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Of an animal that enchanted and conquered the world.
A concept history of humankind according to Yuval N. Harari

Human’s endeavours to write a World History (i.e. Man-Made History) is not perhaps as old as we humans are, but not too far from it if one remembers Herodotus’s *The Histories*. Yet in the former centuries it was probably easier to accomplish such a task, since the amount of accessible historical data was still possible to process by an individual. Some of the best examples of similar trials we find in our grandparents’ reads: H. G. Wells’ *The Outline of History* and A. Toynbee’s *A Study of History*. Nowadays though, the burden of information regarding the whole course of human civilization is well beyond individual comprehension and unbearable. And unsqueezable too, into, say, 500 pages of a paperback. If one bravely undertook the challenge, he or she would have to first find a key to organize the enormous material at hand. An Israeli historian of the Hebrew University in Jerusalem, Yuval Noah Harari, with PhD in history from Oxford, seems to have found an organizational principle helpful enough to cut his way (or a shortcut, really) through the 70 thousand years of our history.

The plot of the book is told through three great revolutions in human history. Although writing a revolution–oriented history book may not strike one as novelty, considering the time span in question and the very content of what stands for a revolution for Harari, we start to appreciate the enterprise called

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Sapiens – even despite the numerous, provocative sounding (or at least thought-provoking) theses and remarks. But to the point: what’s the key? Well, it seems that Dr Harari decided to write a book on the history of an animal: Sapiens, one of the species of Homo, who about 70 thousand years ago, due to some genetic mutations, entered an absolutely idiosyncratic path of development that made him create an elaborate and highly complex realm of non-existent entities (ideas, beliefs, fantasies and concepts). “Non-existent” because for other members of the animal kingdom, only the material world really exists, and anything non-sensually perceived must be labelled as above. In other words Sapiens created “culture”, understood by Mr Harari as a network of artificial instincts enabling millions of strangers to cooperate effectively. He elaborates on this understanding of culture by saying that myths and fictions accustomed people, nearly from the moment of birth, to think in certain ways, to behave in accordance with certain standards, to want certain things, and to observe certain rules. Alongside this naturalistic explanation of culture and its role, there came an equally long-lasting side-effect of the process – the merciless conquest and exploitation of the natural world bringing it nowadays to the brink of extinction.

Well, it all began once upon a time in a distant corner of Africa. The first Revolution, the Cognitive one, commenced as far back as 70 thousand years ago. Even Harari, born in 1976, must remember history handbooks that used to begin our history with ancient Sumer or Egypt – a mere 5 thousand years ago. But 70 makes a difference. It is due to technology-backed archaeological discoveries of the last few decades that we now know that our Homo sapiens ancestors lived rich cultural and spiritual lives. The Cognitive Revolution consisted largely in working out an articulate language – a genetic mutation altered the inner structure of Homo sapiens, which enabled us to think in a complex way and to communicate. We developed an ability to talk about things that don’t really exist, i.e. non-material objects: ideas, fantasies, dreams and deities. As far as we know – says Mr Harari – only sapiens can talk about entire kinds of entities they have never seen, touched or smelled. Obviously we do not know much of the course of the revolution – not only details, but even its outline is shrouded in a mystery. It is hoped, however, that DNA research will help solve some of the riddles. What’s crucial: the Cognitive Revolution was the point when history declared its independence from biology.

2 Ibidem, p. 27, 41.
One of the first illustrations used in *Sapiens* is an ivory figurine, the Lion-man from the Stadel Cave in Germany. It is a human body with a lion’s head and it was made c. 32 thousand years ago. Harari consequently emphasizes the fact that we are not much different from animals – in fact, he sometimes speaks of us as animals (*animals such as cattle, sheep and Sapiens*) and, vice versa, of animals as an integral part of society (*Today the society called New Zealand is composed of 4.5 million Sapiens and 50 million sheep*). We are no crown of God’s creation whatsoever. *Homo sapiens* long preferred to view itself as set apart from animals, an orphan bereft of family, lacking siblings or cousins, and, most importantly, without parents. But that’s not the case (...) Just 6 million years ago, a single female ape had two daughters. One became the ancestor of all chimpanzees, the other is our own grandmother. We are *Sapiens*, but historically not the only *Homo*. On the way we met other species of *Homo* and some of them we managed to drive to extinction, like *Homo neanderthalensis*, with whom we co-lived in Europe between 40 and 30 thousand years ago. This has been to the effect that today, and for the last 30 thousand years, we have been the last *Homo* species.

What will then happen to us in the future? How shall we perish? This is the matter of the last, third revolution. In-between those two however, occurred the Agricultural Revolution. It started circa 10 thousand years ago, and transformed us from hunter-gatherers into farmers. Was it undeniable progress that provided all the generations to follow with a more reliable source of food and permanent shelter? A prerequisite for the development of culture, created by safe and well fed humans? Not necessarily. It all happened at the cost of the rest of the natural world and, regarding the lot of majority of human population, changed free people into slaves or overburdened labourers in the soon formed hierarchical society.

The latest Revolution began only 500 years ago and it is called Scientific. Its achievements so far, its present stage that we are witnessing, and the soon-expected outcomes lead us to think that it is the most “revolutionary” one by far – even to the extent of closing the history of our species. Such was the case of other representatives of the animal kingdom – consecutive waves of human colonisation in, say, America or Asia, brought about massive extinctions and swift ecological disasters that befell the animal kingdom. Such ecological tragedies were *restaged in miniature countless times after the Agricultural Revolution*. Whenever the well-being of the natural world is at stake, Dr Harari is unceas-

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ingly critical of the results of scientific and industrial revolutions, of progress and the colonisation of the world by the Westerners.

Out of all humankind’s stubbornly insoluble problems, one has remained in its indisputable sombreness and gravity: the problem of death. At least for the last three centuries, since the Enlightenment, the proponents of progress, scientists and makers of the industrial revolution have challenged hosts of those problems and succeeded. The most apparent proof of this is that there are almost 7.5 billion people on Earth now, approximately ten times more than in preindustrial times. There are more of us, we live longer and safer lives but the last frontier – defeating death, is still beyond our reach. Another advantage of Harari’s historical account surfaces here. At present, we are witnessing the most dynamic phase of the scientific revolution. We watch history change into the future of mankind before our very eyes. The Israeli historian devotes quite a lot of attention to the shapes this future may adopt. One of them, which Harari dubs the “Gilgamesh project”, aims to conquer death and make us immortal – or at least help us stay in longevity in good physical and mental shape: The leading project of the scientific revolution is to give humankind eternal life. It might be a matter of a few centuries, or even decades, for dynamically advancing medicine to accomplish this task. You may well associate that project with an expectation of the recently famed “Singularity” – in the hope of many, an epochal transformation, a fast approaching phase in scientific progress that will transfer humanity into a radically higher level of development (a fourth revolution?)

Meanwhile, at the beginning of the twenty-first century, Homo sapiens is transcending the limits set to life by biology, let alone by gods, who are only

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4 The total number of Sapiens that have lived so far is probably around 106 billion. http://www.worldometers.info/world-population/; http://www.worldometers.info/world-population/#total (1.02.2017).
5 Y. N. Harari, op. cit., p. 298.
6 The concept of technological singularity was popularized by Ray Kurzweil in his book The Age of Spiritual Machines: when computer exceed human intelligence (Penquin, New York 2000), where he argued that human beings are no more than a stage in the evolution of matter directed towards ever higher complexity. Within the period of three coming decades, all that makes us uniquely human like our genome and cognitive abilities is going to have been mapped, virtualized and stored independently of biological organisms. Cf. D. Rushkoff, Present Shock. When Everything Happens Now, Current. Penquin Group, New York 2013, p. 254–255. Kurzweil’s next book, The Singularity is Near. When Humans transcends Biology (Viking: Penquin Group, New York 2005) intended to familiarise the readers with the future union of human and a machine. Singularity will emerge as the essence of the merging of our biology-rooted intelligence with unlimited powers of computers. This is going to be the dawn of a new civilization; it will transcend our biological limitations.
human-made inventions. Dr Harari concludes that we are (...) now beginning to break the laws of natural selection, replacing them with the laws of intelligent design. And our world is one in which (...) culture is releasing itself from the shackles of biology. Our ability to engineer not merely the world around us, but above all the world inside our bodies and minds, is developing at breakneck speed7. The author lists three possible ways of changing the laws of life: biological and genetic engineering aimed at modifying our body’s shape, our capabilities and needs; cyborg engineering capable of combining organic and inorganic parts of the body; and, engineering inorganic beings where life and consciousness are no longer rooted in biological organism, which would happen for the first time in almost four billion years of the history of life on Earth. During the last century, for the first time in history people recognised the fundamental equality and dignity of all people. Every citizen of a modern, social state, was acknowledged as worthy and eligible for the same medical care if needed. But today the roots of inequality may lie not in status that one is born into, but in financial reserves. The benefits of advanced engineered medicine of tomorrow may be available only for the few who can afford it. And thus the pride of achieving the first-time-in-history basic equality of all humans (...) might be poised to create the most unequal of all societies8.

However, evaluating overall achievements of human civilisation, Dr Harari does not see much to be proud of. The afore-mentioned newly recognised universal equality of all men and women is one of the exceptions. He concedes the point that mastering our surroundings, building cities and empires and increasing food production has improved human living conditions, and reduced plague, famine and wars. Ok, one animal species is better off now. Yet the situation of other animals is deteriorating more rapidly than ever before, and the improvement in the lot of humanity is too recent and fragile to be certain of9. The price of history is the one that the planet and its non-human inhabitants have to pay for human progress.

The author of Sapiens is a great storyteller and synthesiser, a gifted populariser and even an entertainer. Though sometimes he entertains at somebody else’s cost. Pope Francis is shown in one of the illustrations with a caption: The catholic alpha male abstains from sexual intercourse and childcare, even though there is no genetic or ecological reason for him to do so10. A bit unfair and distasteful. But indeed, quite coherent with Harari’s logic and general line of ar-

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7 Ibidem, p. 445, 459.
8 Ibidem, p. 460.
gumentation: animals do not normally abstain from sexual intercourse if *there is no genetic or ecological reason*. Yet advantages prevail. One is that when you are approaching the end of the book, it ceases to be a history account and turns out to be a “live report” from the present moment in the development of Sapiens’ culture. Next, it tries to cast some light on our near future – technology-oriented and by technology dominated. To the majority of the 7-plus billion of Sapiens the looming tomorrow looks murky. To feed and clothe may finally be doable, but to provide us with work in a couple of decades – not necessarily. The eras when masses played a part in economy and warfare are gone. We already do not need 90% of the population working on farms as was the case till the nineteenth century. Industrial production will not engage crowds of workers any more, nor winning the future wars will depend on the numerical strength of armies. The actual problem that the global economy will face soon will be the redundant people, billions of superfluous *Sapiens*, or as Zygmunt Bauman calls these victims, the *human waste* embracing the populations of migrants, refugees and other outcasts of the *brave new liquid modern world* ¹¹.

Harari’s book does not have much to do with “traditional” history written as a record of wars and treaties, battles and dynasties, nor with other, recent one-volume conceptualizations of history, even the excellent ones¹². It is more like a bottom-up approach or a social history with deep interest in ordinary people’s worries and anxieties over past ages. So was the case with his investigations into questions like: were people happier in the past despite the scarcity of material goods? In the past, did we suffer from violence and diseases more than we do today? Harari’s *Sapiens* is a good read. It can introduce and engage a lay reader into a well-informed and thoroughly researched history. All in all, even if one does not fully support the author’s position in this or that point, the book opens a vivid discussion and encourages one to review their standpoint, perhaps by reaching out for other sources.

Harari’s book strikes a difference also because it is in large parts history of... the future, of the Sapiens’s decades to come, being quite possibly the last decades of our species’ last generations. It is all about the Singularity consequences or, as Francis Fukuyama put it: *the consequences of the biotechnology revolution*. And what are they going to consist in? *The most significant threat posed by contemporary biotechnology* – says the author of the concept of “the end of history” – *is the possibility that it will alter human nature and thereby move us into*


a “posthuman” stage of history. History did not end with the fall of communism as Fukuyama prophesized at the turn of the 1980s and 1990s because science positively did utter its final word. Such a future opens before all of us a potential moral chasm13.

Mr Harari concedes that the singularity we are fast getting closer to is the phase (...) when all the concepts that give meaning to our world - me, you, men, women, love and hate – will become irrelevant. (...) What we should take seriously is the idea that the next stage of history will include not only technological and organisational transformations, but also fundamental transformations in human consciousness and identity. And these could be transformations so fundamental that they will call the very term “human” into question14. But will the future human being, as a result of advanced medical engineering, remain a Homo sapiens? Or will it already be somebody (something) different and new?

But still, there remains slight shadow of discontentment, or even some resentment about the way Dr Harari has dealt with the issue of our history, how severely he judged us. Other recent scholarly ideas like the Anthropic principle that originated from the sciences and led to sound philosophical conclusions, appear to be on the very opposite side of a continuum of possible opinions on position and the role of human beings. Anthropic principle, in general refers to the remarkable degree of “fine-tuning” observed within the natural order, and this (...) remarkable convergence of certain fundamental constants is laden with religious significance and as such must remain the most compelling evidence for an element of cosmic design15. It took the universe 13.7 million years to give birth to the first and sole intelligent and self-conscious being we know of. The sole animal deprived of an anima, i.e. soul? There is obviously much more to our history than the guilt of conquering and abusing nature. There is a lasting and strong western philosophical tradition ready to remind one of it. Today,

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14 Y. N. Harari, op. cit., p. 461, 463.

The insight of the Anthropic Principle was introduced by: J. D. Barrow, F. J. Tipler, The Anthropic Cosmological Principle, Oxford University Press, Oxford 1986. They asserted that there exist (...) invariant properties of the natural world and its elementary components which render the gross size and structure of virtually all its constituents quite inevitable. The sizes of stars and planets, and even people are neither random nor the result of any Darwinian selection process from a myriad of possibilities. These and other gross features of the Universe are consequences of necessity; they are manifestations of possible equilibrium states between competing forces of attraction and repulsion. Those controlling forces of nature are known as “the constants of Nature”. The Holy Grail of modern physics is to explain why these numerical constants (...) have the particular numerical values they do. Ibidem, p. 5–6.
a certain conventionality and eco-political correctness sometimes do not emphasize this side of the truth satisfactorily. And in this regard Harari seems to be a conventional historian, author of a book with politically correct theses. The mystery of *Le phénomène humain* – as Pierre Teilhard de Chardin, a fascinated by human uniqueness French paleonthologist and Jesuit philosopher used to put it – does not easily yield ground to any simplified explanations. The riddle of *a thinking reed*, as Blaise Pascal aptly summarized our bi-polar nature, stays reductions-proof.

If it struck the reader that Harari dwelt so heavily on the future by the end of the *Sapiens*, after all a history book, the effect will even strengthen when we turn to the recently released sequel volume called *Homo Deus. A Brief History of Tomorrow*\(^\text{16}\). A history to retell what is yet to come? Is it an oxymoron or indication of *licentia poetica*? Well, when exact sciences come into play it could be neither. We were always able to tell past stories because, more or less, we knew how things had proceeded. However, with regard to the future, we can approximately foresee similar step-by-step procedure because of algorithmic, logical structure of science. At least we know for sure that we cannot stop the progress – Harari implies that our post-human, god-like future is inevitable. The specific factors which will make us like gods, in terms of acquiring some of the attributes traditionally ascribed to God, will be immortality and ability to create artificial life, both thanks to advancement in science. Luckily, some shadowy and ever-present witnesses to human history: famine, plague and wars will sink into oblivion. In fact (...) *humans don’t die because God decreed it, or because mortality is an essentials part of some great cosmic plan*. We always die due to some technical problems, regarding malfunctioning bodily organs and systems. But (...) *every technical problem has a technical solution*. We *don’t need to wait for the Second Coming in order to overcome death*\(^\text{17}\). A couple of professionals will work it out. From priests and theologians death is taken over by engineers. Starting with the moment when (...) *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*\(^\text{18}\). Twenty-first century then is a time for acquiring for us divine powers of upgrading *Homo sapiens* into *Homo deus*. But not for all of us, only for humanity as such, or to be more precise, for those very few who can afford it. Moreover, and more importantly, Harari’s predictions focus on what humanity will be trying to achieve in this new century, not what it will


\(^{17}\) Ibidem, p. 22–23.

Of an Animal that Enchanted and Conquered the World.
A Concept History Humankind According to Yuval N. Harari

The article takes up for a closer scrutiny the concept of universal human history, i.e. of the *Homo Sapiens*, since the very beginning of the species around 70 thousand years ago. And already here surfaces the key characteristics of Y. N. Harari’s attempt to write a concise history – it is a history of an animal called *Sapiens*, ordered in the sequence of three major historical revolutions: cognitive, agricultural and scientific. The first one, 70 thousand years ago, sparked off our history and consisted in creating a language, the
next enabled our rapid civilization development some 10 thousand years ago. And the last one has been in operation since about the year 1500. The author critically assesses human achievements, especially in terms of long-term interfering in natural and global processes and rejects any claims for human’s privileged position in nature.

**keywords:** agricultural revolution, cognitive revolution, humans in nature, man’s abuse of nature, scientific revolution

**słowa kluczowe:** człowiek a przyroda, nadużywanie natury przez człowieka, rewolucja naukowa, rewolucja poznawcza, rewolucja rolnicza