Society 5.0 is a new social contract

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Abstract

Purpose: The aim is to explain that Society 5.0 is not made possible by technological developments only, but also depends on a new social contract that puts the planet and humanity at the centre of the chaos that has resulted from technological and other changes, such as the climate crisis, geopolitics and the colonisation of other planets.

Design/methodology/approach: Based on literature research and reflection, a better understanding of Society 5.0 and the essential role of the social contract has been achieved.

Findings: The difference between the Fourth Industrial Revolution (4IR) and Society 5.0 is that the latter is based on a social contract that focuses on the planet, people and a meaningful economy, in that order. Until recently, too much emphasis was placed on economic growth, while little attention was paid to the well-being of the planet and people.

Originality/value: Society 5.0 is a relatively new concept. Very slowly, a new social contract underlying this becomes clear. In this article, the social contract and its content are explicitly discussed. For example, it is stated that access to the internet and a universal basic income are part of the new social contract and fundamental human rights.

Keywords:

Society 5.0, social contract, Fourth Industrial Revolution, 4IR

Paper type: Viewpoint

Content

1. Introduction

Society 5.0 aims to enable all members of society to enjoy life to the fullest. Economic growth and technological development exist for that purpose, and not to ensure the prosperity of a select few. Society 5.0 is deemed similar to the Fourth Industrial Revolution (4IR) in that both concepts refer to the current fundamental shift of our economic world towards a new paradigm. However, Society 5.0 is a more far-reaching concept as it envisions a complete transformation of our way of life.

The concept of Society 5.0 is generally believed to have originated in Japan (Minevich, 2019). Although I did not follow the path taken by Japan, I arrived at more or less at the same place.

In this article I will:

- elaborate on the concept of Society 5.0, what it entails, where it comes from, and how we will get there;
- present four post-4IR scenarios;
- explain that we are experiencing an era of change driven by several change drivers;
- elaborate on a new concept of human nature that is still evolving; and
- demonstrate why this requires a new social contract.

My plea for a new social contract is supported by Stiglitz and other scholars (Stiglitz, 2019; Omzigt, 2021), who also link a new social contract, Society 5.0 and the pandemic, as can be seen in the following quote:

> A new social contract would start with policies to reward enterprise, but punish rent-seeking, shift the burden of tax away from income and towards accumulated capital and establish job and income protections to boost productivity. Measures to cut fiscal deficits cannot be at the expense of education and training strategies to fit changing demands for skills. We all pay a price for low wages and zero-hours contracts (Stephens, 2020).

2. From 4IR to Society 5.0

Society 5.0 is characterised by the merging of cyberspace and physical space, aiming to achieve a balance between economic advancement and the solving of social problems (Smuts, 2022). We migrated from the First Industrial Revolution (1IR) during the 18th and 19th centuries and are now entering a new era (Figure 1). According to Rotmans and Verheijden (2021), this transformation is part of a cycle that takes between 100 and 150 years to complete.

The Fourth Industrial Revolution (4IR) is about digitalisation. This digitalisation extends to the extent that technology and human become integrated: technology is implanted into the human body (Figure 2).

Figure 1: The five industrial revolutions (Gauri & Van Eerden, 2019).

Figure 2: The Fourth Industrial Revolution (Moore, 2019)

The concepts of 4IR and 5IR overlap with the notion of Society 5.0, as the 1IR started in the late 18th century, whereas Society 1.0 is the label used to refer to the societal form dating back to 13000 B.C. Thus, Society 3.0 starts with 1IR and is predated by Society 2.0 (the agrarian society), whereas Society 4.0 is the information society and Society 5.0 is envisaged as a human-centred society (Figure 3).
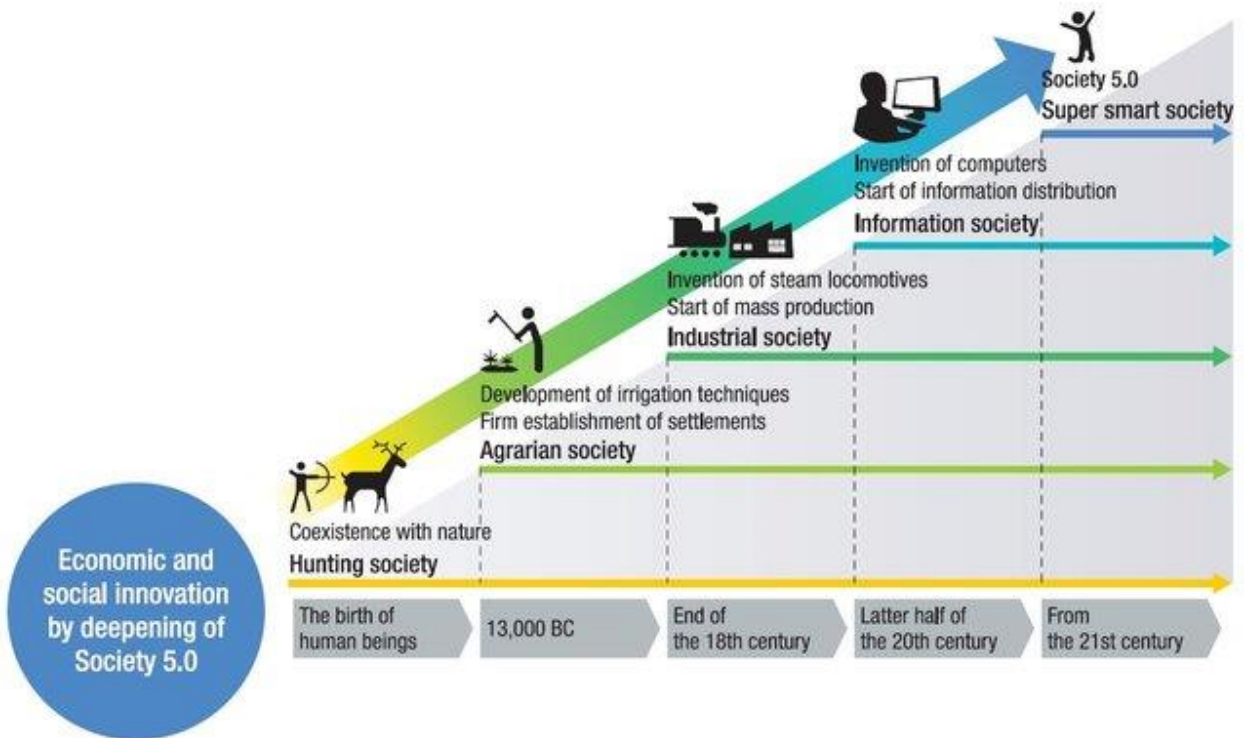
Figure 3: The evolution of human societies, leading to Society 5.0 (Fukuyama, 2018).

One of the differences between Society 4.0 and Society 5.0 is that the former is technology-centred. The technology is, however, complicated, not sufficiently integrated and messy, and requires serious efforts from people to use it and integrate it into their lives and society. In the case of Society 5.0, technology will be almost unnoticeable. It will be like the cars we now drive—they are better than ever, but most of us never look at what is under the bonnet. This is summarised and illustrated in Figure 4.
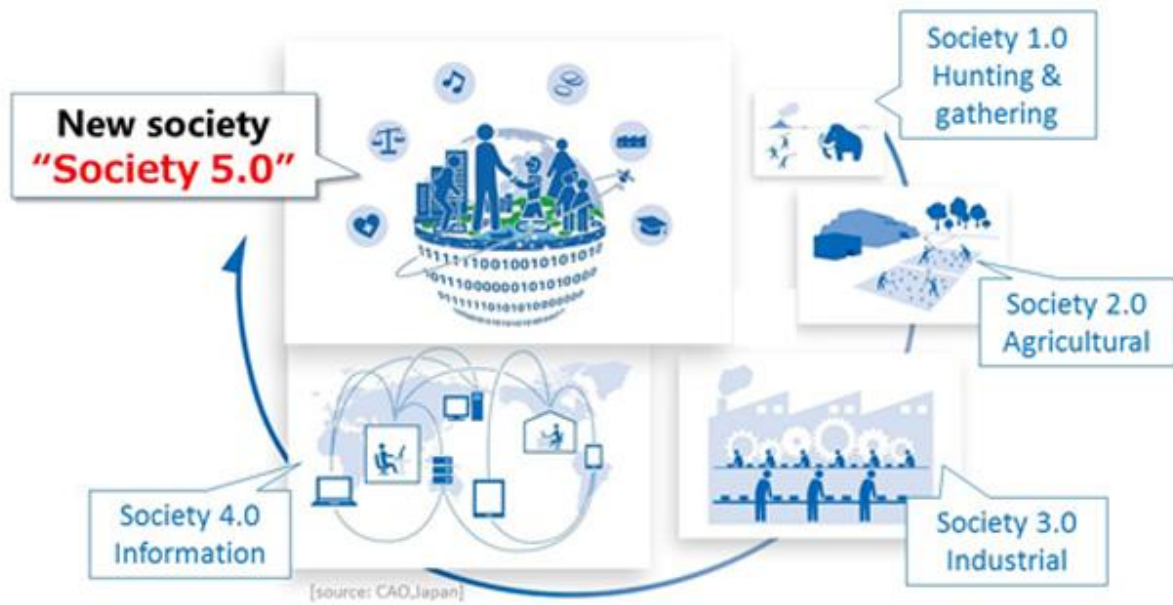
Figure 4: The evolution of human societies, leading to Society 5.0 (Society 5.0, 2022)

Figure 5 illustrates the industrial revolution as one of the critical drivers of change in society from Society 2.0 to Society 5.0.
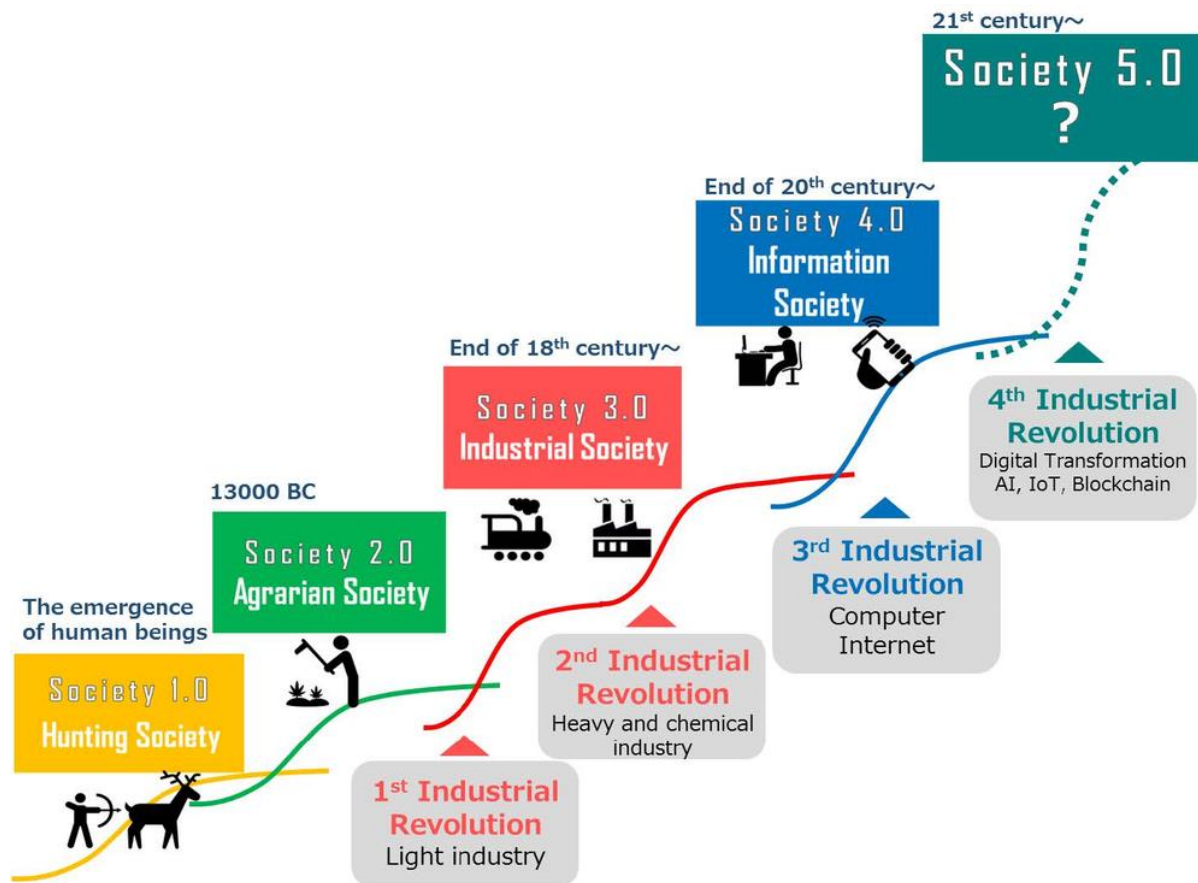
Figure 5: How the industrial revolution is driving the transformation of society to 5.0 (Society 5.0, 2022)

Society 4.0 has reached its limits. The idea is that, wherever possible, Industry 5.0 will revolutionise manufacturing systems across the globe by taking away dull, dirty and repetitive tasks from human workers. Intelligent robots and systems will penetrate the manufacturing supply chains and production shop floors to an unprecedented level. However, it is uncertain whether these goals are attainable as the trends noted in the developed world during 2021 and 2022 indicate a shortage of workers, rather than of jobs. This issue is further aggravated by the recent lockdown due to COVID-19 pandemic, after which many individuals are reluctant to return to work and some have even resigned from their jobs. Some call this phenomenon the Great Resignation (Businessweek, 2021).

Society 5.0 is believed to result in human liberation from various constraints that previous manifestations could not overcome, thus allowing all members of society to pursue diverse lifestyles and values (Figure 6).

People will be liberated from the focus on efficiency. Instead, the emphasis will be placed on satisfying individual needs, solving problems and creating value. People will be able to live, learn and work free from suppressive influences on individuality, such as discrimination based on gender, race, nationality, etc, which have led to the alienation of individuals with alternative lifestyles, values and ways of thinking. People will be liberated from the disparity caused by the concentration of wealth and information, and everyone will have access to opportunities anywhere and at any time. People will be liberated from anxiety about terrorism, disasters and cyberattacks, and will attain security due to strengthened safety nets safeguarding them against unemployment and poverty. They will also be liberated from resource-based and environmental constraints and will be able to live

sustainable lives in any region. In short, Society 5.0 is envisaged as a society in which anyone can create value at any time, anywhere, with security and in harmony with nature (Figure 5).
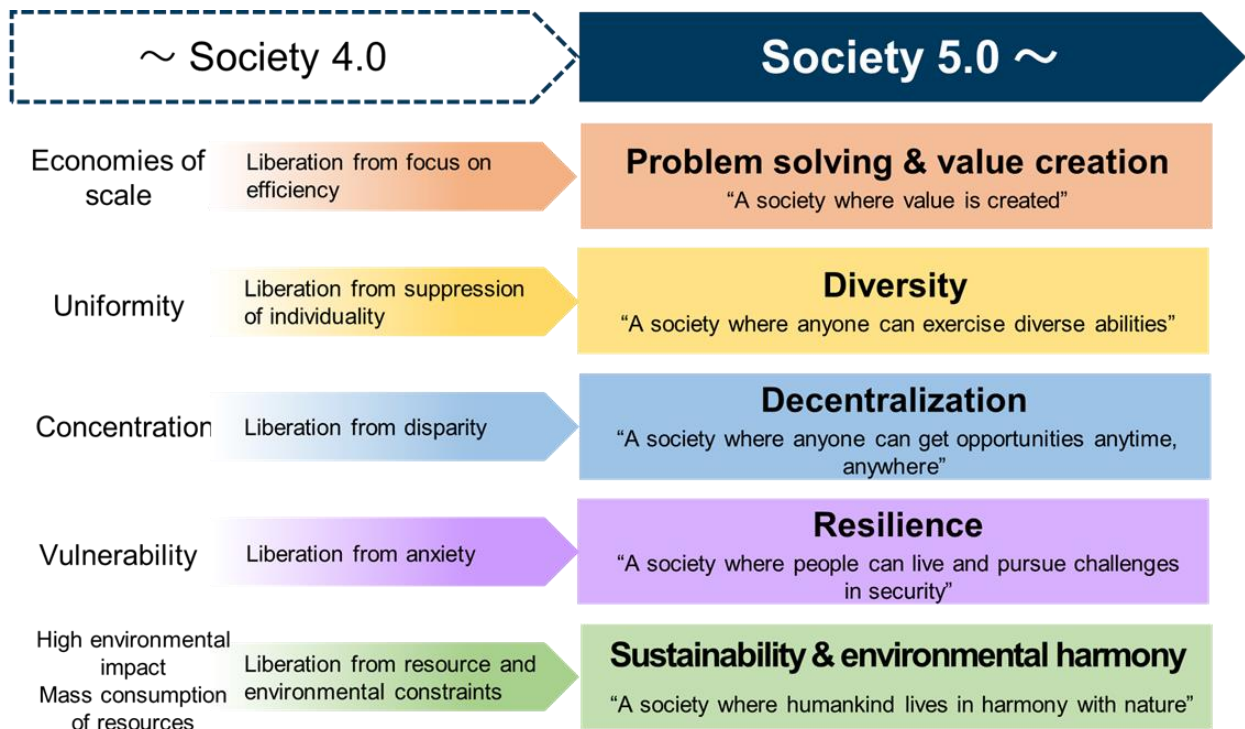
Figure 6: Modern society has reached its limits. Society 5.0 will liberate us (Nakanishi, 2019).

One of the interesting academic publications on Society 4.0, its foreplay and its aftermath, is *The rise of the Network Society* by Manuel Castells (2000).

In my opinion, the following excerpt best captures the essence of Society 5.0:

> According to Dutch Professor Maarten van Rossem, life in society is all about the pursuit of happiness. Happiness is not obtained by applying the propagated happiness formula of happiness gurus. The true formula, according to Van Rossem, entails living a simple life, with no material excesses, shared with family and loved ones. It is also about context. The ten most attractive countries to live in are relatively small countries and have a high average income per capita. The income difference between citizens is not too big. Government services are good and accessible to every citizen. These societies are high-trust societies, meaning that citizens have faith in the democratic process and other institutions. Simply being a rich country is no guarantee of happiness. The United States is proof of this: there is significant poverty, the difference between rich and poor is too big, and a disproportionate number of citizens are in jail (Van Rossem, 2018). (Goede, Society 5.0; We and I, 2020)

Four scenarios

Venturing into the future is not easy. In 2020, the COVID-19 pandemic took many by surprise. Due to the many unknowns and the reflexive nature of human processes, predicting the future is highly problematic. Reflexivity is the ability of any social system to change itself through new strategy determination based on the latest knowledge received. This means that previous knowledge about the system may have lost its validity, and in that sense reflexivity mirrors human freedom ('t Veld, 2010). That is why we create alternative scenarios of the future.

The pandemic has revealed structural weaknesses and has accelerated our progress towards the tipping point that signifies the advent of a new era, but although it has necessitated a resetting of society, it has not predetermined the path to be taken forward. The four most likely scenarios (constructed by combining two spectra) are depicted in Figure 7. In their development, the degree of centralised power and structure in society (ranging from very centralised to completely decentralised) and the degree of individualisation (from a very individualistic society to a collectivistic society) were considered (Goede, COVID-19 and Change, 2020).

	Centralised	Decentralised
Individualistic society	**2.0** State capitalism Lock step	**3.0** Barbarism Hack attack
Collectivistic society	**4.0** State socialism Clever together	**5.0** Mutual aid Smart scramble

Figure 7: The four possible outcomes. Combined Mair (Mair, 2020) and Rockefeller Foundation (The Rockefeller Foundation, 2010) (Goede, COVID-19 and Change, 2020)

Scenario 2.0 envisions a centralised society based on neoliberal principles ruled by a small elite group serving only their own interests. It is dependent on top-down government control and authoritarian leadership, with limited innovation and increasing citizen pushback. This societal form is the primary and dominant response to the crisis caused by the pandemic. It is an attempt to revert

to the pre-COVID-19 situation by enacting massive Keynesian stimulus to the business sector. There is high unemployment and workers fear losing their jobs, livelihoods and lives.

Scenario 3.0 depicts a decentralised society based on neoliberal principles driven by technology, in which everybody tries to become rich or more affluent. It is an economically unstable society prone to shocks in which government weakens, villains thrive and dangerous innovation emerges. This is the bleakest scenario. It is a society focused on seeking profit, and there is no suitable social safety net for those who are unemployed or ill.

Scenario 4.0 denotes the society of the 4IR, driven by technology and data that strive to solve societal problems. It is a highly coordinated society from which successful strategies emerge to address urgent and deep-seated world issues. It represents a shift away from the focus on profit to a focus on people. The state takes charge of providing services that are essential for life and removes them from the market domain. Hospitals are nationalised, food, energy, shelter and internet access are guaranteed, and a universal basic income is part of the policy mix.

Scenario 5.0 envisions a society in which people are served by technology that is employed to solve societal problems, but not at the expense of people. In this new form of society, the focus is no longer solely on the economy, but rather on individuals and communities, and on helping them develop localised solutions to a growing set of problems. This is not a profit-centred society, but a people-focused society in which the state does not take a central role. Rather, individuals and small groups begin to organise support and care within their communities, allowing new democratic structures to emerge. Some call it the post-growth economy (Hickel, 2020) (Goede, COVID-19 and Change, 2020; Goede, Society 5.0; We and I, 2020).

Scenarios 4.0 and 5.0 are to some extent related to Societies 4.0 and 5.0. This is not the case with regard to Scenarios 2.0 and 3.0. The outcomes of any of these scenarios will differ across countries, based on their histories and leadership.

Society 5.0 and its variations

Throughout history it has been evident that one size never fits all. For example, 1IR started in England and gradually spread to Europe and the United States. In most countries the transition from an agricultural to an industrial society was a slow process. Likewise, the integration of countries into the European Union was a gradual process, and even today some EU members are in the fast lane while others are progressing at a slower pace. Even within one country, not everyone will move towards Society 5.0 at the same speed. Prosperous cities and better educated and younger individuals will most probably move faster.

3. The changing of an era: Changes and change drivers

Society 5.0 is not solely and primarily about technology; it is about the New Social Contract (Omzigt, 2021; Stiglitz, 2019). According to its definition, Society 5.0 is not the most technologically advanced society, but rather the most human-centred society. However, technological advancement remains a significant factor in its success. In the 4IR we are moving beyond connectivity and focus more on life sciences. It is about implanting technology into humans, discovering new technologies to develop vaccines and transplanting the genetically altered heart of a pig into a human being (Roberts, 2022; Harari Y. N., 2015). Society 5.0 is about humanity and the planets. Several forces will transform the

world. We are fast approaching a new era and have already reached the tipping point (Rotmans, Verandering van tijdperk; Nederland kantelt, 2014; in 't Veld, 2010).

The climate crisis

Thanks to Greta Thunberg's activism, which started back in 2018, we no longer speak of global warming or climate change, but of a climate crisis, since the warming process is happening more rapidly than initially thought (Climate change widespread, rapid, and intensifying – IPCC, 2021). Thus far, the international community has been unable to adequately respond to this dramatic shift in weather and temperature patterns. The last climate conference, held in Glasgow in 2021, was a disappointment to many. Ultimately, COP26 fell well short of securing the national commitments to limit the global temperature increase to 1.5 °C. Several experts believe that the climate crisis is one of the leading causes of the pandemic, as it has brought humans and animals into close proximity, making it possible for a virus to jump from animals to humans (Gupta, Rouse & Sarangi, 2021).

Neoliberalism

These problems can be traced back to the extreme forms of neoliberalism and its excessive reliance and trust in markets (Monbiot, 2016; Hirsch Ballin, 2019), driven by the pursuit of profit at the expense of the planet and the people. Inequality has become a root cause of several wicked problems that constantly threaten stability. According to Oxfam, inequality leads to death. Yet, even during the pandemic, the rich became richer while the less fortunate were dying at an alarming rate (Tien rijkste mannen bezitten 1,5 biljoen dollar: 'Verdubbeling in pandemie', 2022; Oxfam, 2022). This issue was highlighted by Thomas Piketty (2014) in his book, *Capital in the twenty-first century*.

Many experts indicate that shareholder capitalism may give rise to stakeholder capitalism (Schwab & Vanham, 2021). Circular economy is a form of stakeholder capitalism as it is based on a model of production and consumption in which existing materials and products are shared, rented, reused, repaired, refurbished and recycled for as long as possible to create more value. These products can be used productively, again and again, creating more value (Raworth, 2018). The planet's capacity is considered the start and limit for economic development.

Health care

The pandemic gave rise to a health care crisis induced by the climate crisis caused by neoliberalism. During the pandemic, we could experience what it means when health care services and resources are allocated via the market and not by government or civil society. In countries like the USA, where the market system is very strong, people could not afford to pay for tests and treatment (Williams, 2020). In countries like India, the poor could not afford to stay home during the lockdown. In both scenarios, government had to step in to help mitigate the immediate crisis. However, significant breakthroughs in health care were made during this period, for example the development of vaccines against COVID-19, some of which relied on genetic manipulation.

Universal basic income (UBI)

The pandemic has shown us that poverty increases individual vulnerability and weakens collectivity (The Economist, 2021). The poor were most affected by the virus, which endangered society as a whole and indicated that it is in the general interest to strengthen the weak. One way of doing this is

by introducing universal basic income (UBI)to reinvent the welfare system (Bregman R. , Utopia for Realists: The Case for a Universal Basic Income, Open Borders, and a 15-hour Workweek, 2016).

Mental health pandemic

The pandemic has not created a mental health pandemic, but has rather revealed the true extent of mental health and other issues (Clifton, 2021). One of the causes of mental health pandemics is loneliness, a condition of which many elderly individuals suffer. Although in many countries the aging populations are rapidly increasing, Africa appears to be an exception as its population is comparatively young (Mulikita, 2022).

Although loneliness is a strange phenomenon in a connected world, it is increasing, which suggests that contact via social media has its limitations (Amatenstein, 2019). However, it has also become clear that many homes are not suited to remote working as in many countries cases of domestic violence and divorce rates have soared during the pandemic.

Energy transition

Over-reliance on fossil fuel is considered one of the leading causes of the climate crisis. In recognition of this fact, governments of many countries are implementing a Green New Deal to stimulate the transition to renewable energy (A European Green Deal; Striving to be the first climate-neutral continent, 2019). One target that captures the imagination is the plan announced by European countries, such as the Netherlands, to have only electric cars on their roads by 2030. The problem is that developing countries, Guyana and Suriname, for example, have discovered substantial oil reserves in their territorial waters and are supplying oil to the market (Chabrol, 2021).

Geopolitics

The geopolitical scene is changing. Tendencies are accelerated as in recent years the leverage of countries such as China and Russia has shown marked increases (Lo, 2020). Some predict that by 2030 China will replace the USA as the world's largest economy (Rapp & Brian, 2022; Mintin Beddoes, 2021).

Although global governance has increased as a result of the influence of the World Health Organization (WHO) and other similar organisations, which indicates that the sovereignty of nation-states is declining, the power of corporations continues to grow (TNI, 2014). However, power is being decentralised to local communities, as well as to those formed through technology, such as blockchain and cryptocurrency.

Cyber

Interconnection has made the globe small and although it yields many benefits, it also makes us more vulnerable. The interconnected world has created cybersecurity issues, for example hacking and cyberwar, as well as privacy issues affecting citizens. One example is the failure of Facebook in 2021 (Guardian, 2021).

Blockchain and cryptocurrency

Blockchain and cryptocurrency have enabled the decentralisation of organisations, structures and society, thus facilitating breaking away from centralised governance (Poston, Rose & Eden, 2019). This has the potential to radically alter governance. The concept of decentralised autonomous organisations (DAO) is evolving. At this stage, governance is based on hierarchy and checks and balances.

Artificial intelligence (AI), big data and algorithms

AI is reaching a high level of maturity and is rapidly taking over certain jobs that do not require human involvement. Big data and algorithms have become more widespread, which suggests that they will soon be used increasingly during decision making. By eliminating the need to consult the voters regarding decisions, these technological advances have the potential to erode democracy.

Metaverse

Metaverse is defined most simply as a virtual world in which people can socialise, work and play. This virtual world is growing and is developing not only into a living space, but also into an economy (Economist T. , 2022). This is blended with cryptocurrency, which is used for financial transactions in the virtual world. However, it does have a dark side as it draws people away from the real world.

Nation-state and virtual state

As stated before, the nation-state is changing due to the evolution of global governance, but changes are also taking place at the individual level. Where one lives is no longer relevant with regard to one's belonging to a particular nation, since both nations and people have become virtual. For example, the Caribbean diaspora is still a part of the Caribbean community and those living abroad play an important role in the developments in many countries.

Democracy

Democracy is under pressure, but some authoritarian states are sadly gaining in prominence as civil rights have been frozen in many democratic countries to deal with the pandemic and decisions are made by a small number of influential people (Goede, The future of democracy: the end of democracy as we know it, 2019).

Human rights

Currently existing human rights are under pressure, but are also insufficient as a new way of life calls for the recognition of new human rights, such as access to the internet. In my opinion, a universal basic income (UBI) is also a human right.

Mensbeeld or a human ideal

Recent changes have resulted in the evolving of a renewed view of what it means to be human. We are reminded that we are the species named Sapiens which, according to Yuval Noah Harari, came to

dominate the world because of its unique ability to cooperate flexibly in large numbers (Harari Y. , 2011). Rutger Bregman claims that, in essence, humans are 'friendly, peaceful and healthy', which is one of his main arguments for supporting the idea of a UBI (Bregman R. , 2016; Bregman R. , 2019). While Bregman bases his arguments on the tradition of the social contract and the 'natural state', it is worth noting that in the 17th century Thomas Hobbes claimed that without a strong government and firm leadership, society would be characterised by violent anarchy, which was in contrast to the view of the Frenchman Jean-Jacques Rousseau, who argued that man was born free and was inclined to do good (Anthony, 2020; Bregman R. , 2020; Neidleman, 2012). In today's terms, Hobbes would emphasise individualism (the 'I'), while Rousseau advocated for collectivism (the 'we'). Whatever stance one takes, it is obvious that we have reached the limits of fragmentation and individualisation. After all, the human race is a species just like all others and must collaborate to survive.

In *Homo Dues*, Harari (2015) explores the impact of major technological developments on human society and relies on past events to predict humankind's primary goals in the next millennium. Harari explains that, throughout the history of humanity, we have focused on overcoming three main obstacles: famine, disease and war. This is still the case, as the Sustainable Development Goals address these same three issues. At the heart of this fascinating book is the chilling but straightforward idea that human nature will be transformed in the 21st century because intelligence is uncoupling from consciousness (Runciman, 2016). *Homo Dues* can thus serve as a warning of what society could become if we fail to get Society 5.0 right.

Exploring other planets

Another notable trend that is envisaged for the future is the commercialisation of space travel. While there is as yet no clarity about how space and space travel will be governed, some billionaires are already talking about exploiting or colonising other planets (Wattles, 2020).

Ethical issues

The route to Society 5.0 is full of ethical dilemmas relating to life and death, inequality and many other issues. Science and technology have expanded our possibilities, but are all options sage? (Goede, 2011)

4. A New Social Contract

In the field of political philosophy, a social contract is an actual or hypothetical contract or agreement between those being ruled, or between the ruled and their rulers, defining the rights and duties of each. In primeval times, according to some theorists, individuals were born into an anarchic state of nature, which was either happy or unhappy, depending on whether they concurred with Rousseau or Hobbes. By exercising natural reason, they then formed a society (and a government) by means of a social contract (Palmer, 2000).

Social contract theory, which follows from the principle of fundamental freedom and equality, or the state of nature, originated as an alternative to the dominant theory of political legitimacy in

medieval Europe, which stated that power is derived from God. It was promoted by Robert Filmer, who in 1680 stated that people were born free and equal, and no human had any authority over them. According to Filmer, political relationships and obligations flow from historical and familiar relations and customs and give rise to sovereign power. In 1698, John Locke placed the individual in an artificial construct called the 'state of nature'. From this point, theories have proclaimed the principle of consent in the place of primogeniture as the basis of political legitimacy (Neidleman, 2012).

There are two principal elements to the social contact, namely the pre-political situation called the 'state of nature' or 'original position' and the characterisation of parties in the contract. The parties can be motivated either by self-interest, or by concern for the welfare of others ('We'), as well as being rational or reasonable with respect to the way they understand their own interest ('I').

The social contract has an empirical and a normative dimension. Within the normative dimension, there are two specific questions: 'What are the principles of justice that bind citizens in relation to one another?' and 'Under what conditions may the state legitimately act as the ultimate arbiter in relations among citizens?' These questions relate to 'justice' and 'legitimacy' (Neidleman, 2012).

In the global context, a social contract is an agreement between states, as discussed by Rousseau, Immanuel Kant and Rawls. This type of social contract offers an appealing justification for political power as it reconciles the power of the state with the freedom and equality of each associate. Rousseau calls this a confederation.

In 1971, John Rawls argued that associations of states form an 'original position' in which they reason behind a 'veil of ignorance'. Once states arrive at a domestic level of justice ('justice as fairness'), they must together decide on the fundamental principles to be applied when adjudicating conflicting claims made by different nations ('laws of peoples'). Rawls further argues that states will adhere to these social contracts to varying degrees, and that some states will comply due to the basic principles of justice. However, there are 'outlaw states' that do not adhere to the principles of justice domestically and are not part of the law of the peoples, as well as 'decent' states that fall short of liberal principles, but cannot be considered tyrannical or dictatorial.

Prior to the establishment of international law or treaties, states were situated towards one another in a state of nature as there was no authority that stood above the parties to any presumed treaty or international agreement. The enactment of any such agreement was based on the explicit consent of the relevant parties (Neidleman, 2012).

The international arena is better suited to a social contract concerning the question of origin. However, serious issues remain with regard to matters relating to equality and reciprocity. This is the problem of asymmetry. That is why, whereas Rousseau, Kant and Rawls, the parties to the international contract would be states or people, for Nussbaum, Pogge and Beits, social contract theory makes the most sense at the international level when the parties to the social contract are imagined to be individual human beings. Individual human beings contract a series of human rights that are not constrained by the contingencies of any particular conception of the state (Neidleman, 2012).

What should a new social contract entail in Society 5.0? This question is answered next and, as will be shown, many building blocks of this new social contract are already available. Stiglitz formulated his version of a new social contract for America as follows:

> At the core is a new social contract, a new balance between the market, the state and civil society, based on what I call "progressive capitalism". It channels the power of the market and creative entrepreneurship to enhance the well-being of society more generally. This will entail rewriting the rules of the economy, for instance, to curb market power of our 21st century tech and financial behemoths, to ensure that globalisation works for ordinary Americans, not just for corporations, and that the financial sector serves the economy rather than the other way around.

> It entails increased government investment in technology, education and infrastructure— advances in science and technology and our ability to cooperate at scale. They are why our standards of living and life expectancies are so much higher today than they were 200 years ago.

> With climate change providing an existential threat, both public programs and regulations have to be directed at creating a green economy. Essential in our ability to ensure that a middle-class life is accessible to most citizens will be a "public option," a government alternative, for instance, in the provision of mortgages, retirement security and medical care (Economist, 2019).

After careful consideration, I would like to suggest the following structure for a new social contract:

Planet

What do we pledge to our own planet and other planets? We should restore the harmony between nature and life , which offers the best opportunity to ensure the survival of the human species. We will no longer be the masters of the universe, but will live in balance with nature and take better care of our planet.

Global

A new social contract must legitimise global governance. This is problematic due to the democratic deficit that exists, given that the global government is not democratically elected.

Regarding the state

Since the introduction of a surveillance state using algorithms to rule society is a possibility, the new social contract should protect citizens against such a state (Omzigt, 2021).

Human rights

Current human rights and any new ones that may emerge as a result of global governance should be ensured for all. For example, just like the right to access to clean water (2010) and the right to a

healthy environment (2021), internet access must become a human right. This is an essential condition for Society 5.0 to evolve (Villadiego, 2021). UBI should also be included.

Sustainable Development Goals (SDGs)

As shown in Figure 8, Japan integrates the Sustainable Development Goals set by the United Nations in 2015 for attainment by 2030 into the concept of Society 5.0. The United Nations is currently at the centre of global governance, and the SDGs are at the core of the new social contract. The SDGs and human rights are two sides of the same coin (Rattray, 2019).

Figure 8: The Sustainable Development Goals related to society 5.0 (Da Conceição da Costa Tavares & Graça Maria, 2020)

The SDGs should more explicitly include universal basic income and universal internet access. UBI is related to SDGs one, two and ten, which relate to eradicating poverty and hunger, and reducing inequality.

The horizontal contract

Society 5.0 is envisaged as a horizontal, rather than a vertical society. Thus, a clause in the new social contract between citizens and organisations has become as important as clauses in the contract between citizens and their governments. What do citizens pledge to each other? We should pledge to collaborate to survive as the human species. SDG 17, Partnerships for the Goals, is too abstract and broad for this purpose.

Democracy

A social contract that is appropriate for Society 5.0 should rectify democracy. Currently, democratic states are becoming less democratic and democracy is under pressure while less democratic states are making progress (Goede, 2019). During the pandemic, several democratic rights of citizens were temporarily set aside, and concerns have been raised about when and how those rights will be restored.

Corporations

Stakeholder capitalism refers to the inclusion of corporations in the new social contract, which obliges corporations to create meaningful jobs, rather than meaningless or degrading jobs, in a purposeful and circular economy (K.N.C., 2019).

Robotic law

A new social contract includes the Three Laws of Robotics (often shortened to The Three Laws, also known as Asimov's Laws) devised by the science fiction author Isaac Asimov in 1942, along with a fourth law that has since been added:

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given by human beings, except where such orders would be in conflict with the First Law.
3. A robot must protect its existence as long as such protection is not in conflict with the First or Second Law.
4. A robot must reproduce, provided that such reproduction does not interfere with the First, Second or Third Law.

5. Summary and conclusion

We are currently moving towards a new era which, like Society 5.0, has not yet been defined. In the new era, the focus will be on the human species, and that is more than the whole of individuals. This imminent change is driven by many forces, including climate crisis and technology. The new era requires a new social contract in which the earth and the human species will take centre stage. When discussing Society 5.0, we should therefore also focus on the social contract, otherwise there will be little difference between Society 4.0 and Society 5.0. The logical sequence of the points that should be addressed by the social contract is: the planet and its governance, people and their human rights, and profit with the focus on stakeholder capitalism. In Society 4.0, this order is reversed.

References

K.N.C. (2019, July 8). *If capitalism is broken, maybe it's fixable; A book excerpt and interview with Joseph Stiglitz, a Nobel laureate in economics and author of "People, Power and Profits"*. Retrieved from www.economist.com: https://www.economist.com/open-future/2019/07/08/if-capitalism-is-broken-maybe-its-fixable

A European Green Deal; Striving to be the first climate-neutral continent. (2019). Retrieved from ec.europa.eu: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

Amatenstein, S. (2019, November 15). *Not So Social Media: How Social Media Increases Loneliness*. Retrieved from www.psycom.net: https://www.psycom.net/how-social-media-increases-loneliness/

Anthony, A. (2020, May 12). Humankind: A Hopeful History by Rutger Bregman review – a tribute to our better nature. *www.theguardian.com*, pp. https://www.theguardian.com/books/2020/may/12/humankind-a-hopeful-history-by-rutger-bregman-review.

Bregman, R. (2016). *Utopia for Realists: The Case for a Universal Basic Income, Open Borders, and a 15-hour Workweek.* De Correspondent.

Bregman, R. (2019, November 30). *Rutger Bregman tells Davos to talk about tax: 'This is not rocket science'*. Retrieved from www.youtube.com: https://www.youtube.com/watch?v=P8ijiLqfXP0

Bregman, R. (2020). *Humankind: A Hopeful History.* Bloomsbury.

Businessweek, B. (2021, December 7). *From the Great Resignation to Lying Flat, Workers Are Opting Out; In China, the U.S., Japan, and Germany, younger generations are rethinking the pursuit of wealth*. Retrieved from www.bloomberg.com: https://www.bloomberg.com/news/features/2021-12-07/why-people-are-quitting-jobs-and-protesting-work-life-from-the-u-s-to-china?utm_medium=social&utm_source=facebook&utm_content=business&utm_campaign=socialflow-organic&cmpid=socialflow-facebook-business&fb

Castells, M. (n.d.). *The rise of the Network Society.* 2000: Blackwell Publishing.

Chabrol, D. (2021, August 19). *Presidents of Guyana, Suriname reveal joint gas development strategy*. Retrieved from www.spglobal.com: https://www.spglobal.com/platts/en/market-insights/latest-news/oil/081921-presidents-of-guyana-suriname-reveal-joint-gas-development-strategy

Clifton, J. (2021, December 3). *The Next Global Pandemic: Mental Health*. Retrieved from ww.gallup.com: https://www.gallup.com/workplace/357710/next-global-pandemic-mental-health.aspx

Climate change widespread, rapid, and intensifying – IPCC. (2021, August 9). Retrieved from www.ipcc.ch: https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/

Da Conceição da Costa Tavares, M. & Graça Maria, d. C. (2020). *Society 5.0 as a Contribution to the Sustainable Development Report*. Retrieved from link.springer.com: https://link.springer.com/chapter/10.1007/978-981-33-4256-9_5

Economist. (2019, July 8). *If capitalism is broken, maybe it's fixable; A book excerpt and interview with Joseph Stiglitz, a Nobel laureate in economics and author of "People, Power and Profits"*. Retrieved from www.economist.com: https://www.economist.com/open-future/2019/07/08/if-capitalism-is-broken-maybe-its-fixable

Economist, T. (2022). Metaverse Landlords; Virtual-property prices are going through the roof; Investors are paying hard currency for software real estate. *The Economist*. Retrieved from https://www.economist.com/business/2022/01/01/virtual-property-prices-are-going-through-the-roof

Gauri, P. & Van Eerden, J. (2019). *What the Fifth Industrial Revolution is and why it matters*. Retrieved from europeansting.com: https://europeansting.com/2019/05/16/what-the-fifth-industrial-revolution-is-and-why-it-matters/

Goede, M. (2011). The wise society: beyond the knowledge economy. *Foresight-The journal of future studies, strategic thinking and policy*, 36-45.

Goede, M. (2019, June 21). The future of democracy: the end of democracy as we know it. *Kybernetes*.

Goede, M. (2020). COVID-19 and Change. *Archives of Business Research, 8*(7), 311-370.

Goede, M. (2020). *Society 5.0; We and I.* Willemstad: Univesity of Governance 5.0 / Goede 5.0 / Think Thank 5.0.

Guardian, T. (2021, October 5). Facebook explains error that caused global outage; Engineers' command accidentally disconnected company's network from rest of world, blogpost says. *www.theguardian.com*, pp. https://www.theguardian.com/technology/2021/oct/05/what-caused-facebook-whatsapp-instagram-outage.

Gupta, S., Rouse, B. & Sarangi, P. (2021, December 8). *Did Climate Change Influence the Emergence, Transmission, and Expression of the COVID-19 Pandemic?* Retrieved from www.frontiersin.org: https://www.frontiersin.org/articles/10.3389/fmed.2021.769208/full

Harari, Y. (2011). *Sapiens: A Brief History of Humankind.* Vintage.

Harari, Y. N. (2015). *Homo Dues: A Brief History of Tomorrow.* Harvill Secker.

Hickel, J. (2020, March 30). *Het is nú tijd voor een economie die niet draait om groei en koopkrachtplaatjes*. Retrieved from decorrespondent.nl: https://decorrespondent.nl/10594/het-is-nu-tijd-voor-een-economie-die-niet-draait-om-groei-en-koopkrachtplaatjes/16959674305420-503698f4?fbclid=IwAR3Kr5-Lsj06-IoNsLrKdSFXBM_R0uwFWieYBGAtDpP4mxOhDuMHVnueV3w

Hirsch Ballin, E. (2019). *Ernst Hirsch Ballin: 'Het neoliberalisme heeft ons in zijn greep'*. Retrieved from /www.maartenonline.nl/: https://www.maartenonline.nl/ernst-hirsch-ballin-het-neoliberalisme-heeft-ons-in-zijn-greep/

in 't Veld, R. (2010). *Kennisdemocratie; Opkomend stormtij.* Den Haag: Sdu Uitgevers bv.

Lo, B. (2020, July 29). *GLOBAL ORDER IN THE SHADOW OF THE CORONAVIRUS: CHINA, RUSSIA AND THE WEST*. Retrieved from www.lowyinstitute.org: https://www.lowyinstitute.org/publications/global-order-shadow-coronavirus-china-russia-and-west

Mair, S. (2020, March 30). *What will the world be like after coronavirus? Four possible futures*. Retrieved from theconversation.com: https://theconversation.com/what-will-the-world-be-like-after-coronavirus-four-possible-futures-134085?fbclid=IwAR3WlWrBJCwKVHN2CanlxmbTiHnYbtnYCrUTN3Dx_YdJiW9v6rYx0O9wHbI

Minevich, M. (2019, February 2). *Japans "society 5.0" initiative is a roadmap for todays entrepreneurs*. Retrieved from https://techcrunch.com: https://techcrunch.com/2019/02/02/japans-society-5-0-initiative-is-a-roadmap-for-todays-entrepreneurs/

Mintin Beddoes, Z. (2021, November 8). Rivalry between America and China will shape the post-covid world. *The economist*. Retrieved from https://www.economist.com/the-world-ahead/2021/11/08/rivalry-between-america-and-china-will-shape-the-post-covid-world

Monbiot, G. (2016, April 15). Neoliberalism – the ideology at the root of all our problems; Financial meltdown, environmental disaster and even the rise of Donald Trump – neoliberalism has played its part in them all. Why has the left failed to come up with an alternative? *The Guardian*. Retrieved from https://www.theguardian.com/books/2016/apr/15/neoliberalism-ideology-problem-george-monbiot

Moore, G. (2019). *3 ways to be a good leader in the Fourth Industrial Revolution*. Retrieved from weforum.org: https://www.weforum.org/agenda/2019/01/the-fourth-industrial-revolution-needs-new-forms-of-leadership/

Mulikita, J. J. (2022). *Young People's Potential, the Key to Africa's Sustainable Development*. Retrieved from www.un.org: https://www.un.org/ohrlls/news/young-people%E2%80%99s-potential-key-africa%E2%80%99s-sustainable-development

Nakanishi, H. (2019, January 9). *Modern society has reached its limits. Society 5.0 will liberate us*. Retrieved from www.weforum.org: https://www.weforum.org/agenda/2019/01/modern-society-has-reached-its-limits-society-5-0-will-liberate-us/

Neidleman, J. (2012). The Social Contract Theory in a Global Context. *E-International Realations*. Retrieved from https://www.e-ir.info/pdf/28179

Omzigt, P. (2021). *Naar een nieuw sociaal contract.* Amsterdam: Prometheus.

Oxfam. (2022, January). *Inequality Kills; The unparalleled action needed to combat unprecedented inequality in the wake of COVID-19*. Retrieved from oxfamilibrary.openrepository.com: https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621341/bp-inequality-kills-170122-summ-en.pdf

Poston, H. L., Rose, J. & Eden, J. (2019). *A Brief Introduction to Blockchain Concepts: Understand the principles of blockchain technology and the security considerations of using a decentralized network.* GhostVolt.

Rapp, N. & Brian, O. (2022, January 30). *This chart shows how China will soar past the U.S. to become the world's largest economy by 2030; Meanwhile, the total GDP of the global economy is predicted to double between 2022 and 2035*. Retrieved from fortune.com: https://fortune.com/longform/global-gdp-growth-100-trillion-2022-inflation-china-worlds-largest-economy-2030/?utm_medium=social&xid=soc_socialflow_facebook_FORTUNE&utm_campaign=fortunemagazine&utm_source=facebook.com&fbclid=IwAR2JIsf2ieqLLGyDwIN4z1RF1hvD7

Rattray, S. (2019, Juy 5). *Human rights and the SDGs - two sides of the same coin*. Retrieved from www.undp.org: https://www.undp.org/blog/human-rights-and-sdgs-two-sides-same-coin?fbclid=IwAR02xdCfm8BxOZGBS3a4C7mKYmnPiiRDIaAk0uDnY7skqVHK_0W-PJdU2fQ

Raworth, K. (2018). *Doughnut Economics; Seven Ways to Think Like a 21st-Century Economist.* Random House.

Roberts, M. (2022, January 11). *Man gets genetically-modified pig heart in world-first transplant*. Retrieved from www.bbc.com: https://www.bbc.com/news/world-us-canada-59944889

Rotmans, J. (2014). *Verandering van tijdperk; Nederland kantelt.*

Rotmans, J. & Verheijden, M. (2021). *Omarm de chaos.* De Geus.

Runciman, D. (2016, August 24). *Homo Deus by Yuval Noah Harari Review*. Retrieved from www.theguardian.com: https://www.theguardian.com/books/2016/aug/24/homo-deus-by-yuval-noah-harari-review

Schwab, K. & Vanham, P. (2021, January 22). *What is stakeholder capitalism?* Retrieved from www.weforum.org: https://www.weforum.org/agenda/2021/01/klaus-schwab-on-what-is-stakeholder-capitalism-history-relevance/

Smuts, H. (2022, January 20). *Feeding a knowledge-intensive society; The increasing innovative use of artificial intelligence and knowledge management will ensure an integrated organisational capability in Society 5.0*. Retrieved from www.itweb.co.za: https://www.itweb.co.za/content/WnpNgM2KVxrqVrGd

Society 5.0. (2022). Retrieved from /www8.cao.go.jp: https://www8.cao.go.jp/cstp/english/society5_0/index.html

Society 5.0. (2022). Retrieved from www.4wardfutures.org.uk: https://www.4wardfutures.org.uk/society-5

Stephens, P. (2020, July 23). *The path from Covid-19 to a new social contract; Pandemic offers world leaders an opportunity to rebuild faith in liberal democracy*. Retrieved from www.ft.com: https://www.ft.com/content/9df529e8-0e9d-42ec-930c-d22cbc5a7964

Stiglitz, J. (2019). *People, Power, and Profits: Progressive Capitalism for an Age of Discontent.* Allen Lane.

The Economist. (2021, May 4). Might the pandemic pave the way for a universal basic income? *The Economist*. Retrieved from https://www.economist.com/finance-and-economics/2021/03/02/might-the-pandemic-pave-the-way-for-a-universal-basic-income

The Rockefeller Foundation. (2010). *Scenarios for the Future of Technology and International Development.* The Rockefeller Foundation and Global Business Network.

Thomas, P. (2014). *Capital in the Twenty-First Century.* Harvard University Press.

Tien rijkste mannen bezitten 1,5 biljoen dollar: 'Verdubbeling in pandemie'. (2022, janauri 17). Retrieved from www.rtlnieuws.nl/economie: Poverty https://www.rtlnieuws.nl/economie/artikel/5281525/economische-ongelijkheid-oxfam-rijkste-mannen-15-biljoen-dollar?fbclid=IwAR0jX7ab_wz2KLFI-oSnoeDt4aKBXtZEfzLE-ifZKdLjs7eiafDokx4LRNU

TNI. (2014, June 2). *The great divide: exposing the Davos class behind global economic inequality*. Retrieved from www.tni.org: https://www.tni.org/es/node/12606

Van Rossem, M. (2018). *Wat is geluk.* Amsterdan: Nieuw Amsterdam.

Villadiego, L. (2021, January 17). *Internet access: a new human right?* Retrieved from www.equaltimes.org: https://www.equaltimes.org/internet-access-a-new-human-right#.Yffi9erMI6Y

Wattles, J. (2020, September 8). *Colonizing Mars could be dangerous and ridiculously expensive. Elon Musk wants to do it anyway*. Retrieved from cnn.com: https://edition.cnn.com/2020/09/08/tech/spacex-mars-profit-scn/index.html

Williams, O. D. (2020). COVID-19 and Private Health: Market and Governance Failure. Development. *Nature Public Health Emergency Collection*, 181-190.