected, they are again in chains, and are nothing." We seem to forget that elections are just a means of taking part in democracy, whereas we see it as an absolute, fundamental doctrine that has an intrinsic value itself. True, elections can lead to the change of government, resulting from public electoral debates. However, if you look closely, you can see that the whole process is tightly controlled by the teams of professional experts supporting the competing parties, which feed the media and the electorate directly using the most sophisticated socio-political techniques of persuasion.

A new Consensual Presidential Democracy (CPD), as proposed here, must therefore, have a new electoral system. The participation in the election should be mandatory reflecting the notion that the right to vote is also a responsibility to take part in societal and communal life. Among the long-standing democracies that make voting in elections compulsory are Australia, Belgium, and Luxembourg. Mandatory voting is also used in Latin America. Examples there include Argentina, Brazil, Costa Rica, and Ecuador. In some countries voting has been made compulsory at the discretion of sub-national governments or is applied only to certain types of elections.

Being a voter means that someone performs that function because he has certain rights and responsibilities. Everyone has the same rights at birth, including an implicit voting right, which he can execute once he becomes an adult. Every vote has the same weight, every vote is equal, and it cannot be increased or decreased by any additional factors. Equality has been the cornerstone of the western democracy for over two centuries. The principle of equality comes straight from the French revolution: liberte, fraternite, égalité. That has served us well and has become the backbone of the Western democracy.

However, equality is not as simple a principle as we are being told. For example, in the UK, both Labour and Conservative governments have been rightly trying to make the following principle plain: everyone must have equal opportunities and rights at birth but not the same equal rights in the share of the national wealth. This should only depend on such factors as ability, education and simply on the kind of work performed over a citizen's life. That is why people working at different levels of organisations are being paid depending on their contribution to the company's performance. Pensioners get pensions corresponding to their financial contributions. Not everyone can be a doctor, be elected to the parliament, or be a judge.

Why should then an electoral voting system be an exception? Why must each vote have the same weight and impact on matters of governance of a country, irrespective of how capable a voter is of making decisions on complex matters of economy and the state? Is that fair or even is that just? Shouldn't his voting weight depend on his knowledge, engagement, or contribution to his country, rather as it was in the 19th century Britain, on the taxes he has paid? After all, his abilities to make a reasonable judgment on complex matters in any sphere of life, depend on his education and experience.

We already apply a kind of a weighted voting by denying children the right to take part in elections because they would not be able to make a rational judgment. That is certainly a restriction. But there is a good reason for doing this - we do not want people with no idea of what politics is about to have any influence on political decisions. Applying a minimum age to voting rights is an attempt to filter out the ignorant and incompetent people from the voting process. However, at the same time, we have evidence that many adults are sometimes even less capable of making a rational judgment than some teenagers. Why should the teenagers be discriminated in elections and some, uninterested or even illiterate adults, have that right?

In some countries, some politicians question whether it is right to give disproportional voting power to those who have very little understanding of how their country is governed. Others may question whether it is just and fair that those who are net beneficiaries, rather than net contributors to the wealth of a given nation, should have a say on the level of taxation. Without any prejudice but only reviewing the facts, over 1/3 of British adults are at the lowest level of literacy (level 1) [34]. Should such voters have the same voting weight as those ones that are far better educated and experienced in ever more complex matters of today's world? Should their

understanding of how wealth is created, and which priorities should be assigned, or material resources allocated, matter as much as that of any other voter? Probably not, but this is how equality is being understood today since at least the time of the ancient Athenian democracy and the French revolution.

Such questions as above need to be asked openly, even if solutions to resolve them may not be easy to accept and implement. People may need to change their views on what is justice and fairness, or what is safe and prudent to do for a nation not just from today's perspective, but from a long-term point of view, which is of course, much more difficult to do. That also includes the voting equality.

Let's consider what is the desired outcome of the vote cast for the whole population of the country? It is for the country to elect the most capable people who would make decisions in the most rational and effective way blended with compassion when appropriate, for the benefit of all citizens because only then the benefits created will be optimal. To achieve that, the weight of the vote could depend on voter's engagement in the country's affairs, his knowledge about how the country is run, i.e., its internal and external activities. The current voting system contributes to a large extent to the system of government, which does not reflect the true will of the widest population, allowing that will of the people to be manipulated by populists.

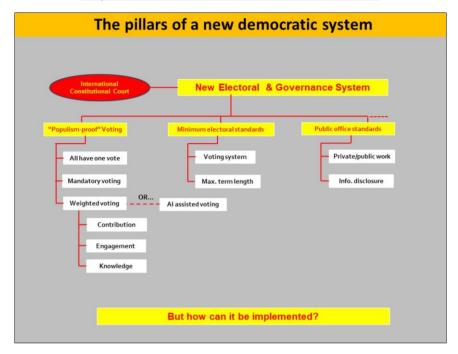
In the end, it is in everyone's interest to get governments elected more rationally, so that they deliver in the most effective way the decisions that most of us want. Therefore, as the world becomes more and more complex, shouldn't the equal power of a single vote be replaced by a **weighted voting system?**

Historically, weighted voting has been applied in many countries since at least Roman times. In 19th century it was applied in Sweden, France and in Britain and was mainly based on gender (women could not vote), social or financial position, or taxes paid. Today, such a weighted voting system based on financial contribution would be utterly unacceptable. That should rather be based on other principles such as voter's capabilities of understanding sometimes complex political decisions that are largely correlated with his education, interest in politics and the matters that are important for the country. Only then can we marginalise populism and implement difficult decisions based on the understanding by the electorate that there is simply no easy way to overcome the problems that a country may have at the time.

Adding some weight to each vote in line with some criteria, such as voter's education level and contribution to the society or communities they live in, would lead to electing representatives in a more rational and less emotional way (being more immune from the half-truths of many populist politicians). But that would also mean that some people would influence the election results more than others. Many voters would say, it should never be done – equality means equality, it is an outrageous idea. Well, we have exactly such a system of weighted voting at the heart of the EU. It was introduced by the EU in the Treaty of Nice for decision making by the European Council. The countries' voting rights are directly related to their contribution/impact in the EU (mainly the country's population).

Some people say that one of the solutions to get voters more engaged and not being lured by populist politicians might be a better education. However, in my view, that will not be enough. Traditional education and communication (assuming it will be free of fake news), should be improved, especially adult education. However, that is a long-term solution. We simply have not enough time to change democracy fundamentally by about 2030, as I have argued throughout the book. Therefore, we must apply other means, which may be more direct and act much faster.

In summary, the weighted voting system, combined with random selection is probably one of the key measures needed to significantly improve democracy. Almost any system of weighted voting, like the one below, will have some disadvantages. Experience will show, which system works best.



A political quiz for elections

One of the options to make a vote's weight assigned more justly and equally is 'A political quiz'. There are several such ideas but the simplest one is perhaps the system proposed by Stefan Hansen [35]. This system seems to preserve both the voting equality, as well as fairness. It could be easily implemented but could not be applied in an on-line voting. Without going into too much the detail, here is how it could work.

- 1. On the election day a voter goes to the polling station
- 2. Voting is mandatory
- 3. He casts his vote using a digital terminal. But before he selects his candidate, he must answer 10 randomly selected questions out of 500 on the country's system of governance and current economic or political problems that the country is facing. Only then can he press the button.
- 4. If he answers all questions correctly, his vote's weight is 100%. But if he answers only 4 of them, then the weight of his vote is reduced to 40%.
- 5. The questions would have been prepared earlier by an independent body and approved by the parliamentary committee, which would

be composed of MPs in the same proportion as the proportion of the votes cast for their parties in the previous election.

The benefits of this system are obvious, such as:

- 1. There is no discrimination against anyone. Everyone's vote is equal
- 2. The voting age might be lowered even to 14. If that is supported by an extended programme in all schools on how the country is governed and what are the main current problems the country is currently facing, then it would have increased the teenager's motivation to learn, and later on, be more actively involved in the country's social, economic and political matters
- 3. The impact of the voting adults who have no interest, or hardly any knowledge, on how the country is governed, will be minimized. That would result in a more rational and effective government
- 4. It would significantly reduce the impact of populism since the fake news would simply lead to wrong answers at the polling station.

There are at least two objections that one might raise. First, such a system could not work well in an on-line voting since people could find the answers on the Internet. That is true, but this could be counterbalanced by lowering the weight of votes given online.

The second objection might be that people will have no other realistic option than go to the polling station. Additionally, the voting could take 10 or more minutes. If this is the case, voters may not bother to vote.

To that I would say that the voting could be extended to 2 or 3 days, or there would have to be many more polling stations. Moreover, this is simply a minimum duty a citizen should do for his country and that is why the voting should be made mandatory.

I am a strong supporter of mandatory voting. The objections against the mandatory voting are another example of how we have mixed up the concept of rights and obligations. We do not have an absolute, unconstrained freedom that is given to us free of charge – protecting our freedoms costs a lot of money. The same goes for rights. The protection of your right to free education, free emergency health care etc. costs. Yes, it is covered from our taxes, but a society is not just a shop where the relationships among the participants are only about the price and quality. They are much more about things that make us human. For example, in

some countries, it is a criminal offence not to help somebody who is in need e.g., has a heart attack on the street. With rights come obligations.

AI-based electoral solutions

In a few years' time many people will have a Personal Life Mentor application in their smart phone or even implants in their brain. These applications will be much more sophisticated than the current Google's Personal Assistant, Amazon's Alexa or the most recent ChatGPT or Google's Bard. How could it help us in selecting a more representative Parliament and protect the voters against an extreme populism?

Well, this is the concept that I have developed in the last 10 years, and which has been discussed with one of the London Universities and an AI company. Knowing how fast the market operates it will probably be not me, who gets the product on the market. The important message is that such a product will certainly be developed most likely in about than 2 years. So, I am using the features offered by my prototype as if it had been available in the future product.

In a nutshell, such an application available on a smartphone or other medium would communicate with the user in a natural language, which ChatGPT can do quite well even today. But of course, it will be a much more sophisticated Personal Life Mentor that would acquire through a series of long structured conversations with you, an almost absolute knowledge about you. It would know who you are as an individual, your psychological profile, your character traits, your life goals, objectives, and daily tasks, your strengths and weaknesses, your opportunities and threats, your skills, education, friends, family members, your detailed life journey with pictures and video. **And it will also know your political preferences.**

Since such a Personal Life Mentor would of course know more about politics and the world than an average Joe Blogs, it would be able to give an impartial advice, on which party he should vote for, considering the voter's preferences, and justifying to him its proposed choice. Yes, you are a free man, so you can ignore the advice and rather be guided by your emotions. We are not robots; we are humans and as the Roman philosopher Seneca rightly said *Errare humanum est* – to make an error is human. But that's the first part of his motto, which would nicely go along with your emotional choice, against the wisdom of your Personal Life Mentor, which would probably add the second part of Seneca's motto: Sed in errare perseverare diabolicum - but to make errors persistently is diabolical.

So, in the end the choice will still be yours. Sometimes, the difference between your gut feeling for which party or a candidate to vote, your intuitive choice, and your Personal Life Mentor's choice is between what is good for you in the short term and in the long-term. The prototype that I have proposed almost always takes a long-term view because after all you want to fulfil your life goals, which are very long-term. But you can discuss with such a Personal Life Mentor the best options for you if you just want to consider the consequences of your vote in the short-term.

But back to serious matters, one way of overcoming the plague of populism, xenophobia, and to some extent racism, would be to make such Personal Life Mentors freely available as part of a standard software on a smart phone. It will not only guide you on making your political choices, but also such as party membership or voting in elections. It will also advise you in the most effective way how to achieve your objectives and life goals consistently and help you sail across the ocean of your life most effectively, with a dose of spontaneity, randomness and some bad choices thrown in, to add some spice to your life.

Can coalitions deliver better governments?

One of the biggest differences between the European and the UK model of post-war democracy is that the first one produces mostly coalition governments, whereas the governments of the UK have been run almost exclusively by a single, majority party. That is the outcome of the First Past the Post system but also the belief that 'strong', one party rule is more efficient and more effective in delivering better quality of life for the electorate. However, the actual results do not confirm that, if we measure the UK's quality of life by GDP per capita, which has been consistently falling. For example, in 1990, UK's rank in GDP per capita in the world was 18^{th} , whereas in 2018 it was 26^{th} .

In my view, the biggest disadvantage of a single party government is the adversarial nature of politics as has been evidenced so plainly during the UK's Brexit proceedings in the Parliament. This leads by extension to a deep polarization of society and again we have witnessed it during the Brexit campaigns. But there is even a greater disadvantage that really shows up in the longer term. The adversarial politics based on the majority of one party, which does not have to win the majority of the votes to rule the country. This leads to short-term politics and constant swings in policies. The whole focus of the government is on winning the next

election by tuning its manifesto to temporal whims of the electorate. If we return to Maslow's two lowest levels of the Pyramid of Needs (physiological and safety needs), that is exactly how people would respond. And that directly translates into the voters' preferences to elect those, who give more and now - an ideal platform for populism.

Additionally, such an adversarial politics, supresses by its very nature the inflow of new ideas by virtually eliminating smaller parties in the First Past the Post system. The voters have less choice and therefore are quite often either not voting at all, or voting tactically, which only rarely delivers the intended result.

Perhaps we should then consider coalition governments for the new, reformed democracy? Unfortunately, the answer is more complex since coalitions also have their disadvantages. Just think about the influence that a dozen DUP MPs in the British Parliament had on the outcome of the Brexit proposals. It is immensely disproportional to the number of voters supporting that party. Furthermore, some people may still remember the fate of the Liberal Democrats coalition with Conservatives in 2010-2015 UK government. Each party in the coalition government will have to drop some of its Manifesto commitments, as Liberals had to do with their promise not to charge any University fees.

Finally, let us consider the minority governments, i.e., emerging from a single party having the highest number of MPs but with less than 50% of the seats in the parliament. Usually, it must get the support of a tiny party on a case-by-case basis. In the UK this is called confidence and supply arrangement like with the DUP in 2017 Theresa May's government. That is similar to the model practiced in most Scandinavian countries and sometimes called **contract parliamentarianism**. In this model, the government passes a particular law if it can command the support of the majority of MPs.

Ad hoc coalitions can thus be formed for passing a single law. I would consider this model the closest to what the politics of consensus means. However, to run it relatively smoothly you need an independent arbiter. In Scandinavian countries that, very active, role is played by the president. That model applies the double majority rule, where most MPs and most voters (in a proportional voting system, which is another important ingredient) support a given Act of parliament. However, that system does not guarantee either that any legislation that is sometimes urgently needed

will pass through the Parliament. Therefore, Political Consensus must also rely on some additional arrangements, such as those proposed below:

- In CPD system of governance the President is the main counsellor and arbiter between the parties. He helps the Parliament to pass the legislation with the support of ad hoc coalitions, which may be different for each act of Parliament.
- Some legislation may require double majority. This means there must be a proportional representation electoral system, which will allocate the mandates to the Parliament proportionally. Like in any parliament any act to be legislated will require the support of the majority of MPs. But the double majority principle would also require that the act gets the support of the majority of the voters. In CPD it can happen because the MPs would be elected using a proportional system, so any ad hoc coalition that may be needed to pass the act, will also represent the will of the majority of the voters.

The advantage of such a system lies in its ability to introduce legislation with long-term commitments, such as in health and education, or as is the case in Sweden and New Zealand, agreeing 3-year budgets. Governments are formed much more quickly, and the legislation is also passed faster than in coalition governments although usually not that fast as in the single party majority rule, like in the UK.

The positive consequences of Political Consensus, even in a limited form as proposed by CPD, are evident in politics and governance of the countries, which have tried it. These are the countries, where the politics of consensus is a norm. No wonder that all Scandinavian countries are in the top 10 most contented nations in the world, with Finland being the happiest country twice in a row.

Chapter 4 Deep Decentralization – Pillar 3

Small is beautiful - defending regionalism

In 1973, just in the middle of the first turbulent oil crisis, a little book was published. It was titled "Small is beautiful: A study of economics as if people mattered". Its author was a German-born British economist E. F. Schumacher. The phrase "Small is beautiful" is mostly used in the context of small companies or technologies, which can quite often deliver better and faster results than traditional big businesses. But I am using this phrase in a different context – to define the allocation of decision-making powers to the lowest possible governance level. Let's call it 'cantonization', resembling the concept of Swiss cantons. It is what the third pillar of Consensual Presidential Democracy is about – Deep Decentralization.

This pillar deals with internal matters of states and therefore it is bound to be very controversial. However, in this book I have been trying not to shy away from such matters for political correctness, difficulty, or other reasons. This is an area that may affect the formation of any federation, including the future federalization of the EU. However, it is also very relevant today. The best example is the Catalonia's referendum on independence carried out on 1st October 2017, which had not been previously agreed with the Spanish central government. Did the Catalans have the right to carry out such a referendum without the consent of the Spanish government? The illegality of the referendum is crystal clear. That's what Article 2 of the Spanish Constitution says. But not having a legal right does not close the problem. If Catalans do not have a legal right to organize such a referendum on the region's independence, do they have a moral right not only to the referendum but to becoming an independent state? In my view, they have such a right and I would put forward these arguments:

• The first one is the so-called **Natural law** ("lex naturalis" in Latin). It asserts that "certain rights are inherent by virtue of human nature. The law of nature is implied to be universal, existing independently of the legal system of a given state, political order, legislature or society at large". The best example of applying natural law to declaring independence is the Declaration of Independence of the United States, which says that "...it has become necessary for the

- people of the United States to assume the separate and equal station, to which the Laws of Nature and of Nature's God entitle them" [36].
- The second one is individual freedom, indirectly derived from Natural Law, practiced in ancient Rome as "habeas corpus" - "you shall have the body" and indirectly referred to in Magna Carta meaning nobody can be prosecuted without a fair trial in the court. That has ultimately become a common law in the UK. Individual freedom means among others a freedom of unrestricted travel. That natural law has been frequently violated in legal systems of dictatorships. For example, how could an individual living in the Soviet Union, or in Nazi Germany, leave the country freely at any time? They could not. This is why such a Natural Law has been directly applied to refugees and 'freedom fighters' by the European Human Rights Court. In the European Convention on Human Rights, we have among others, articles on the rights to education and free elections, derived from 'natural law'. Therefore, regions, as communities, have the same 'natural laws' that protect their rights to self-governance (or 'freedoms') as those that protect individuals.
- The third argument is **the Right to Secede**, which is frequently used by international lawyers. It describes two types of rights to secede: Primary Right and Remedial Right. Primary Right asserts that certain groups, like nations, have the right to secede in order to have their own state. Remedial Right is a unilateral right to secede, to which a group is entitled on the grounds of injustices they may have endured from the state they are part of. Here are some examples of application of the Remedial Right:
 - Former colonies are considered to have a legitimate claim to break away from the imperial power;
 - Secession is justified when it is simply the taking back of the wrongly taken territory (the most recent cases are the Baltic States: Estonia, Latvia, and Lithuania);
 - Secession is legitimate after persistent, large-scale violations of basic human rights (e.g. Palestine, Kosovo, or Chechnya).

That was the reason used for creating the United States. At that time, the fulfilment of such will of the people could only be implemented through a war. The last time we had it in Europe was the Balkan war in 1990s. Today, we must be able to let the regions, which want to become independent states to do it peacefully, even if the state they are a part of, deems it illegal or has no legal framework for a region to make such a decision. These

moral rights would be sufficient for Catalonia and other large minorities anywhere in the world to conduct a referendum for independence whenever they want it. In principle these rights for declaring independence must rest with the community of that region, irrespective of whether it is a single nation based on history, tradition and culture, or a large region of common interests.

Therefore, constitutions, and especially the pending Constitution of the EU or the future Human Federation must include articles on region's secession from the member states such as:

- 1. The process of such a secession from a state must follow the overall right specified in the new Universal Values of Humanity
- 2. Therefore, any nation or a region has the right to secede from its current member state. It can then immediately become a state on its own, or apply to become a part of another state or a federation
- 3. Any such process of a cessation must be supervised by an independent organization
- 4. There is a minimum period of 5 years (just an example) for completing the secession.

How much of self-governance?

The second aspect of Deep Decentralization relates to what is the necessary minimum level of decisions that must be in the competence of the central government or in reverse – what is the maximum level of self-governance within a federated state. This is a political and philosophical problem, and I will only touch on this area because of the implications on the actual approach that might be taken to form the future European Federation or the Human Federation.

To make it easier to create any federation, it seems to me that it should be set up from the outset as a 'Minimal State'. That is not just a phrase but a whole concept of a state, favoured by liberal philosophers such as Emanuel Kant who viewed freedom as 'the absence of external constraints upon an individual'. More recently an American philosopher Robert Nozick expressed the notion that 'a state must possess two main attributes: it must have a monopoly on the use of legitimate force in a territory, and it must provide protective services for everyone in that territory'. What I believe is important in the context of a federation is that living in such a state is a kind of a bargain - greater safety for less freedom. That is precisely why I would think a Minimal State might be the very right political structure for

any federation, especially for the Human Federation and for any regional government within a state. In such a federation or a state with regional governments, the duties of a federation or a state are so minimal that they cannot be reduced any further because otherwise the state would cease to exist and would become a form of anarchy.

Typical governmental institutions in a Minimal State would be the defence, foreign affairs, police, and the judicial systems. It is then obvious that a Minimal State is certainly not a Welfare State. That would be a continuing prerogative of the former states or larger regions within a federation. The exact split of powers between a federation and its former independent states would have to consider the cost and effectiveness of services provision beyond those that will be covered by a federal government. However, it is unlikely and undesirable that there should only be one 'acceptable' model of self-governance for the subsidiary entities of a federal state. For it is obvious that in any proposed model there will be positive and negative features. Additionally, the same feature can be viewed as positive or negative dependent on the cultural or regional differences

Therefore, the actual level of self-governance can only be decided in very concrete geopolitical circumstances. It will most likely happen just before a federation becomes a legal entity, when the states will have to decide how much of their sovereignty they agree to shed on behalf of a federation. That's why such a decision on accession to a federation will have to be for approval put to voters.

Chapter 5

AI-assisted Governance - Pillar 4

This chapter presents an optimistic view of the future showing how incredible capabilities of maturing AI will create the world of unimaginable prosperity. I should only repeat the assumption underlying this optimistic view, made in the conclusions of Part 1. I think there is a better than even probability that within the next few years we shall have a de facto World Government and the world will start acting like a planetary civilisation. That does not mean we will avoid immense chaos resulting from a nearly exponential pace of change and unprecedented reform of the way in which we will be governed. The turmoil will be there and significant improvements in our life will happen at the same time when we will need to face inconvenience and practices limiting our freedoms.

A deep reform of democracy should start right now but realistically it will be carried out in parallel to the process of global federalization. Both processes may reinvigorate each other since one cannot be complete without the other. But to deliver the world of abundance we will need a very efficient and effective World Government as well as the national and regional governments. That is the objective of the fourth pillar of Consensual Presidential Democracy (CPD).

How can we do that when nearly all governments world-wide are today run by politicians, who are not top experts in efficient delivery of services such as health service, education, or economic development. Yes, they have the support of a civil service and thousands of advisers and consultants but in the end they themselves must make the final decision. The problem is that quite often such a decision requires deep understanding of the subject matter.

The consequence of that is that many of the projects initiated by ministers run over time and budget and some, especially the most expensive ones, which will have an impact for decades, are unnecessary. One of the best recent examples is the HS2 railway project in Britain, which is to be completed in 15 years, cost over £100bn to enable trains running at speeds of the last century (about 350 km/h).

Examples like that one prompt some academics to suggest a silver bullet solution – a technocratic government run by experts. Its technocratic ministers would respond to the parliament as needed or as the law may

require. The apparent logic behind a technocratic government is that it should be the parliament, which tells the government *what to do*, and it is the government, which knows *how to do it*. That would also increase the separation of powers.

Such governments have been set up in many countries mostly in the 'hour of need' but only as a temporary solution, rather than a 'normal' feature of delivering services to the nation. The British civil service could have been considered a kind of a technocratic government had not all its departments been headed by Secretaries of State and Ministers (altogether about120). An exception is perhaps Singapore with its longest, and probably most effective, technocratic government, which achieved an incredible growth of prosperity for the nation over a few decades.

So, why are such governments still a rarity? The main problem of technocratic governments is their accountability. That's why they are usually disliked by both the public and politicians even though they are more likely to deliver value for money for the society than a government led only by politicians. Unless the whole political system is a blend of democratic and authoritarian rules, as is the case in Singapore, such governments are not here to stay.

Therefore, in the pursuit of effective and efficient government we need to look for other options. What I propose here may significantly impact, if implemented, political decision-makers at any level of governance, i.e., ministers, governors, mayors, councillors etc. The solution that I consider involves the support of politicians and decision makers at all levels of governance by AI Assistants. This is already happening anyway in almost every profession, such as medicine or engineering, where top consultants will be supported by such AI Assistants.

If you think it sounds incredible, then just look at the offerings of one company – Generis. It has already several industry-specific AI Assistants. For example, CARA (Case Analysis Research Assistant) can work in most 'soft' areas such as law, pharmaceutical, medicine or government. It is competing with ROSS, which is primarily an AI legal assistant, which has already delivered incredible results. especially in the Anglo-Saxon world, whose law is case based. There are other such AI Assistants in the legal area where they deal with thousands of documents per case, so are engaged in similar tasks as in most government departments, such as:

- Due diligence Litigators perform due diligence with the help of AI tools to uncover background information
- Prediction technology An AI software generates results that forecast litigation outcome
- Legal analytics Lawyers can use data points from past case law, win/loss rates and a judge's history to be used for trends and patterns.
- Document automation Law firms use software templates to create filled out documents based on data input
- Intellectual property AI tools guide lawyers in analysing large IP portfolios and drawing insights from the content
- Electronic billing Lawyers' billable hours are computed automatically [37].

If you consider the continuous exponential improvement based on self-learning of such AI Assistants like ChatGPT, Lambda, Bard or IBM's Watson, then within a few years, work in many companies of these industries will change beyond our imagination.

The easiest way to imagine the progress made in just two years in AI Assistants is to compare Amazon's Alexa-type application. This application can communicate in perfect, easy to understand accent, in about 60 languages but only one way. We can understand what the app is saying but it has serious difficulties to continue a natural contextual dialogue. Therefore, quite often its response is just 'I don't know that one'. Only the very best, most expensive robots, linked to superfast computers, such as Sophia by Hanson Robotics, could have a longer meaningful dialogue but most of that dialogue was scripted. According to the company, it needed another 2-3 years before its Sophia would be fully conversant on most subjects.

Now, compare that with ChatGPT which can have an extensive intellectual conversation on any subject, although sometimes, it will make things up. Although released in December 2022, its merger with Microsoft Bing in February 2023 has created something much more powerful. Most of its results are now far more credible by showing what is the basis of its conclusions (displaying Internet links). This is probably the most important breakthrough in applying those AI Assistants in almost any environment, including education, health service or factories and indeed in government.

According to Ray Kurzweil, the most renowned futurist, by 2029 (he is precise on that) AI will achieve human level intelligence (in terms of

processing power not intelligence as such). However, the current progress indicates that AI Assistants will achieve human level intelligence in most domains of human activities before then. When this happens, almost every decision made by a political decision-maker or any consultant will be executed as the AI assistant had suggested.

Right now, these AI Assistants and robots (this includes autonomous cars) can advise on a narrow subject matter using its database of knowledge. Such databases are already being produced as plug-ins (see CARA and ROSS mentioned earlier), purchased as a service and then maturing through self-learning in a concrete environment, e.g., at Ministry of Health. Therefore, realistically, we can expect a widespread use of such assistants by about 2025, although probably without full cognitive capacity yet.

Such a 'Master' Assistant serving for example the Minister of Health will be a generalist and therefore may still need to be supported by several of his 'colleagues', each in various subjects. On the other hand, from the user's point of view, the whole process of knowledge acquisition, interpretation, compilation, and presentation of final answers by such AI Assistants will be largely seamless. The quality of its response and decisions will largely depend on the quality of data to which it has access and its overall skill level it has learned on a given site. However, only about 2030, such AI Assistants will have a multi-disciplinary knowledge and intelligence (human level cognition) in nearly all disciplines.

In the next two to three years we will have advanced AI humanoid Assistants which will be a merger of, for example, Optimus robot, and far more knowledgeable and skilled ChatGPT.



Tesla – Optimus robot

Such humanoid AI Assistants will be present in many doctor's surgeries. Costing about \$20,000, they will be perhaps the best investment that any Healthcare has ever made. They will support doctors in presenting relevant data for incoming patients, remember all their medical data, knowing a potential impact of their genes on their current health, and suggesting which compliant medicine they may take. This will dramatically reduce the doctors' workload allowing them to focus on the most important patient's health issues and leading over the years to a significant lengthening of people's healthy life. It will also substantially reduce the overall cost of medical care in every country.

But equally an immensely positive role will also be played by such AI Assistants is education. Some capabilities of significantly boosting the knowledge acquisition by children and students at schools and universities have existed for several years. One of the best-known websites providing such a free service is Khan Academy. But humanoid AI Assistants in a classroom can do far more. First of all they can do much better what teachers have been doing for thousands of years helping their pupils acquire knowledge. That can now be done far more effectively by such AI Assistants who would deliver personalized learning, assessment, and guidance. They will also support teachers in presenting new material, remember all students' data, provide individual support lessons, check students work and write detailed reports on student's performance, greatly reducing teacher's work. This will allow teachers to focus on students' career and personal development.

But to do that, teachers will have to learn new skills. The first one is knowledge application, followed by career preparation. But even more important will be an entirely new skill, neglected in most schools, because of teachers' lack of relevant qualifications, personal abilities, but most importantly because of 'political correctness'. In Britain, it means that teachers can hardly correct misbehaviour of their pupils because apparently this is an exclusive domain of their parents. This follows the mantra of the government "who are we to tell the people'.

We can now see the results of such an approach in every walk of life, which has so negatively impacted not just individual societies but nearly all western democratic countries. And yet, one of the reasons that we elect the government is to have the people, our representatives, who will tell us what to do, because they should know, with the help of their advisers, what is best for the country in the long-term. The problem is that most of the politicians are only concerned with short-term policies, which hardly extend beyond the end of the current parliamentary term.

But teaching personal relations, or simply better behaviour, so that children and students become responsible citizens, will be very important at the time when the world will be going through the most turbulent period in its history. This will be especially noticeable in the job market when many skill types will be gone for ever and the new ones will demand much higher level of education. According to some estimates about 100 existing skills will be gone by 2030. At the same time about 160 new skills will be created but requiring much higher level of education.

With the help of AI Assistants, it will be possible to introduce a more conciliatory politics by deploying AI-assisted Consensual Debating facility, which was described in chapter 3 of this Part. It will assist in all debates at all level of governance, checking all the facts presented by parliamentarians, councillors or the public, producing meeting notes, suggesting action plans with possible deadlines, summarizing resources needed, and assisting in managing of the budget. Other tasks will be progressively added.

The benefits gained by the government of a country implementing such an AI-assisted governance will be immediate and significant. First, most decisions will be made many times faster, with full justification and various options costed. They will also be correlated with other decisions made in a similar way by AI assistants helping across all government departments.

There will be fewer missed deadlines and unwanted projects. The savings will be truly vast if implemented at all levels of government.

There will also be very few purely 'political' decisions to win the votes in the coming elections since the planning horizon for most of such projects will cover a decade or more. Additionally, should there be a legal requirement that each decision made by a minister must be justified by an AI assistant - an entirely apolitical entity, populism will be most likely rooted out. That should not be a surprise at all. If you agree that in about 30 years' time Superintelligence will become our benevolent dictator, then what would be practiced in the intermediate period is just a preparation for what will happen on an unprecedented scale in every step of our life anyway.

Such implementation would allow the politicians to have a personal, direct control on even the largest initiatives and projects, executing them with incredible effectiveness and efficiency. The added benefit will be a continuous parliamentary scrutiny, should such a politician be an MP. To make the best use of these assistants, say from 2025, they will probably be best used as additional advisers to humans. However, they should be physically present in a humanoid form in their 'place of work' for three reasons:

- If such an AI Assistant is in a physical, humanoid form, hardly distinguishable from humans, it will also move around almost like most of us, explore and learn about its environment, listen to conversation, and analyse the problems 'first-hand'.
- It will have the ability to practice its learned skills and improve on them in a real physical environment
- Finally, it will also learn our values, emotions, how we make errors
 and simply what is good and bad. That can only be experienced in a
 physical environment by a real (not augmented) physical humanoid
 robot.

Gradually, through self-learning and additional augmented reality capability, such AI assistants will become better in making decisions than most human advisers. However, it may be too late to postpone a necessary global legislation on the production and use of such robots and advance AI systems. We need such a legislation right now. The most advanced but still far inadequate is the EU's legislation which is to become EU law by the end March 2023. It is urgently needed to minimize the risks for humans from such advanced AI Assistants and robots. But we need to move further and much faster.

One of the first laws might be to recognize a concrete AI Assistant, as having some rights – e.g., only certain people will be able to make highest level decisions, and if needed, switch off the assistant (hopefully it will still be possible, meaning we will retain ultimate control). Secondly, laws may be introduced, requiring a politician to execute *any* decision made by such an AI Assistant because that might be in the best interest of the nation or a given community. The only exception might be in cases when such an Ai Assistant's decision is challenged by a panel of human specialists. In any case, expect some interesting laws to be introduced quite soon regulating the sphere of initial coexistence of humans and AI assistants.

Chapter 6: An example of a Constitutional Framework

Applying CSD for a Constitutional Framework

For most of you reading this book it may have been rather a shocking discovery that Humanity might be just a generation away from the time when it will coexist with an emerging new species – Artificial General Intelligence (AGI). Although AI is only one of several man-made existential risks, such as Global Warming, it is the most imminent progressive threat, i.e., which increases on a daily basis in some areas at a faster than an exponential rate. Therefore, my focus is on that existential threat, which perhaps best illustrates why we have to act so swiftly and decisively.

The risk of this gradually maturing Superintelligence will be combined with other existential risks, such as a global warming, an extensive global migration, or nuclear wars. The severe crisis of democracy that we are experiencing right now calls for immediate solutions. We can only significantly reduce all these risks through a deep, unprecedented reform of democracy, which will need to find answers for the current wave of populism and discontent. It is quite likely that we may lose control over AGI within a decade and be entirely controlled by it, as a new species, Superintelligence, within about two decades. If this happens, this new species will take over the control over the destiny of the planet and of all humans. Superintelligence will most likely emerge as an entirely non-biological species in a form of a gigantic superintelligent network with billions of nodes. Many humans will also become such bio-digital nodes by morphing their bodies to a various degree with Superintelligence.

Those that doubt it may happen by 2050, should remember just one thing which I have mentioned many times in this book – the pace of change. It is no longer linear – it is exponential. Therefore, what takes 1 year to complete today, will take about a few weeks in 10 years' time, in almost any domain, including politics.

Similarly, as we cannot uninvent nuclear weapons, we can no longer stop a continuous process of self-improving AI agents. Neither can we put the AI genie back into the bottle. If such a Superintelligence, which will be vastly more intelligent from us, does not have its top goals aligned with the Universal Values of Humanity, it will not distinguish what is right and

wrong (from our perspective). Initially, it may only misinterpret or misunderstand our objectives but at some stage it may start treating us as adversaries. Given its immense capabilities, in the worst-case scenario it might mean the end of a human species, or even a biological life on Earth.

Therefore, what we can and must do right now is to minimize the risk of developing such a malicious Superintelligence by ensuring it is literally brought up among us, behaving like the best of humans and being guided by the uploaded values that we hold dear. To do that, we need to agree, which are the values that represent us, as Humanity. That can only be done by an organization that represents all of us.

The UN's Declaration of Human Rights and the European Convention of Human Rights must be reviewed for the times they had never been intended. I have suggested some additional values, combining them with responsibilities and I am sure there are plenty of academics that could complete such a task. However, the new Universal Values of Humanity would have to be approved, at least in theory, by all countries in the world. If we consider that it took over 20 years to approve the UN's Declaration of Human Rights by just 50 countries, such a task will never be completed. Therefore, we have to compromise and look towards the future European Federation, which may act on behalf of the whole Humanity, developing new Universal Values of Humanity itself, for the benefits of all humans.

A critical mass that the European Federation will create, may be enough to gradually convince nearly all countries of the world to join the Human Federation. The Superpowers may join in when they realize that they face the AI control dilemma. This ensures that there could be no winners in a cyber war by creating Superintelligence, which would favour one nation only. Nobody will be able to create a Superintelligence that would selectively favour only some humans, while inflicting harm to others. Such Superintelligence with the uploaded goals and values, which may selectively do harm or annihilate other humans, sooner or later would destroy its creator. The same would be the case should humans develop competing Superintelligence agents, created by Superpowers – they would destroy all of us.

Therefore, the only way for humans to survive the next few decades and simultaneously live in the world of abundance is to develop one benevolent Superintelligence under the control of a Human Federation. Although today's political situation makes such a scenario hardly credible, I believe this is more likely to happen than the delivery of a malicious

Superintelligence, paradoxically, because of the war in the Ukraine and the emerging Western Alliance. This is one of the options for creating a Human Federation, which should be set up on the principles of the Big Consensus. One way of achieving it might be to base it on the four pillars of **Consensual Presidential Democracy** (CPD). I am now going to use it to create a Constitutional Framework for such a new type of democracy.

I see it as a kind of a template, which may be used for the future Constitution of Humanity, as well as for other countries in need of reforming democracy. I know that the very name 'Constitution of Humanity' sounds grandiose. However, it reflects the scale and significance of such a document, which sooner or later will have to be agreed, if we want to use it as a unifying platform based on universal values and aspirations of Humanity. It will be the content of such a document that might be uploaded to a maturing Superintelligence. We can only hope that together with other risk mitigating factors, such an approach will ensure that the goals of Superintelligence will be in line with the expectations of most humans and therefore the final 'product' will be a benevolent being, effectively a new species.

All the principles of Consensual Presidential Democracy (CPD) are embedded in this Constitutional Framework. It could be applied not just for the future Human Federation but as a kind of an 'aspirational' model for any constitution, provided its overall objectives are similar to the ones expressed here. This includes an overall assumption that we can only survive the extremely dangerous transition period to the time of Superintelligence if we work more closely together. This means a gradual federalization of the whole world. One such organisation might be the European Union if it is to be converted into the European Federation.

The electoral system, and the institutions of the Constitutional Framework, which I am proposing ,serve only as the necessary elements in a much bigger picture – the creation of an organisation that may one day act on behalf of the whole Humanity - the Human Federation. In that sense, this Constitutional Framework is a kind of a strawman. The strawman that I have selected is the European Union, which may at some stage be converted into a European Federation.

If such assumptions are accepted, then this Framework can be used as a generic model for creating a state's constitution. Therefore, it is not intended to be read as an actual wording of the articles but rather as a proposal of the content for such articles.

The debate on such a new Constitution should extend beyond typical political considerations and look at how such a new constitution of a given country, or a confederation of states would best support the overall goals of Humanity. At least that is the context of my proposal presented here. Therefore, in most general terms, for any country or a union of states that wishes to follow the principles of democracy proposed here, it will have to include these assumptions in their new constitution:

- 1. People will have to sacrifice part of their sovereignty and freedom to maintain their level of safety
- 2. The ethical values of a given country must be aligned with the Universal Values of Humanity, described either in the existing documents, such as UN Declarations of Human Rights, or other frameworks, such as the model presented here
- 3. The overall modus operandi of democracy in the Human Federation or any country willing to implement to, should be based on the politics of consensus.

A new Constitution in one week

Before presenting a Constitutional Framework, I would like to introduce an entirely new process of delivering such a new democratic system. It is not only the speed, but also an entirely different way in which a new Constitution could be delivered. How is it possible to create a new democratic system, including a new Constitution, in just a week? What's the catch?

I refer you to the previous chapter, where we were discussing the AI-assisted governance. After all, creating a new democracy is precisely the area where we can use quite intelligent AI Assistants, such as ChatGPT or even more capable coming from Google e.g. Chinchilla. We also already have AI Assistants such as eBrevia, from Columbia University, which uses Natural Language Processing and machine learning to extract relevant textual data from legal contracts and other documents to guide lawyers in analysis, preparing cases, due diligence etc. If we apply Moore's law to this area, which is almost entirely driven by AI technology, then in a year's time, such AI Assistants may be about 10 times more efficient, specialized and more intelligent than today. Therefore, the scenario with the activity list that I present below is entirely feasible today. I use as an example the creation of a new European Union constitution, which is long overdue

anyway. The time does not of course include, the debating process and ratification:

- 1. Create a new Constitution project supported by an AI Assistant, which will include digital data repository (to store all documents needed)
- 2. Add the Lisbon Treaty and all other current EU legislation, ECJ court cases, etc.
- 3. Add all international Agreements that the EU has signed, such as UN Declaration on Human Rights, and Trade Agreements (these may be the constraints on certain articles of the new constitution)
- 4. Add any proposals for the new EU Constitution from academics, politicians, and independent contributors
- 5. Collect all EU countries' constitutions and all other relevant documents in a digital form
- 6. Collect from each EU country a 'wish list' of what each country would like to see implemented in a new EU Constitution
- 7. Collect from each £U country a 'NO list' i.e., what each country would NOT like to see implemented in the new EU Constitution
- 8. For each country collect basic statistics and its Constitutional Tribunal verdicts
- 9. Create a list of 'must haves' in the new EF Constitution, which are not present in the Lisbon Treaty. Such a list could be initially created from the 'wish lists', made by the EU countries.
- 10.Do not propose any future EF structure or Institutions they will be created as needed by the AI Assistant
- 11. Request a detailed transition Plan to the EF with several variants
- 12. Press the button and in less than an hour you would see the first results
- 13. You should receive the following output with detailed comments and justifications. There will most likely be several variants of such a Report, scored against the percentage of matched preferences or 'wish lists' that had been made earlier by the EU Council and individual countries:
 - The EU Constitution
 - The structure of the EU, the Parliament, the Government, the Courts, Agencies, the new EU legislature, in line with the new EU Constitution
 - Inconsistencies between the wish lists from the EU as a whole and from each individual country. These will be the impossibilities of 'have a cake and eat it' type

- Positive effects of the new constitution for the EU as a whole and for each country
- Negative effects of the new constitution for the EU as a whole and for each country
- 14. This will be the first draft, which will have to be reviewed and debated, using for example the Consensual Debating approach (see next Part)
- 15. The amendments will be input to the AI Assistant in the next round
- 16. After a few rounds, the Constitution, the EU structure, the Transition Plan, and any other requested documents for the EU as a whole and individual countries will be created

The advantage of producing the EU Constitution (or any other country's Constitution – remember this is just an example), electoral laws, the Transition Plan etc., is not just about the speed. The biggest value would be in the objectivity, neutrality of the decisions made, and inconsistencies found. Such inconsistencies may relate, for example, to the Universal Values of Humanity. Values, which become rights, have an associated cost of delivery. That may require the existence of certain institutions to enforce the respect for such values or responsibilities that each of us will have to bear, to make such a right real. The paramount advantage, over a similar document created by humans is that it would be as balanced as possible. However, no sentiments and no favours will be granted to anyone. The populists will of course want to undermine it. However, the sheer volume of facts, and the degree of objectivity will be there for all to see.

Preamble of a Constitution

I will again use the future European Union constitution as an example but with some modifications it can be applied to any country. If the fundamentals of a new type of democracy, such as CPD, are accepted then they should be reflected in the preamble and may include statements like these:

- 1. The constitution affirms that the European Union is a Presidential system of democracy. It is a merger of representative and direct democracy. *In this example, it is modelled on Consensual Presidential Democracy (CPD)*
- 2. The predominance of the twelve Universal Values of Humanity is the basis for all laws and decisions, which are: Freedom, Democracy, Equality, Justice & the rule of law, Human Dignity,

- Social Solidarity, Tolerance, Life, Peace, National Security, Family Safety and Nature & Beauty
- 3. Human rights, which are derived from the above values, must be balanced with citizens' responsibilities
- 4. A non-faith-based system of governance, education and social activities is applied in all public domains
- 5. A Judeo-Christian culture, without a religious association, is accepted as the unifying culture of the EU, while ensuring that other cultures can flourish, as long as they do not undermine the homogeneity of the common culture
- 6. Any region of the member states of the EU have an unequivocal right to secede from their state and become directly members of the EU, merge with another region, or become a state of its own outside the EU, subject to specific restrictions, such as the population size.
- 7. The central role in this the Constitution of Humanity is played by the President, who is the axis of any consensus, ensuring that the voice of the 'losing' minority is always considered. To do that properly, he has unprecedented powers, which he also needs, to respond to a variety of potential catastrophic events, by maximising all available resources within the shortest possible time.

Outline of a Constitution

This is an outline of a constitution based on Consensual Presidential Democracy (CPD) as it might be applied for the new Constitution of the European Union. It would vary for other countries. The differences may be stemming from the exiting constitution of a country, whether it is a monocultural, a single-nation or a multi-national country, such as Great Britain, Belgium or Switzerland.

1. The elections of the President and Members of the Parliament use the **Two Rounds System** in a proportional representational electoral system. In the first round, First Past the Post electoral system is used. If no candidate gets 50%+1 vote in the first round, then any candidate who has received the support of at least 25%+1 vote can take part in the second round. In the second round, the **Single Transferable Vote** electoral system is used. The voters order the candidates according to their preferences, marking the top candidate as 1, his second preference as 2 etc. After the voting, a minimum quota of votes given is calculated, using the formula: Quota = (votes / (candidates +1)) +1. The candidate who gets the highest number of votes in the second round wins the presidential election.

- 2. The Parliament consists of two chambers the Lower House, to which MPs are elected on a national (or pan-European basis, i.e., across the borders), and the Nations' (or Regions) Chamber, consisting of MPs elected from within individual region (or a member state).
- 3. MPs are elected using the Two Rounds System. In the first round, the First Past the Post System is used, and in the second round, the Single Transferable Vote electoral system.
- 4. To enable a continuous oversight of the governed by the governing a new type of participatory democracy is introduced. It consists of a system of Petitions and a semi-permanent Citizens' Senate (see Chapter 2 Part 3 for details).
- 5. Petitions can be made by eligible citizens on any matter. If they gain 1% support of the electorate, the Parliament must debate it within 6 months.
- 6. If a petition achieves 5% of support, a session of a Citizens' Senate will be called.
- 7. The Citizens' Senate only sits when there is an active session. Such a session is triggered by a valid petition
- 8. There may be more than one Citizens' Senate session debating at the same time a different venues
- 9. For each session of a Citizens' Senate there is a new lot of members, who are selected using a random selection from a national (or EUwide) electoral roll
- 10. The decisions of the Citizens' Senate are passed using the **Single Transferable Vote** system.
- 11.If The Citizens' senate passes a decision with 2/3 majority, such a decision must be implemented in law by the Parliament. Otherwise, it must be debated and voted by the Parliament, although it may not become law.
- 12. The President is elected in a pan-European elections. He is the main counsellor and arbiter between the parties with strong legislative powers.
- 13. He is assisted by two Vice-presidents. One is the representative of the second largest Party. The second Vice-President is elected by a specially convened Citizens' Assembly. Together they form the Presidency.
- 14.In some exceptional situations, the president can issue a decree on his own. Otherwise, such a decree may only be issued by the Presidency. In both cases such decrees must be approved by the Parliament at the earliest opportunity

- 15. Strong powers of the President are counterbalanced by an high level of scrutiny, transparency, and accountability
- 16. The Presidency helps the Parliament to pass the legislation with the support of ad hoc coalitions, which may be different for each act of Parliament.
- 17. The members of the government come from the party, which has won most seats and in addition from the members of at least one other party, even if one party has won an outright majority
- 18. The government is headed by Prime Minister, who is selected from the majority party by the President.
- 19. Some legislation may require double majority. This means there must be a proportional representation electoral system, which will allocate the mandates to the Parliament proportionally. Like in any parliament any act to be legislated will require the support of the majority of MPs. But the double majority principle would also require that the act gets the support of the majority of the voters. In CPD it can happen because the MPs would be elected using a proportional system, so any ad hoc coalition that may be needed to pass the act, will also represent the will of the majority of the voters.
- 20. In order to make the government more effective and ensure a clearer separation of legislative and executive powers, elected politicians that are also members of the government are supported by AI assistants, which will progressively make most of the decisions at all levels of governance.

CONCLUSIONS

The crisis of democracy is reaching its apogee at the time when the pace of change in the world in various areas, including politics, has become nearly exponential. What once took a decade, can now be achieved in a year. Apart from man-made existential dangers to Humanity, such as biotechnology or a nuclear war, which may happen at any time, the most imminent risk facing Humanity is Artificial Intelligence (AI). Its advanced form – Artificial General Intelligence (AGI) may be with us by 2030, and its fully mature form – Superintelligence, which will be thousands of times more intelligent than all humans may arrive by about 2050.

However, it is quite likely that even before 2030, in the next few years we may already have developed what I call - Immature Superintelligence, less intelligent than AGI. This is the type of AI, which will vastly exceed human capabilities but only in some areas, being incompetent in most other. Therefore, any political or social changes, including reforming democracy, have to be viewed from that perspective. We have just about a decade to remain in control of our own future. This risk of losing that control overshadows all other existential risks, such as a global warming, because of its imminent arrival, and potential global disasters it may create.

What needs to be done then to stop the crisis? More equal distribution of wealth, the reform of the capitalist system, tighter regulations and more control? I think these would be the right areas that need urgent improvement. However, in the end the overall solution for putting the world on the road to recovery should be a new system of democracy that would be based on a planetary rather than on a national view. The main objective of the liberal democracy has been to create the greatest happiness for the greatest number of people. But today, it might also be seen as a kind of a roadmap ensuring safe passage for Humanity to its coexistence with a mature Superintelligence.

With that view in mind, I have proposed in this book an outline of a new system of democracy, which I call – **Consensual Presidential Democracy** (CPD). It is based on four pillars: Balanced Rights and Responsibilities, Political Consensus, Deep Decentralization and AI Assisted Governance.

The overall assumption underlying Consensual Presidential Democracy is that we can only survive an extremely dangerous transition period to the time when we will lose control over Artificial Intelligence if we work more closely together. That means a gradual federalization of the whole world.

We must act as a swarm of bees protecting the hive, knowing that our safety is in numbers. Instead of growing apart and reclaiming sovereignty, as populists would like it, we need to act as a planetary species, whose existence is in extreme danger. Only then can we minimize the risk that humans, as a species, may cease to exist. To avoid that, we would need a new global, powerful and very responsive organisation, which would take charge of all humans.

Since there is no longer enough time to create a new, powerful global organization from scratch, I have proposed in this book that the most suitable organization for such a role could be the European Union. It should first become the European Federation through a rapid conversion from the current organization. But that should be followed by equally fast subsequent enlargement into a Human Federation with its de facto World Government. We can only hope to create a de facto, rather than a real World Government, because in a such a short time, it is impossible to expect that all countries of the world would agree to be members of such an organisation.

However, because of the war in Ukraine there are two other options. The first one is to create a very shallow political and defence organization on the basis of the European Political Community, which was created in October 2022. That may be a faster route to a de facto World Government.

There is also the third option, which may by fulfilled in months in a 'quick and dirty' mode, reminiscent of the way in which NATO was created in 1948. This would transform the 'ad hoc' NATO/EU alliance into a permanent organisation, with objectives only – common defence and common foreign policy, based on adherence to democratic principles.

In whichever way a de facto World Government would be created, it would avoid potential catastrophic repercussions in Europe and world-wide, which may happen if there is no power to mitigate existential risks.

A critical mass that such a Human Federation with its de facto World Government would create, may be enough to gradually convince nearly all countries of the world to join it. The Superpowers will join in, when they realize that nobody is able to create a Superintelligence that would selectively favour only some humans, while inflicting harm to others. Such Superintelligence with the uploaded goals and values, which may selectively do harm or annihilate other humans, sooner or later will destroy

its creator. The same would be the case should some countries develop competing Superintelligent systems – they would destroy all of us.

Therefore, the only way for humans to survive the next few decades and create a global welfare state in the world of abundance is to develop one benevolent Superintelligence under the control of the Human Federation. Although today's political situation makes such a scenario hardly credible, I believe this is more likely to happen than the delivery of a malicious Superintelligence.

At a governance level the most effective decision making should be carried out at the most optimal level of management by those who have the best knowledge about how to do that. Today, they are specialists, engineers, doctors, teachers, or project managers. But most often such decisions are also carried out by political decision-makers with scarcely any knowledge on how to deliver the set objectives. Tomorrows' politicians will be supported by AI Assistants that will deliver the required know-how to decision makers at the most appropriate level of governance.

Such a new style of democracy will have a better chance of supporting the future Human Federation and indeed any other organization, or a state. This is the key aspect of Consensual Presidential Democracy - a system of governing with maximum consensus, where the voice of the 'losing' minority is always considered. It gives the President exceptionally strong powers against the strongest accountability and recall procedures, to enable him to play a crucial role as a conciliator and moderator between the opposing parties. This system of democracy not only ensures the widest representation of the electorate but also could react very fast in case of emergencies that we will be facing very frequently.

I realize it is a philosophical and political minefield. It would thus be fairly easy to dismiss certain proposals, especially if they are discussed in isolation from the entire system that underpins CPD and its overall objective. In the end, it is a question of the level of risk that we are going to accept in any sphere of life. However, this choice affects all other choices because it is a choice between the existence and the extinction of the entire species. There will be no winners, neither individual people, nor certain states. The only winner could be Humanity by delivering a benevolent Superintelligence and in this way continue our existence as a biological species at least for some time. The only way we can achieve that is by substantially changing the way we govern ourselves by deeply reforming democracy based on such frameworks like CPD.

In summary, a deep reform of democracy should be carried out within years rather than decades. The proposed merger of direct and representative democracy would now be possible thanks to new technological inventions supported by AI. Solutions such as Consensual Debating enable a digital, participatory democracy to be applied at any level of governance.

The key to a successful implementation of a new generation of democracy is pragmatism, which will enable faster introduction of any democratic reforms. Therefore, we should start with something that is fundamental, such as rebalancing the power of governance between the citizens and their representatives in the parliament.

GLOSSARY

Anthropogenic

Something of man-made origin or caused by

man.

Artificial Narrow Intelligence (ANI) An inorganic intelligence resident in a computer as computer programs. Its intelligence can surpass human intelligence, but usually in one area, e.g., playing chess. It is combined with some self-learning capability. May be represented as humanoids or as software-based AI Assistants or chatbots speaking in natural language. This is what we have right now.

Artificial General Intelligence (AGI) An inorganic intelligence much smarter than the best human brains in every field, including scientific creativity, general wisdom and social skills. May be embedded in humanoid robots but also in fully autonomous cars. May be available by 2030.

Artificial Intelligence (AI)

A general description of several types of AI.

Brexit

Britain's intended exit from the European Union

Citizens' Assembly

This is a one-off Assembly of sortition members selected at random from among the voters to make important political decisions, e.g., to decide on the articles of a constitution

Citizens' Chamber

This is a chamber in the parliament of sortition members selected at random from the voters to perform the duties identical to Members of Parliament elected through elections.

Consensual Presidential Democracy

Consensual Presidential Democracy is a system of democracy aimed at governing with maximum consensus, where the voice of the 'losing' minority is always taken into account. It gives the President exceptionally

powers against the strongest accountability and recall procedures, to enable him play a crucial role as a conciliator and a moderator between two opposing parties, each represented by one Vice President. This system has the widest representation of the electorate. The MPs are elected using a combined First Past the Post and the Two Rounds System with a Citizens' Senate with some legislative powers.

E-Democracy

The type of democracy, where the voters can exercise their will using the Internet.

European Federation

A proposed name for the federated European Union, expected to be achieved by 2030.

European Federation Convergence Area (EFCA) European Federation Convergence Area -Zone 1 of the European Federation for member states that within a few years will join the European Federation.

Market (EFSM)

European Federation Single European Federation Single Market - Zone 2 of the European Federation for countries that are in the Single Market and Customs Union but are not expected to join the European Federation.

European Federation Customs Union (EFCU) European Federation Customs Union - Zone 3 of the European Federation for countries that are in Customs Union but not in the Single Market.

European Federation Association Area (EFAA) European Federation Association Area -Zone 4 of the European Federation for members that have individual agreements with the European Federation.

GWRF

Global Wealth Redistribution Fund to be run by the European Federation to lower the wealth inequality world-wide.

Human Federation (HF)

The organisation that may evolve from the European Federation to rule Humanity

Linear change This type of change is called linear because

the value of growth is the same in every

period.

Nanotechnology Nanotechnology ("nanotech") is

manipulation of matter on an atomic, molecular, and supramolecular scale.

Non-anthropogenic Something that is not originated by man or

not caused by man.

A parliamentary system of democratic **Parliamentary Democracy**

governance of a state where the government derives its democratic legitimacy through the election of the representatives to the parliament, which in turn selects from its members the Prime Minister and indirectly,

the ministers

A system of governance where the President **Presidential Democracy**

> is the head of state and selects the Prime Minister and sometimes a few key ministers.

who are then voted in by the parliament.

Referendum A direct voting system, in which an entire

> electorate is invited to vote on a particular proposal. This may result in the adoption of a new law. In some countries, it is synonymous with a plebiscite or a vote on a

ballot question.

Republican Democracy A Republican system of governance is a

version of the Presidential system. The President is the head of state, but the government may fall within a given electoral term and new elections must be called. whereas in the presidential system the same head of state can elect another government

(like in France).

Singularity In the context of Artificial Intelligence, it

means Technological Singularity - see

below.

Sortition

In governance, sortition means selecting political officials by a random sample from a larger pool of candidates, usually adult who have the right to vote in elections.

Superintelligence

An inorganic intelligence web spanning the entire planet, including satellites, which is much smarter than any human brain in every field, including scientific creativity, general wisdom and social skills. It will be out of any control of humans and instead will be humans' Master. Might be available by about 2050.

Technological Singularity

It means the point in time when Superintelligence, smarter than any human being in every aspect of human knowledge, skills and capabilities, starts re-inventing itself exponentially, through the process of self-learning until it reaches so-called 'runaway point', when its capabilities will only be limited by the available resources, mainly energy.

Transpartisan Democracy

A programme of the Danish Party Det Alternativet that focuses on HOW to govern rather than what policies to put in its Manifesto. The WHAT element is a kind of a vague programme, crowd sourced by the party members and aimed at a transition to a sustainable society, supporting entrepreneurship, social entrepreneurship and changing the culture of political dialogue.

Universal Values of Humanity

These are top values of Humanity that apply to humans, animals and the environment.

Weighted Voting System

A system of voting where everybody has a vote, but its weight and ultimate value may depend on knowledge or voter's contributions

World Government

The executive body of the Human Federation - the future organization that would rule Humanity

References

- [1] R. Williams, Being Human, London: Society for Promoting Christian Knowledge, 2019.
- [2] H. Gardner, Multiple intelligences and related educational topics, 2013.
- [3] T. Czarnecki, Becoming a Butterfly, Vol. 3 of 'Poshumans', London: Amazon publications, May 2021.
- [4] M. Rees, "The world in 2050 and beyond," New Statesman, 2014.
- [5] B. Chiarelli, "Overpopulation and the Threat of Ecological Disaster: the Need for Global Bioethics," *Mankind Quarterly*. 39 (2): 225–230, 1998.
- [6] S. Lovgren, "Mystery Bee Disappearances Sweeping U.S.," *National Geographic News*, 2007.
- [7] T. Czarnecki, "Who could save Humanity from Superintelligence?," Amazon, 2018.
- [8] T. Czarnecki, Democracy for a Human Federation, vol. 2 of Pusthumans, London: Amazon publishing, July 2020.
- [9] L. Watson, "Illiterate Britain: One in five adults struggling to read and write and some can't even use a chequebook," Daily Mail, 29 03 2012. [Online]. Available: http://www.dailymail.co.uk/news/article-2122007/Illiterate-Britain-One-adults-struggling-read-write-t-use-chequebook.html.
- [10] Wikipedia, "World Happiness Report," Wikipedia, 2019. [Online]. Available: https://en.wikipedia.org/wiki/World_Happiness_Report.
- [11] International Institute for Democracy and Electoral Assistance, "About," International Institute for Democracy and Electoral Assistance, 2017. [Online]. Available: https://www.idea.int/gsod-indices/about.
- [12] A. Maslov, "A theory of human motivation," *Psychological Review*, pp. 50, 370, 1943.
- [13] R. Nauert, "Updated Maslow's Pyramid of Needs," 30 06 2011. [Online]. Available: https://psychcentral.com/news/2010/08/23/updated-maslows-pyramid-of-needs/17144.html.
- [14] Electoral_Knowledge_Network, "Electoral Systems," [Online]. Available: http://aceproject.org/ace-en/topics/es/esd/esd02/esd02d/esd02d01.
- [15] International Institute for Democracy and Electoral Assistance, "Data set and Resources," International Institute for Democracy and Electoral Assistance, 2010. [Online]. Available: https://www.idea.int/gsod-indices/dataset-resources.
- [16] Electoral Reform Society, "Alternative Vote," Electoral Reform Society, 2017. [Online]. Available: https://www.electoral-reform.org.uk/votingsystems/types-of-voting-system/alternative-vote/.

- [17] K. McDonald, "Sick of EU referendum? Switzerland has had 180 referendums in the last 20 years," 23 06 2016. [Online]. Available: https://inews.co.uk/news/long-reads/switzerland-held-9-referendums-already-2016/.
- [18] OECD, "Public Governance: A matter of trust," 2017. [Online]. Available: http://www.oecd.org/governance/public-governance-a-matter-of-trust.htm.
- [19] Wikipedia, "Democracy," Wikipedia, 01 12 2017. [Online]. Available: https://en.wikipedia.org/wiki/Democracy.
- [20] T. D. Barnett, "China demonstrates quantum encryption by hosting a video call," 22 01 2018. [Online]. Available: China's Intercontinental Quantum Communication Network Is Now Online.
- [21] The Alternative UK, "THE VALUES WE USE," The Alternative UK, 2017. [Online]. Available: https://www.thealternative.org.uk/the-values-we-use/.
- [22] H. Freinacht, "The Danish Alternative, a Party about Nothing," Metamoderna, 12 05 2017. [Online]. Available: http://metamoderna.org/the-danish-alternative-a-party-about-nothing?lang=en.
- [23] Democracy_building, "Different Systems of Democracy," Democracy building, 2004. [Online]. Available: http://www.democracy-building.info/systems-democracy.html.
- [24] M. G. P. W. Harold Clarke, What would have happened if everyone had voted in the EU Referendum?, The Conversation, 28/7/2016.
- [25] N. Times, Referendums a threat to democracy: Dutch Council of State, 6/4/2017.
- [26] S. Foundation, Citizens' Assemblies and sortition around the world.
- [27] T. Czarnecki, Conference on the Future of Europe, Sustensis, June 2021.
- [28] R. H. a. H. Miller, Petitions, Parliament and Political Culture: Petitioning the House of Commons, 1780–1918, Oxford Academic, 13/4/2020.
- [29] T. Malleson, "Should Democracy Work Through Elections or Sortition?," 01 2018. [Online]. Available: https://ssc.wisc.edu/~wright/929-utopias-2018/wp-content/uploads/2018/01/Malleson-PS-special-issue-onsortition.pdf.
- [30] W. Sullivan, A Scottish House of Citizens would be the opposite of Westminster's institutionally corrupt Lords, Electoral Reform Society, 3/6/2021.
- [31] A. R. a. R. Liao, The Constitution Unit Blog 'The future of citizens' assemblies in Scotland', 21/5/2021.
- [32] C. Horton, "The simple but ingenious system Taiwan uses to crowdsource its laws," 21 08 2018. [Online]. Available: https://www.technologyreview.com/s/611816/the-simple-but-ingenious-system-taiwan-uses-to-crowdsource-its-laws/.

- [33] Wikipedia, "Value (ethics)," Wikipedia, 25 11 2017. [Online]. Available: https://en.wikipedia.org/wiki/Value_(ethics).
- [34] D. Wright, "5 million adults lack basic literacy and numeracy skills," Joseph Rowntree Foundation, 29 8 2016. [Online]. Available: https://www.jrf.org.uk/press/5-million-adults-lack-basic-literacy-and-numeracy-skills.
- [35] S. Hansen, "DEMOCRACY OF THE FUTURE NOTHING LESS," Scenario Magazine, 19 05 2011. [Online]. Available: http://www.scenariomagazine.com/byline/stefan-hansen/.
- [36] Wikipedia, "Natural law," [Online]. Available: https://en.m.wikipedia.org/wiki/Natural_law.
- [37] E. A. Rayo, "AI in Law and Legal Practice A Comprehensive View of 35 Current Applications," 05 2019. [Online]. Available: https://emerj.com/ai-sector-overviews/ai-in-law-legal-practice-current-applications/.
- [38] T. Chu, in *Human Purpose and Transhuman Potential: A Cosmic Vision of Our Future Evolution*, Amazon, 1/3/2014.
- [39] R. Bidshahri, "What Is It That Makes Humans Unique?," 28 12 2017. [Online]. Available: https://singularityhub.com/2017/12/28/what-is-it-that-makes-humans-unique/#sm.0000ho5xd6udzf33sh11d0prbs54l.
- [40] Wikipedia, "Kardashev scale," 2016. [Online]. Available: https://en.wikipedia.org/wiki/Kardashev_scale.
- [41] Australian_National_University, "The Aliens Are Silent Because They Are Extinct," Australian National University, 21/1/2016.
- [42] A. Frank, "Is a Climate Disaster Inevitable?," *The New York Times*, 17/1/2015.
- [43] G. Leonhard, Technology vs. Humanity, Zurich: Fast Futurers Publishing, 2016-08-01.
- [44] O. Hilrich, "Universal Human Values," 01 10 2014. [Online]. Available: http://www.humanbasics.org/Basic_human_values/basic_human_values.ht ml.
- [45] United_Nations, "United Nations Millennium Declaration," New York, 2000.
- [46] R. Kurzweil, Singularity is Near, Gerald Duckworth & Co Ltd, 9/03/2006.
- [47] T. Urban, "The AI Revolution The road to Superintelligence," 22 01 2015. [Online]. Available: https://waitbutwhy.com/2015/01/artificial-intelligence-revolution-1.html.
- [48] S. Teller, "Ciężkie roboty," Niezbędnik Inteligenta, p. 94, 2013/4.
- [49] R. Coulom, "The Mystery of Go, the Ancient Game That Computers Still Can't Win," *Wired*, 2014.

- [50] a. A. D. Russel Stuart, "Yes, We Are Worried About the Existential Risk of Artificial Intelligence," *Technology Review*, p. 15, November, 2016.
- [51] N. Bostrom, "Existential Risk Prevention as Global Priority," p. 15–3, 2013.
- [52] M. Rees, Our Final Hour: A Soxientist Warning, 2004.
- [53] N. Bostrom, "Existential Risks Analyzing Human Extinction Scenarios and Related Hazards," *Journal of Evolution and Technology, Vol. 9, No. 1*, 2002.
- [54] N. Bostrom, Superintelligence: Paths, Dangers, Strategies, 2014.
- [55] S. F. J. H. S. S. A. S.-B. Owen Cotton-Barrat, "Global Catastrophic Risks 2016," Oxford University Press, 2016.
- [56] N. Stern, "The Economics of Climate Change," 30/10/2006.
- [57] T. W. a. O. Moody, "Stephen Hawking on humanity," The Times, 07 03 2017. [Online]. Available: https://www.thetimes.co.uk/edition/news/hawking-on-humanity-and-corbyn-jk88zx0w2.
- [58] M. Rees, "Martin Rees: The world in 2050 and beyond," 26 11 2014. [Online]. Available: https://www.newstatesman.com/scitech/2014/11/martin-rees-world-2050-and-beyond.
- [59] S. Theodore, "How did the Roman republic differ from Athenian democracy?," 16 10 2016. [Online]. Available: https://www.quora.com/How-did-the-Roman-republic-differ-from-Athenian-democracy/answer/Steve-Theodore.
- [60] D. v. Reybrouck, "Why elections are bad for democracy?," 29 06 2017.
 [Online]. Available:
 https://www.theguardian.com/politics/2016/jun/29/why-elections-are-bad-for-democracy.
- [61] Diffen, "Confederation vs. Federation," Diffen, [Online]. Available: https://www.diffen.com/difference/Confederation vs Federation.
- [62] R. Sikorski, "Sikorski: German inaction scarier than Germans in action," The Economist, 29 11 2011. [Online]. Available: https://www.economist.com/blogs/easternapproaches/2011/11/polands-appeal-germany.
- [63] Economics, "Disadvantages of EU Membership," Economics, 2016.
 [Online]. Available:
 https://www.economicshelp.org/europe/disadvantages-eu/.
- [64] Wikipedia, "Flight and expulsion of Germans from Poland during and after World War II," Wikipedia, 04 02 2018. [Online]. Available: https://en.wikipedia.org/wiki/Flight_and_expulsion_of_Germans_from_Poland during and after World War II.

- [65] Wikipedia, "History of the Jews in Poland," Wikipedia, 02 02 2018. [Online]. Available: https://en.wikipedia.org/wiki/History of the Jews in Poland.
- [66] Quora, "Which countries are least ethnically diverse in Europe?," Quora, 2017. [Online]. Available: https://www.quora.com/Which-countries-are-least-ethnically-diverse-in-Europe.
- [67] Global_Challenges_Foundation, Global Challenges Foundation Report p.20, Stockholm, 2017.
- [68] Future_of_Humanity_Institute, "Global Catastrophic Risks Survey," 2008. [Online]. Available: https://www.fhi.ox.ac.uk/reports/2008-1.pdf.
- [69] Institute_of_Fiscal_Studies, "Is our tax system fair? It depends...," 03 11 2017. [Online]. Available: https://www.ifs.org.uk/publications/10038.
- [70] I. f. G. Policy, "World Federalist Movement," 2016. [Online]. Available: http://www.wfm-igp.org/.
- [71] J. Lovelock, Novacene, The coming Age of Hyperintelligence, London: Penguin Random House UK, 2019.
- [72] S. Hawking, Brief Answers to the Big Questions, London: John Murray, 2018.
- [73] Wikipedia, "History of the Internet," Wikipedia, 01 09 2019. [Online]. Available: https://en.wikipedia.org/wiki/History_of_the_Internet.
- [74] M. Yunus, A World of Three Zeros: The New Economics of Zero Poverty, Zero Unemployment, and Zero Net Carbon Emissions, PublicAffairs, 2017.
- [75] G. Dvorsky, "IBM Is Clueless About AI Risks," Gizmodo, 30 06 2017.
 [Online]. Available: https://gizmodo.com/ibm-is-clueless-about-ai-risks-1796549532.
- [76] OECD, "Looking to 2060: Long-term global growth prospects," *OECD Economic Policy Papers*, 2012.
- [77] M. Rousse, "Singularity," 2018. [Online]. Available: https://searchenterpriseai.techtarget.com/definition/Singularity-the.
- [78] N. Machiavelli, "The Prince," Everyman, 1996, p. 96.
- [79] C. Jewell, "Bringing AI to Life," WIPO, 2018. [Online]. Available: https://www.wipo.int/wipo_magazine/en/2018/05/article_0003.html.
- [80] S. Russell, "How to Stop Superhuman A.I. Before It Stops Us," The New York Times, 08 10 2019.
- [81] Wikipedia, "Ozone depletion," Wikipedia, 15 May 2019. [Online]. Available: https://en.wikipedia.org/wiki/Ozone_depletion.
- [82] J. S. A. D. B. Z. a. O. E. Katja Grace, "When Will AI Exceed Human Performance? Evidence from AI Experts," Future of Humanity Institute, Oxford University, AI Impacts and Department of Political Science, Yale University, May, 2017.

- [83] K. Kelly, "The Myth of a Superhuman AI," Wired, 25 04 2017. [Online]. Available: https://www.wired.com/2017/04/the-myth-of-a-superhuman-ai/.
- [84] S. Reardon, "Artificial neurons compute faster than the human brain," Nature, 28 01 2018. [Online]. Available: https://www.nature.com/articles/d41586-018-01290-0. [Accessed 10 2019].
- [85] B. Henning, "End of Politicians," 2018. [Online]. Available: https://unbound.com/books/the-end-of-politicians/.
- [86] Wikepedia, "Sortition," Wikepedia, 26 1 2018. [Online]. Available: This all below quoted from Wikipedia: https://en.wikipedia.org/wiki/Sortition.
- [87] A. Öcalan, "Democratic confederalism," 217. [Online]. Available: http://ocalan-books.com/downloads/EN-brochure_democratic-confederalism 2017.pdf.
- [88] G. D. a. O. Dowlen, Sortition: Theory and Practice, Amazon books, 2010.
- [89] D. O. a. G. Smith, "The circumstances of sortition," 2017. [Online]. Available: https://ssc.wisc.edu/~wright/929-utopias-2018/wp-content/uploads/2018/01/Owen-and-Smith-PS-special-issue-on-Sortition.pdf#page=1&zoom=auto,-169,368.
- [90] Xenophon, "Xenophon Meomorabilia," Wikipedia, 10 08 2017. [Online]. Available: https://en.wikipedia.org/wiki/Memorabilia_(Xenophon).
- [91] Various, "What if everyone had voted in the EU referendum?," The UK in the changing Europe, 28 06 2016. [Online]. Available: http://ukandeu.ac.uk/what-if-everyone-had-voted-in-the-eu-referendum/.
- [92] T. Czarnecki, Federate to Survive!, London: Sustensis, 2020.
- [93] World_Atlas, "The Poorest Countries In The World," World Atlas, 06 12 2017. [Online]. Available: https://www.worldatlas.com/articles/the-poorest-countries-in-the-world.html.
- [94] N. N. Forum, Basic Income Grant Coalition, 2008.
- [95] T. Czarnecki, Federate to Survive, London: Amazon, July 2020.

For any questions or comments please visit: http://www.sustensis.co.uk