

ARTIFICIAL INTELLIGENCE

AN INTERIM REPORT

BY

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P R E M I S E

WE'RE AN EXTREMELY WISE SPECIES IN SO MANY WAYS BUT WHEN IT COMES TO MAKING IMPORTANT DECISIONS WE HAVE THIS TENDENCY SOMETIMES TO MAKE THESE TERRIBLE MISTAKES, AND WE ARE NOW IN A SITUATION WHEN WE JUST DON'T HAVE MUCH ROOM FOR ERROR. AS WE GAIN MORE AND MORE POWER, THE CONSEQUENCES OF MAKING A STUPID CHOICE ARE CATASTROPHIC FOR US AND FOR THE ENTIRE ECOLOGICAL SYSTEM. SO THIS IS A GREAT CAUSE FOR CONCERN.

IN THE 21ST CENTURY, HUMANITY IS FACING SOME VERY DIFFICULT PROBLEMS, WHETHER IT'S GLOBAL WARMING OR GLOBAL INEQUALITY OR THE RISE OF DISRUPTIVE TECHNOLOGY, SUCH AS BIOENGINEERING AND ARTIFICIAL INTELLIGENCE.

SOCIAL INTELLIGENT SOCIETY
OR
ARTIFICIAL CIVILIZATION (AI)
A REFLECTION PUT TOGETHER

"Morality is more important than ever before. The future of the entire ecological system and the future of the whole of life is really now in our hands. And what to do with it is an ethical question and also a scientific question. The real question is what to do with the technology."
(Harari)

BY
M A R C G U I O T

What is coming in connexion with Artificial Intelligence is not exactly reassuring. I have read a lot about it in Harari's Bestsellers. A. I. is not precisely my subject, I must concede it, but I. it is in the pipeline and you cannot simply ignore it any longer. Actually, it is already before the hand.

Homo Sapiens has conquered the world in about 20-70,000 years.

A.I. is now providing for a mutant: Homo Deus, a semi-computerized form of human half man-half machine who could easily defeat and overcome Sapiens. The question is not how? but when?

Already Goethe has dealt with that issue in his second Faust as well as Meyrink with his Golem, even Mary Shelley with her bleak "Frankenstein" not to mention Brave New World and 1984.

Very rightly and very wisely Ernst Jünger, and after him Martin Heidegger, have warned against the dangers of *Die Technik*. Two world wars were dominated by her. Millions of human beings have been cruelly minked or dehumanized in the process.

Question: Is it realistic that Eyes of Europe should seek to institutionalize humanity in people by means of an antidote to A.I.? *"instituter l'humanité dans l'homme"* (Edgar Morin).

Is there a more noble goal for E. o. E. at all?

While reading Harari's books, I have become more skeptical about the feasibility of this ambitious scheme, but I am deeply convinced that it remains one of the very last realistic alternatives.

Perhaps the very last utopia. Time is running out and *what is possible is almost always done*. This is true for Auschwitz and also for Hiroshima and the like.

Could we have avoided it? The question is by no means technical but definitely ethical as Albert Camus wrote in his editorial about Hiroshima the day after the blast in August 1945.

The world is what it is, that is to say, little.

We are taught, indeed, amid a host of enthusiastic comments that any medium-sized city can be totally destroyed by a bomb the size of a ball. Mechanical civilization has just reached its last degree of savagery. It will be necessary to choose, in a more or less proximate future, between collective suicide or the intelligent use of scientific conquests ... It is no longer a prayer but an order that must rise from peoples to governments, the order to choose definitively between hell and reason.

This question is more explosive today than ever.

MAYBE THE BIGGEST CONCERN OF ALL IS HUMAN BLINDNESS AND STUPIDITY. (Harari 2017)

Get to know yourself better, and especially what you really want from life, because otherwise technology tends to dictate to people their aims in life, and instead of technology serving us to realise our aims, we become enslaved to its agenda. And it's very difficult to know what you really want from life. I'm not saying it's an easy task. (Harari)

This is basically what Eyes of Europe is striving for. Indeed it is not an easy task but it is becoming an act of civil resistance against an all enslaving technology that is conquering the world and threatening humanity in its identity and survival.

Let us reflect on this while revisiting Harari's *Homo Deus* together.

WE'RE AN EXTREMELY WISE SPECIES IN SO MANY WAYS BUT WHEN IT COMES TO MAKING IMPORTANT DECISIONS WE HAVE THIS TENDENCY SOMETIMES TO MAKE THESE TERRIBLE MISTAKES, AND WE ARE NOW IN A SITUATION WHEN WE JUST DON'T HAVE MUCH ROOM FOR ERROR. AS WE GAIN MORE AND MORE POWER, THE CONSEQUENCES OF MAKING A STUPID CHOICE ARE CATASTROPHIC FOR US AND FOR THE ENTIRE ECOLOGICAL SYSTEM. SO THIS IS A GREAT CAUSE FOR CONCERN. IN THE 21ST CENTURY, HUMANITY IS FACING SOME VERY DIFFICULT PROBLEMS, WHETHER IT'S GLOBAL WARMING OR GLOBAL INEQUALITY OR THE RISE OF DISRUPTIVE TECHNOLOGY, SUCH AS BIOENGINEERING AND ARTIFICIAL INTELLIGENCE.

Reading Harari is a bit of a challenge. It forces us to reflect deeply upon the future of the human race, human society and civilization in the coming decades. More than a challenge it is yet becoming a vital necessity.

HOMO DEUS: A BRIEF HISTORY OF TOMORROW, was published in the UK, becoming another bestseller. It develops many of the themes explored in *Sapiens*, and in particular examines the possible impact of biotechnological and artificial intelligence innovation on *Homo sapiens*, heralding perhaps ***the beginning of a new bionic or semi-computerised form of human***.

It's an exhilarating book that takes the reader deep into questions of identity, consciousness and intelligence, grappling with **what kinds of choices and dilemmas a fully automated world will present us with**.

Now 41, Harari grew up in a secular Jewish family in Haifa. He studied history at the Hebrew University of Jerusalem and completed his doctorate at Oxford. He is a vegan and he meditates for two hours a day, often going on extended retreats. He says it helps him focus on the issues that really matter. He lives with his husband on a moshav, an agricultural co-operative, outside Jerusalem. Being gay, he says, helped him to question received opinions.

Harari is a naturally gifted explainer, invariably ready with the telling anecdote or memorable analogy. As a result, it's tempting to see him less as a historian than as some kind of all-purpose sage. We asked public figures and readers to pose questions for Harari, and many of these (below) were of a moral or ethical nature, seeking answers about **what should be done**, rather than about what has happened.

WE ARE LIVING THROUGH A FANTASTICALLY RAPID GLOBALISATION. WILL THERE BE ONE GLOBAL CULTURE IN THE FUTURE OR WILL WE MAINTAIN SOME SORT OF DELIBERATE ARTIFICIAL TRIBAL GROUPINGS?

Helen Czerski, physicist

Harari: I'm not sure if it will be deliberate but I do think we'll probably have just one system, and in this sense we'll have just one civilization. In a way this is already the case. All over the world the political system of the state is roughly identical. All over the world capitalism is the dominant economic system, and all over the world the scientific method or worldview is the basic worldview through which people understand nature, disease, biology, physics and so forth. **There are no longer any fundamental civilisational differences.**

WHAT IS THE BIGGEST MISCONCEPTION HUMANITY HAS ABOUT ITSELF?

Lucy Prebble, playwright

Maybe it is that by gaining more power over the world, over the environment, we will be able to make ourselves happier and more satisfied with life. Looking again from a perspective of thousands of years, **we have gained enormous power over the world and it doesn't seem to make people significantly more satisfied than in the stone age.**

IS THERE A REAL POSSIBILITY THAT ENVIRONMENTAL DEGRADATION WILL HALT TECHNOLOGICAL PROGRESS?

TheWatching Place, posted online

I think it will be just the opposite – that, **as the ecological crisis intensifies, the pressure for technological development will increase, not decrease.** I think that the ecological crisis in the 21st century will be analogous to the two world wars in the 20th century in serving to accelerate technological progress.

As long as things are OK, people would be very careful in developing or experimenting in genetic engineering on humans or giving artificial intelligence control of weapon systems. **But if you have a serious crisis, caused for example by ecological degradation, then people will be tempted to try all kinds of high-risk, high-gain technologies in the hope of solving the problem, and you'll have something like the Manhattan Project in the second world war.**

WHAT ROLE DOES MORALITY PLAY IN A FUTURE WORLD OF ARTIFICIAL INTELLIGENCE, ARTIFICIAL LIFE AND IMMORTALITY? WILL AN ASPIRATION TO DO WHAT IS GOOD AND RIGHT STILL MOTIVATE MUCH OF THE RACE?

Andrew Solomon, writer

I think morality is more important than ever before. As we gain more power, the question of what we do with it becomes more and more crucial, and we are very close to really having divine powers of creation and destruction. The future of the entire ecological system and the future of the whole of life is really now in our hands. And what to do with it is **an ethical question** and also a scientific question.

So to give just a simple example: what happens if several pedestrians jump in front of a self-driving car and it has to choose between killing, say, five pedestrians or swerving to the side and killing its owner? Now you have engineers producing the self-driving cars and they need to get an answer to this question. **So I don't see any reason to think that AI or bioengineering will make morality any less relevant than before.**

After reading *Homo Deus* I began to wonder why we are so wilfully ushering in **a future that will slowly make us redundant**. We are the only animal obsessed with progress.

SHOULD WE TRY TO RESIST THE IDEA OF THE FUTURE AS ONE OF INEVITABLE TECHNOLOGICAL ADVANCEMENT AND CREATE A DIFFERENT KIND OF FUTURISM?

Matt Haig, author

You can't just stop technological progress. Even if one country stops researching artificial intelligence, some other countries will continue to do it. **The real question is what to do with technology.** You can use exactly the same technology for very different social and political purposes. If you look at the 20th century, we see that with the same technology of electricity and trains, you could create a communist dictatorship or a liberal democracy. **And it's the same with artificial intelligence and bioengineering.** So I think people shouldn't be focused on the question of how to stop technological progress because this is impossible. Instead **the question should be what kind of usage to make of the new technology. And here we still have quite a lot of power to influence the direction it's taking.**

IS BEING COMPASSIONATE AND EMPATHETIC A MAJOR FLAW IN HUMAN EVOLUTION? IS PSYCHOPATHY THE FUTURE FOR OUR SPECIES?

Dominic Currie, reader

No, I don't think so. First of all, if it is, then it's going to be quite a terrible future. But even if we leave aside the moral aspect and just look at it from a practical aspect, then **human power comes from cooperation, and psychopaths are not very good at cooperation. You need empathy and compassion, you need the ability to understand and to sympathise with other people in order to cooperate with them effectively.** So even if we leave aside all moral issues, still I don't think that empathy is bad for us or that psychopaths are the future of humankind.

WAS THE MOVE FROM HUNTER-GATHERING TO FARMING A MISTAKE? IF SO, HOW CAN WE MAKE THE BEST OF IT NOW?

Philippa Perry, writer and psychotherapist

There is absolutely no way to turn back the clock, with 8 billion people returning to living as hunter-gatherers. So **the question is really how to make the best of our current situation**, and how not to repeat the mistakes of the agricultural revolution. **With the new revolution in artificial intelligence and biotechnology, there is a danger that again all the power and benefits will be monopolised by a very small elite, and most people will end up worse off than before.**

WHAT CONCERNS YOU MOST ABOUT THE WORLD, AND WHAT ARE YOU DOING ABOUT YOUR CONCERNS?

LeaActforChange, posted online

There are so many different concerns that I'm not sure which is the biggest one. At present, because of the enormous power of humankind, **maybe the biggest concern of all is human blindness and stupidity. We're an extremely wise species in so many ways but when it comes to making important decisions we have this tendency sometimes to make these terrible mistakes, and we are now in a situation when we just don't have much room for error.** As we gain more and more power, the consequences of making a stupid choice are catastrophic for us and for the entire ecological system. So this is a great cause for concern.

HOW WOULD YOU ADVISE THE INDIVIDUAL WHO WANTS TO LIVE A GOOD LIFE AND CONTRIBUTE TO THE WELLBEING OF THOSE NOT YET BORN AS WELL AS THOSE ALREADY HERE?

Paul Baker, reader

Get to know yourself better, and especially what you really want from life, because otherwise technology tends to dictate to people their aims in life, and instead of technology serving us to realise our aims, we become enslaved to its agenda. And it's very difficult to know what you really want from life. I'm not saying it's an easy task.

I suggest that we now revisit Homo Deus together and highlight some of its most relevant issues:

For thousands of years, the answer to humanity's questions remained unchanged. The same three problems preoccupied the people of twentieth century China, of medieval India and Egypt: famine, plague and war were always at the top of the list. At the dawn of the third millennium, humanity wakes up at an amazing realization. In the last few decades we managed to rein in famine, plague and war. (p.1)

They have become a manageable challenge. For the first time in history, more people die today from eating too much than from eating too little, more people die from old age than from infectious diseases; and more people commit suicide than are killed by soldiers, criminals and terrorists combined. Humankind and lift its eyes up and look upon new horizons. (p.2)

What are we going to do with ourselves in a healthy, prosperous and harmonious world, what will demand our attention and ingenuity?

If you ask me, this raises the dramatic issue of what the citizens of the twenty first time will do with their free time. Drugs? Video games and the like. Harari is inclined to see them as alternatives. But what about permanent education and the transmission of our immense cultural inheritance? Not only our European inheritance but also that of other world civilizations. That would be a very noble task for EOE.

This question becomes rather urgent given the immense new powers that biotechnology and information technology are providing us with.

WHAT WILL WE DO WITH ALL THAT POWER? (p. 13)

Biotechnology enables us to defeat bacteria and viruses, but it simultaneously turns humans themselves into an unprecedented threat. Today the main source of wealth is knowledge. Hence knowledge became the most important economic resource. (p. 15)

It is now within our power to make things better and to reduce the incidence of suffering even further. (p. 19)

The most common reaction of the human mind to achievement is not satisfaction but craving for more. When human power possesses enormous powers and when the threat of famine war and plague is finally lifted, **what will we do with ourselves?** (p. 20)

Humanity's next targets are likely to be immortality, happiness and divinity. We are now aiming to upgrade humans into gods and turn Homo sapiens into Homo deus. For modern people death has become a technical problem that we can and should solve. (p. 22).

Equality is out, immortality is in. (p. 25)

In truth, humans will soon actually be a-mortal rather than immortal. Unlike gods future superhumans could still die in some war or accident. (p. 25)

The second big project on the human agenda will probably be to find the key to happiness.
(p.29)

During the nineteenth and twentieth centuries, countries measured their success by the size of their territory, the increase of their population and the growth of their GDP-not by the happiness of their citizens. Industrialised nations such as Germany, France and Japan established gigantic systems of education, health and welfare, yet these systems were aimed to strengthen the nation rather than ensure individual well being. Schools were founded to produce skillful and obedient citizens who would serve the nation loyally. At 18 youth needed to be not only patriotic but also literate, so that they could read the brigadeer's order of the day and draw up tomorrow's better plans. (p. 30)

The aim wasn't to make people happy, but to make the nations stronger. The country needed sturdy soldiers and workers, healthy women would give birth to more soldiers, workers and bureaucrats who came to the office punctually at eight. (p.31)

On the biological level, both our expectations and our happiness are determined by our biochemistry, rather than by our economic, social, political situation. If science is right and our happiness is determined by our biochemical system, then the only way to ensure lasting contentment is by rigging the system. We need therefore to manipulate human biochemistry. And this is exactly what we have begun doing over the last few decades. (p.39)

Hitherto everybody still agreed on one thing: in order to improve education, we need to change the schools. Today for the first time in history, at least some people think it would be more efficient to change the pupils' biochemistry. (p.40)

What some people hope to get by studying, working or raising a family, others try to obtain far more easily through the right dosage of molecules. This is an existential threat to the social and economic order, which is why countries wage a stubborn, bloody and hopeless war on biochemical crime. (p. 40)

Gainig happiness through biological manipulation wont be easy, for it requires altering the fundamental pattern of life. But then it wasn't easy to overcome famine, plague and war either. (p.41)

It seems that the second great project of the twenty first century-to ensure global happiness- will involve reengineering Homo sapiens so that he can enjoy everlasting pleasure. (p.43)

In seeking bliss and immortality, humans are in fact trying to upgrade themselves into gods. (p.43)

The upgrading of humans into gods may follow any of three paths:

biological engineering, cyborg engineering the engineering of non organic beings. Bio engineering is not going to wait patiently for natural selection to work its magic. Instead, bio engineers will take the old Sapiens body, and intentionally rewrite its genetic code, rewire its brain circuits, alter its biochemical ballance, and even grow entirely new limbs. (p.44)

After 4 billion years of wandering inside the kingdom of organic compounds, life will break out into the vastness of the inorganic realm, and will take shapes that we cannot envision even in our wildest dreams. Our wildest dreams are still a product of organic chemistry. We don't know where the paths might lead us.(p.45)

Once technology enables us to re-engineer human minds, Homo sapiens will disappear, human history will come to an end and a completely new kind of process will begin, which people like you and me cannot comprehend. All we can say is that people similar to us are likely to use biotechnology to re-engineer their own minds. **Our present day minds cannot grasp what might happen next.**

In the twenty first century the third big project of humankind will be to acquire for us divine powers in creation and in destruction, and upgrade Homo sapiens into Homo deus. We won the ability to reengineer our bodies and minds in order, above all, to escape old age, death and misery, but once we have it who knows what else we might do with such ability. So we may well think of the new human agenda as consisting really of only one project with many branches: attaining divinity.

In pursuit of health, happiness and power, humans will gradually change first one of their futures and then another, and another, until **they will no longer be humans but superhumans.** (p. 49)

THE ATTEMPT TO UPGRADE HOMO SAPIENS IS LIKELY TO CHANGE THE WORLD BEYOND RECOGNITION IN THIS CENTURY.

Scientific research and technological developments are moving at a far faster rate than most of us can grasp. (p.50)

Nobody can absorb all the latest scientific discoveries, nobody can predict how the global economy will look in ten years and nobody has a clue where we are heading in such a rush. **Since no one understands the system anymore no one can stop it.**

When you develop bionic legs that enable paraplegics to walk again, you can also use the same technology to upgrade healthy people.

When you discover how to stop memory loss among older people, the same treatment might enhance the memory of the young. **No clear line separates healing from upgrading.** (p. 51)

This is why **it is vital to think about humanity's new agenda.** Precisely because we have some choice regarding the use of new technologies we had better understand what is happening and make up our minds before it makes our minds for us. (p.55)

THE MORE WE KNOW, THE LESS WE CAN PREDICT.

In 1017 it was relatively easy to predict how Europe would look in 1050. In 2017 we have no idea how Europe will look in 2050. We cannot say what kind of political system it will have, how its job market will be structured, and even what kind of bodies its inhabitants will possess. (p.58)

If we act wisely, we can change the world, and create a much better one. (p.60)

In the twenty first century we are likely to push humankind as a whole beyond its limits.

The same technologies that can upgrade humans into gods might also make humans irrelevant. For example, computers powerful enough to understand and overcome the mechanisms of aging and death will probably also be powerful enough to replace humans in any and all tasks. (p.65)

As a matter of fact, the twenty first century will be dominated by algorithms. Algorithm is arguably the single most important concept in our world. If we want to understand our life and our future, we should make every effort to understand what an algorithm is, and how algorithms are connected with emotions. (p.83)

According to most definitions of intelligence, a million years ago, humans were already the most intelligent animals around as well as the world's champion toolmakers, yet they remained insignificant creatures with little impact on the surrounding ecosystem. They were obviously lacking some key feature other than intelligence and tool making. Twenty thousand years ago, the average Sapiens probably had higher intelligence and better toolmaking skills than the average sapiens of today. (p.131)

But the crucial factor in our conquest of the world was our ability to connect many humans to one another. Humans nowadays completely dominate the planet not because the individual human is far smarter and more nimble-fingered than the individual chimp or wolf but because homo sapiens is **the only species on earth capable of cooperating flexibly in large numbers.** (p. 131)

The advantage always lies in flexible cooperation. (p.137)

This is a most interesting point as EOE defines itself as educational auto-active education program based on active and permanent cooperation, interaction and dialogue between auto active critical learners (autodidacts).

It is essential that pupils don't only learn from teachers, books and syllabuses only but that they also learn from each other by permanently exchanging in real time.

FLEXIBILITY IN LARGE NUMBERS

Modern humanist education believes in teaching students to think for themselves. Above all it is trying to teach kids to think for themselves. It may not always succeed, but that is basically what humanistic education seeks to do. (p. 234)

And in essence, "teaching kids to think for themselves" is and remains precisely the basic ambition of Eyes of Europe.

Evolutionary humanism paid an important part in the shaping of modern culture, and it is likely to play an even greater role in the shaping of the twenty first century. (p. 257)

The main products of the twenty first century will be bodies, brains and minds and the gap between those who know how to engineer bodies and brains and those who don't will be far bigger than the gap between Dickens's Britain and the Mahdi's Sudan.

Indeed, it will be bigger than the gap between Sapiens and Neanderthals. (p.273)

The most important question in twenty first century economics may well be what to do with all the superfluous people.

What will conscious humans do, once we have highly intelligent non conscious algorithms that can do almost everything better. (p. 318)

When mindless algorithms are able to teach, diagnose and design better than humans, what will we do? (p. 319)

We might witness the creation of a new massive class: people devoid of any economic, political or even artistic value who contribute nothing to the prosperity, power and glory of society. (p. 325)

BUT WHAT WILL KEEP THE REDUNDANT MAJORITY OCCUPIED AND CONTENT?

People must do something, or they will go crazy. What will they do all day? One solution might be offered by drugs and computer games.

Another solution may be offered by Eyes of Europe. Culture as an intellectual game, culture as a challenge to help your personal realization. Culture as your secret garden to help you become your true self.

Some experts and thinkers warn that humankind is likely to suffer this degradation, because once artificial intelligence surpasses human intelligence it might simply exterminate humankind.

Before anyone realizes what is happening, A.I. takes over the planet, eliminates the human race, launches a conquest campaign to the ends of the galaxy and transforms the entire known universe into a giant super-computer that for billions upon billions of years calculates pi ever more accurately. While the system might still need humans, it will not necessarily need individuals. Humans will continue to compose music, to teach and to invest money, but the system will

understand these humans better than they understand themselves and will make most of the important decisions. The system will thereby deprive individuals of their authority and freedom. (p.328)

It is therefore essential to resist the system by forging and educating vigilant, alert and critical European citizens capable of resisting all the Big Brothers of the future. This may well be the first priority of Eyes of Europe in the coming decades: combatting the passivity of the consumers' attitude of most people and turning it into an active and most critical voice.

An external algorithm could theoretically know me much better than I can ever know myself. An algorithm that monitors each of the systems that comprise my body and my brain could know exactly who I am, how I feel and what I want. Once developed, such an algorithm could replace the voter, the customer and the beholder. The algorithm will know best and will always be right, and beauty will be in the calculation of the algorithm.

The KGB and the FBI had only a vague understanding of my biochemistry, genome and brain, and even if agents bugged every phonecall I made, and recorded every chance encounter on the street, they didn't have the computing power to analyse all these data. Consequently, given twentieth technological conditions, liberals were right to argue that nobody could know me better than I know myself. Humans therefore had a very good reason to regard themselves as an autonomous system, to follow their own inner voices rather than the commands of Big Brother.

However, twenty first century technology may enable external algorithm to know me far better than I know myself, and once this happens the belief in individualism will collapse. Authority will shift from individual humans to networked algorithms.

People will no longer see themselves as autonomous beings running their lives according to their wishes and instead become accustomed to seeing themselves as a collection of biochemical mechanisms that is constantly monitored and guided by a network of electronic algorithms. For this to happen, there is no need of an external algorithm that knows me perfectly and never makes any mistakes; it's enough that an external algorithm will know me better than I know myself, and will make fewer mistakes than me. So if you wish to obey the old adage "*know thyself*", you should not waste your time on philosophy, meditation or psychoanalysis, but rather you should systematically collect biometric data and allow algorithm to analyse them for you and tell you who you are and what you should do. The movement's motto is selfknowledge through numbers. (p. 330-31)

Humans will no longer be autonomous entities directed by the stories their narrating self invents, instead they will be integrate parts of a huge global network. Yet, once we have a system that really does know me better it will be foolhardy to leave authority to the hands of a narrating self. (p. 338)

People might abandon their own psychological judgments and rely on computers when making important life decisions, such as choosing activities, career paths or even romantic partners. It's possible that such data-driven decisions will improve people's lives. (p.34).

In the twentyfirst century, our personal data is probably the most valuable resource most people still have to offer and we are giving it to the tech giants in exchange for email services and funny cats videos. (p.341)

The new technologies of the twenty first century may thus reverse the humanist revolution, stripping humans of their authority, and empowering non human algorithms instead. If you are horrified by these directions, don't blame the computer geeks; the responsibility actually lies with the biologists.

Some people are indeed horrified by these developments, the fact is that millions willingly embrace it.

The shifting of authority from humans to algorithms is happening all around us, not as a result of some momentous governmental decision but due to a flood of mundane choices.

THE INDIVIDUAL WILL NOT BE CRUSHED BY BIG BROTHER, IT WILL DESINTEGRATE FROM WITHIN. (p.345)

There is definitely something kafkaesque in this analysis, in the line of the Metamorphosis (Die Verwandlung) i.e. the gradual transformation of Homo sapiens into an upgraded Homo deus (the new class of the "happy few" superhumans). What about the unhappy many: the "Homines nulli", the huge mass of ordinary men and women?

Reality will be a mesh of biochemical and electronic algorithms without and without clear borders and without individual hubs. (p.346)

Kafka's Trial tells the story of a man arrested and prosecuted by a remote, inaccessible authority. The nature of his crime is revealed neither to him nor to the reader. Mankind, like Joseph K is threatened by destruction.

Humans will lose their value completely, humans will still be valuable collectively, but they will lose their individual authority and will instead be managed by external algorithms. The system will still need you to compose symphonies, teach history or write computer codes. But the system will know you better than you know yourself, and will therefore make most of the important decisions for you- and you will be perfectly happy with that. **It won't necessarily be a bad world it will however be a post liberal world.**

Some people will remain both indispensable and undecipherable, but they will constitute a small and privileged elite of upgraded humans. These superhumans will enjoy unheard and unprecedented creativity, which will allow them to go on making many of the most important decisions in the world. They will perform crucial services for the system while the system couldn't understand and manage them. Most humans will not be upgraded and they will consequently become an inferior class, dominated by both computer algorithms and the new superhumans.

The Nazi death camps were aimed at the destruction of bodies. The technological revolution goes farther in absolute horror. It is aiming at the annihilation of individualities, human personalities, limiting the thinking subject to the function of a simple passive consumer, nullifying his status as an active citizen inherited from the Enlightenment.

One finds oneself, volens nolens, in Huxley's Brave New World which is engendered by means other than those imagined by the famous English novelist. It's definitely worse.

It is therefore imperative to forge a generation of young citizens capable of resisting the domination of the new superhuman class, which Harari designates as Homo deus.

We may see real gaps in physical and cognitive abilities opening between an upgraded upper-class and the rest of society.

The twentieth century aimed to heal the sick. The twenty first century is increasingly aimed to upgrade the healthy. Healing the sick was an egalitarian project, in contrast, upgrading the healthy is an elitist project, because it rejects the idea of a universal standard applicable to all, and seeks to give some individuals an edge over others. People want superior memories, above-average intelligence and first class sexual abilities. If some form of upgrade becomes so cheap and common that everyone enjoys it, it will simply be considered the new baseline, which the next generation of treatments will strive to surpass.

In short, it is a gentle but sure return to an old regime society with its feudal and undemocratic privileges. One could explain the present disinterest in education policy in the same way: education is neglected and underfunded so that political elites are no longer disturbed by the protests and rebellions of a class of critical citizens educated by voluntarist and emancipating teachers. Eyes of Europe sees itself as an emancipatory citizen enterprise of resistance against the oppression of a society run and managed by the Big Datas.

Already, today the birthrate is falling in technically advanced countries such as Japan and South Korea, where prodigious efforts are invested in the upbringing and education of fewer and fewer children-from whom more and more is expected.

How could huge developing countries like India, Brazil or Nigeria hope to compete with Japan. These countries resemble a long train. The elites in the first-class carriages enjoy healthcare, education and income levels on a par with the most developed nations in the world. However, the hundred of millions of ordinary citizens who crowd the third-class-carriages still suffer from widespread diseases, ignorance and poverty. What would the Indian, Brazilian or Nigerian elites prefer to do with coming century investing fixing the problems of millions of poor or in upgrading a few million rich? (p.349)

.This is indeed the question that must be brought up regarding education. One could explain the disinterest in politicians for public education for precisely such reasons.

In the 21st century, the most efficient strategy may be to let go all the useless third class carriages, and head forward with the first class only to. In order to compete with Japan, Brazil might need a handful of upgraded superhumans far more than millions of healthy ordinary workers. (p. 349)

We seem to come back most surreptitiously to a privileged class of "Superhumans".

The great human projects in the 20th century overcoming famine, plague and war aimed to safeguard the universal norm of abundance, health and peace for all people without exception. New projects of the twenty first century-gaining immortality, bliss and divinity-also hope to serve

the whole of humankind. However, because these projects aim at surpassing rather than safeguarding the norm, they may well result in the creation of a new superhuman cast that will abandon its liberal roots and treat normal humans no better than the 19th century Europeans treated Africans.

If scientific discoveries and technological developments pledge humankind into a mass of useless humans and a small elite of upgraded superhumans, or if authority shifts altogether away from human beings into the hands of highly intelligent algorithms, then liberalism will collapse. (p. 350)

But what will be the ideals of this super caste / class? I find it hard to imagine anything other than a remake of the Third Reich, an elitist and dominating chivalry, the ultimate avatar and revenge of the white race in decline. Most men and women will be made redundant by the new technologies but they will not be sent to annihilation camps. But they will most likely be abandoned to their sad fate: pure and simple social disintegration. How can we reconcile this with the demographic explosion that is predicted in Africa and the entire southern hemisphere? What are the values, what is the project and what is the culture of the new dominant "hyperclass" as Jacques Attali calls it and which is believed to be nomadic and cosmopolitan. In short, we are witnessing the devaluation of Homo sapiens, which is likely to suffer the same fate as that of the Jews in the Hitlerite Reich.

The machines have never made man happy and advanced technology will not succeed either. Happiness is not in technology; it is still in the mind. Only who is master of his mind can find happiness, no one else can. No one can hope to be happy if he proves incapable of conquering himself. Learning to think for oneself is therefore essential. The most important thing is to take an active part in your own education. And this is precisely what EOE wants to encourage and achieve: urging young people to do their own education, i.e. practicing self-learning from an early age, share knowledge and learn from one another.

*"In 2030, artificial intelligence (AI that brings together all the advances and techniques to reproduce human intelligence) will be fully integrated into autonomous information systems for companies, and robots for individuals, which makes it possible to learn, create music and stimulate emotions. The distinction between man and artifact, and thus between mortal and immortal, will be reduced" (J. Attali, *vivement après-demain*, p. 120)*

"Should we prepare ourselves to relive the barbarity of the elders?

How not to worry about the next generations? Should we accept the collective suicide of our world without reacting" (ibid p. 186)

"There is an urgent need for an ethic breakthrough. and a reorganization of humanity. The destruction of the world is underway." (Ibid)

"As always, when great collective changes are necessary, everything begins with a personal change, an inward mutation: acting upon oneself, to prepare to act on the world so that it remains livable for oneself and the others. This requires selfless ethics that gives meaning to each of our lives and to those of the next generations, allowing them to choose their lives. It is by leading noble lives that the world will be saved." (p.190)

Homo deus will retain some essential human features, but will also enjoy upgraded physical and mental abilities that will enable it to hold its own even against the most sophisticated non conscious algorithms.

70.000 years ago, the Cognitive Revolution transformed the Sapiens mind , thereby turning an insignificant African ape into the ruler of the world. The improved Sapiens minds suddenly had access to the vast intersubjective realm which enabled us to create gods, incorporations, to build cities and empires, to invite writing and money and eventually to split the atom and reach the moon. As far as we know, this earthshattering revolution resulted from a few small changes in the the Sapiens DNA and a slight rewiring of the Sapiens brain.

If so, says techo-humanism, may be a few additional changes to our genome and another rewiring of our brain will suffice for launching a second cognitive revolution. The mental renovation of the first cognitive revolution . The first C. R. gave homo Sapiens the access to the intersubjective realm and turned us into the rulers of the planet; a second cognitive revolution might give homo deus access to unimaginable new realms and turn us into the lords of the galaxy. (p. 350)

If we have understood Harari well, what is in preparation is a revival of feudalism or the reintroduction of Nazism by other more efficient means.

Wherever Hitler and his ilk planned to create superhumans by means of selective breeding and ethnic cleansing, twenty first century techno humanism hopes to reach that goal far more peacefully, with the help of genetic engineering, nano technology and brain-computer interface. (p. 353).

WE DON'T KNOW WHAT MENTAL AIM TO SET TO OURSELVES. (p. 353)

We may successfully upgrade our bodies and our brains, while losing our minds in the process. Indeed, techno humanism may end up downgrading humans. The system may prefer downgraded humans not because they would possess any "superhumanness " but because they would lack some really disturbing human qualities that hamper the system and slow it down. (p 363)

Artificial Intelligence and biotechnology might soon overhaul our societies and economies and our bodies and minds too; but they are hardly a blip on our political radar? Our current democratic structures just cannot collect and process the relevant data fast enough, and most voters don't understand biology and cybernetics well enough to form any pertinent opinions.

Hence traditional democratic politics loses control of events, and fails to provide us with with meaningful visions for the future. (p. 375)

While communists and nazis tried to create a new society and a new human with the help of the steam engines and typewriters, today's prophets could on biotechnology and supercomputers. (ibid)

There would be a library to write about Hitler and the technique he used at all levels. Hitler's propaganda was able to take advantage of all the technological innovations then available to spell the German people with his superhuman ambitions.

It is precisely at this level that the role of Eyes of Europe must be contemplated. Perhaps will it be enough to educate one or two generations of extremely critical and autonomous European citizens in order to prevent things from turning into a drama for mankind and civilisation.

In the twenty-first century, traditional political structures can no longer process the data fast enough to produce meaningful visions, the new and more efficient structures will evolve to take their place. These new structures may be very different from any previous political institutions whether democratic or authoritarian.

Precisely because technology is now moving so fast, and parliaments and dictators alike are overwhelmed by data they cannot process quickly enough, present-day politicians are thinking on a far smaller scale than their predecessors a century ago. In the early twenty-first century, politics is consequently bereft of grand visions. Government has become mere administration. It manages the country but it no longer leads it. It makes sure teachers are paid and sewage don't overflow, but it has no idea where the country will be in twenty years. (p. 376)

The only question is who will build and control these structures. If humankind is no longer up to the task, perhaps it might give somebody else a try. (p. 377)

A conversation between a peasant, a priest and a physician may produce novel ideas that would never emerge from a conversation between three hunter-gatherers (p. 378)

Therefore a permanent EoE interactive dialogue between teenagers across Europe in real time and in English (globish) may help produce critical alternatives.

Where there is a strict limit to the number of Neandertals, chimps or elephants you can connect to the same net, there is no limit to the number of Sapiens. (p. 378)

We often imagine that democracy and the free market won because they were "good". In truth they won because they improved the global data-processing system. (p. 380)

Humans are merely tools for creating the Internet-of-All-Things, which may eventually spread out from planet Earth to cover the whole galaxy and even the whole universe. The cosmic data-processing would be like God. It will be everywhere and will control everything and humans are destined to merge into it. (p. 381)

Why did the USA grow faster than the USSR? Because information flowed more freely in the USA...(p. 384)

Every individual is becoming a tiny chip inside a giant system that nobody really understands.

Dataism is the first movement since 1789 that created a really novel value: freedom of information that mustn't be confused with the old liberal ideal of freedom of expression. (p. 382)

EYES OF EUROPE STANDS FOR FREEDOM OF EXPRESSION. IT THEREFORE FEELS IT HAS AN ESSENTIAL ROLE TO PLAY IN THE GREAT METAMORPHOSIS THAT IS TAKING PLACE FOR THE MOMENT.

Dataists believe in the invisible hand of the data flow.

As the global data-flow processing system becomes all knowing and all-powerful, so connecting to the system becomes the source of all meaning. Humans want to merge into the data flow because when you are part of the data flow you are part of something much bigger than yourself. Traditional religion told you that God watched you every minute and cared about all your thoughts

and things. Data religion now says that your every word and actions is part of the great data flow, that the algorithms are constantly watching you and that they care about everything you do and feel. (p. 386)

Dataism may sideline humans by shifting from a homo-centric view to a data-centric view. (p. 389)
That shift won't be a philosophical revolution, it will be a practical revolution. (p.390)

For millions upon millions of years, feelings were the best algorithms in the world. (p. 392)

One understands why google and Facebook are so anxious to collect data from all at all times.

The Google and Facebook algorithms not only know exactly what you feel, they also know a million things about you that you hardly suspect. Algorithms know better than yourself how you feel.

In order to make the right decisions you get to know yourself better. But if you want to know yourself in the twenty-first century, there are much better methods than climbing mountains, going to museums or writing diaries. (P. 392)

Dataism naturally has its critics and heretics. (p. 393)

A critical examination of the Dataism dogma is likely to be not only the greatest scientific challenge of the twenty first century but also the most urgent political and economic project.

If dataism succeeds in conquering the world, what will happen to us humans? (p. 394)

Once we abandon the homo-centered world view in favour of a data-centric world view, human health and happiness seem far less important.

Dataism thereby threatens to do to Homo sapiens what Homo sapiens has done to all other animals. (p. 395)

Once humans lose their functional importance to the network, we will discover that we are not the apex of creation after all. (ibid)

WHAT DOES OUR FUTURE HOLD?

*How to prevent the great catastrophe that threatening our democratic society from happening?
Are the times indeed "out of joint"? (Jacques Attali)*

We are obviously heading for a world catastrophe resulting from the use of new technological means and methods to achieve new forms of human barbarism.

Is it credible to imagine that a great ethical breakthrough could reverse the tide? Another attitude is needed in order to promote a new form of altruism that cares about the future of generations to come. (J.A.)

It may be essential to focus on the realization of our precious lives and understand that our happiness is essentially linked to that of the others.

Education may be the very last hope. But education too may soon be enslaved to technology as Harari is suggesting in his book.

But education needn't be enslaved to technology it may well decide to become its master.

Educational systems are failing in most western countries even in the USA. It is time for a radical change. J.A.)

DON'T PANIC THE MACHINES ARE COMING. (Benjamin Bidder, SPIEGEL-MAGAZINE)

Computers, robots, artificial intelligence: Researchers at the University of Oxford fear that around half of all jobs will be lost and used by machines.

Digitization will radically revolutionize the potential of the world of work and society: mass unemployment threatens because machines will be able to take on routine tasks.

Robots will soon be supervising robots that make other robots.

Economics Nobel Prize laureat Robert Shiller, shares this view

We happen to be the powerless witnesses of an imperceptible revolution that is gradually transforming our democratic societies almost without our knowledge. This subtle but wicked metamorphosis has been going on for several decades now. It is even more radical than the drastic change caused by the massive use of oil at the beginning of the 20th century which has profoundly transformed the destiny of humans, their societies and the face of the planet. The coming digital revolution generated by the Big Data is a lot more powerful and devastating. It actually threatens to destroy every form of private life as well as our precious individual freedom. It tends to radically transform our democratic fabric into some sort of soft totalitarian dictatorship. The ambition of the Big Data is *to rid the world of its unpredictability.* (Dugain, Labbé, *the naked man*, p. 2)

The surveillance of every human person, everywhere and all the time will soon be the rule. Very few will escape, unless they agree to be part of a new category of marginals. It does indeed come down to a question of resisting this new form of *voluntary enslavement*, implemented by a total technological information system. Today, it is the USA that happens to control the Big Data, not Europe.

Never in the history of mankind have so few individuals concentrated so many powers and wealth in so few hands. *The digital world has given birth to a hyper oligarchy.* (ibid, p.24)

According to Denis Gabor (Nobel Prize in Physics 1971), *all that is technically feasible must be realized, whether this realization is judged moral or condemnable.*

Our democracy seems totally unsuited to resist this frightful superhuman challenge.

Despite their cool and casual attitude, the pioneers of the digital revolution in jeans and open shirts barely conceal an inflexible desire to put an end to democracy. (ibid 29).

In fact, we are witnessing the transformation of humanity in the direction of voluntary enslavement. This implies the very negation of the concept of responsible citizen invented by the Greek and incarnated by the English, American, French revolutions and especially encouraged by the Enlightenment.

The Silicone Valley new elite dreams of an algorithmic governance that does no longer relies on the capacity of judgment of us, citizens. They seem willing to be trying to take away from us every desire to remain free citizens.

A majority of humans are hardly aware that they are gradually losing their free will.

When we connect on the web, we believe that do it freely but we actually submit to the power and control of the machine (p. 39)

The essential thing for free and autonomous citizens are exciting contacts, connections, exchange and dialogue. The human brain develops, diversifies and enriches itself through interactions with the surrounding environment and intense exchange with other men and women.

Man is a social animal that has played the collective card for thousand of generations. Its strength has always been in group work: empathy, solidarity and dialogue.

A people willing to sacrifice a little freedom for a little security deserves neither the one nor the other and ends up losing both. B. Franklin 1755)

We are exposed to a form of soft and apparently painless dictatorship in which every individual must accept that parts of himself can and will be revealed to a planetary and total surveillance system of all humans.

Europe in particular seems incapable of countering the present American hegemony over information, which relegates it to the status of a secondary and vassal nation. (p.51)

Total transparency resembles a new form of inquisition (ibid p.64). We are gradually landing in a kind of revisited Brave New World. Will it be possible to escape it.

How are we to resist (p.66)

The dictatorship described by Orwell in his 1984 looks ridiculously archaic compared with the technological sophistications of today. *Technique is no longer in harmony with man; it is gradually becoming a monstrous outgrowth* (p.83)

BIG DATA IS GRADUALLY TURNING MAN INTO AN OBJECT. (P.84)

These big data aim to empty democracy of its subversive substance and nature in order to leave behind only an apparently intact empty shell.

We are witnessing the death of politics and the stifling of all critical spirit.

School could, however, be a disconnected space for reflection; a place of resistance where the critical spirit would be transmitted. Unfortunately it is affected by the technological trend. (p.106)

Eyes of Europe intends to lead this movement of European resistance against the resistable advance of the US Big Data.

Every human being is a source of creativity but they need to be constantly stimulated by intellectual interactions that awaken them. Yet they are constrained more and more by automated control of knowledge (ibid, page 107). *In such a context, brains risk unlearning.* (p.110)

Eyes of Europe intends on the contrary to stimulate them constantly in order to awaken the conscience of the young Europeans and to emancipate their spirits.

Google is trying to shape the humanity of tomorrow in its sole interest. (p.137)

The whole question of education now revolves around the need to make the citizen the center of gravity of the school. (p 189)

It is precisely Eyes of Europe's ambition to achieve such a goal by creating a real virtual *citizen agora* to which a majority of European students could participate in real time and in English (globish).

As an interactive learning platform, EoE is basically about multiplying interactions between them. It is vital, we have insisted on that repeatedly from article to article, to forge a European public opinion. Therefore it is necessary to educate a generation of European citizens in order to create a European people. First and foremost, we need to form, educate and train a generation autonomous and critical citizens capable of taking part actively in the democratic process.

The act of resistance requires a return to the productions of European and world culture (p.190)

More than ever, the great works-art, music, literature, philosophy...- of the cultural heritage must be (re)visited and questioned and solicited by all pupils. *Greek thought and that of the Renaissance and the Enlightenment, are necessary to nourish the critical spirit* (p.190)

It comes down to creating a counter-power by putting the human being at the center of the game. (p.195)

The achievements of mass literacy in the 19th and 20th centuries was a prerequisite for the foundation of a democratic dynamic.

What is at stake now is not only the survival of humanity but above all the persistence of humanity in each of us: *Menschheit* (Kant), the humanity of man. Man tends more and more to reduce himself to a technological machine. It is not altogether impossible that we have reached the twilight of humanity or at least of its western version.

Increasingly, *democracy is reducing itself to managing insignificance* (Costoriadis) .

We really need an ethical and democratic breakthrough pretty soon.

This implies a renewal of consciousness, will and autonomous thought. Young people need to be taught *to think without mad guards* (Hannah Arendt) in order to develop their will to resist. This means transmitting a culture that is not based solely on money and technology. Sharpening the weapons of the critical reason is therefore essential if we wish to oppose the forces of inhuman barbarism. Eyes of Europe intends to rediscover the path that leads to the *humanity of man*. There is indeed an urgent need to re-establish the principle of humanity, of freedom, of responsibility and of altruism.

To *institute* humanity in man sums up the whole project of Eyes of Europe, project of both resistance and commitment.

It is becoming urgent to set limits to the invasion of the Big Data. The limit that must not be transgressed is obviously that of *human dignity*.

Eyes of Europe will have to devote itself to this dissident tendency in order to fight in favour of human decency. The hyperconnected man is a manipulated man who accepts to be conditioned. Eyes of Europe advocates emancipation in the face of the soft tyranny of technology.

Faced with the growing totalitarianism of Google and the social networks, E.o.E. is advocating a critical and emancipating education that favours the revival of a decent human society. It is determined to oppose a moral counter power against every form of technological imperialism.

TO SUM IN UP IN THE WORDS OF HARARI:

"The question should be what kind of usage to make of the new technology .

I think morality is more important than ever before.

Get to know yourself better, and especially what you really want from life, because otherwise technology tends to dictate to people their aims in life, and instead of technology serving us to realise our aims, we become enslaved to its agenda. And it's very difficult to know what you really want from life. I'm not saying it's an easy task.

A critical examination of the Dataism dogma is likely to be not only the greatest scientific challenge of the twenty first century but also the most urgent political and economic project. If we act wisely, we can change the world, and create a much better one. (Harari)

Eyes of Europe intends to act wisely and bring about a new political and citizen consciousness.

We don't know what mental aim to set to ourselves. (Harari)

Eyes of Europe definitely knows what aim to suggest to our European youth. It is is prepared to tackle the challenge of all challenges: the revival of democracy.

Eyes of Europe wants technology to remain democracy's slave and not to become its master.

MARC GUIOT

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