

*Homo Deus: a Brief History of Tomorrow* by Yuval Noah Harari

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*Homo Deus: a brief history of Tomorrow* is Yuval Noah Harari's second international best-seller. Like his first, *Sapiens: a brief history of Humankind* (Harari: 2014; for a review see Lindebaum: 2015), this book is already topping the selling charts across the globe while attracting countless critiques from the scientific community. Indeed, it is written in the same vein: both address a grand topic in a very entertaining style replete with wonderful stories and paradoxes. And both challenge several taken-for-granted assumptions about the world we live in and how we got here. Each book recounts, in 400 pretty well-documented pages, the weird and wonderful history of our species, starting over 70,000 years ago and leading us into a largely undrawn future. However, while *Sapiens* was largely turned towards the past, *Homo Deus* is primarily interested in humanity's future and looks at the past as to a canvas on which our future is currently being drawn.

Overall, *Homo Deus* is neither about management nor about organisation studies. Human organisations are confined to a cameo role in a script that oscillates between macro-historical accounts extending over centuries and anecdotes centred on a few individuals. Yet it could inspire scholars in organisation studies who study how contemporary organisations shape the

future of humanity. The themes it addresses are too important to be neglected, and the relative absence of organisations in Harari's account may encourage us to pursue his journey, albeit with different maps and compasses.

Harari argues that for the first time in History, our species is on the brink of liberating itself from the three evils that have plagued its existence to date: famine, plague and war. As the catchy back-cover puts it: 'War is obsolete; you are more likely to commit suicide than be killed in conflict. Famine is disappearing; you are more at risk of obesity than starvation. Death is just a technical problem; equality is out but immortality is in.'

But as they are about to be fulfilled, the three dreams of perpetual abundance, health and peace give way to three new dreams: immortality, bliss and divinity. While death still has the last word, human beings now enjoy lives that are longer and healthier than ever before. While levels of subjective happiness scarcely improve, humans are now seeking bio-chemical solutions such as drugs and even electrical stimuli targeting specific brain areas. Finally, the divine attributes imagined by polytheist religions are already well within our grasp. We may never become eternal omniscient beings as Allah, Jah or Jehova, but we have already started to acquire Heracles' strength, Hermes' speed, Aphrodite's beauty and Ares' powers of destruction.

Humanity's new dreams share, however, a paradox. Their realisation supposes that we transform the very nature of our humanity and the humanist religion that allowed us to reach the current threshold is unlikely to survive its crossing. For Harari, religion is 'anything that confers superhuman legitimacy on human social structures.' (p. 181). Polytheism legitimised the ways of hunter-gatherers; monotheism those of agricultural societies; and humanism those of modern technologically driven societies.

Humanism, as Harari understands it, is a belief in the sanctity and ultimate authority of human beings but also of their individuality, emotions and desires. While we may not anymore seek worth or meaning in super-human entities, we are encouraged to believe that democratic regimes are worthy and meaningful because they result from the free choice of citizens; economic products because we choose to purchase and consume them; life choices such as marriage because we enter in them freely.

Recent advances in genetics, neurology, psychology and economics, Harari argues, undermine these humanist beliefs. From a genetic perspective, all organisms (including Homo Sapiens) are algorithms: series of simple and predefined steps that, taken together, allow the production of complex activities. In Harari's vivid words: 'Why do I decide to kill my annoying neighbour instead of turning the other cheek? ... I don't choose any of these wishes. I feel a particular wish welling up within me because this is the feeling created by biochemical processes in my brain. These processes might be deterministic or random, but not free.' (p. 284).

Harari's arguments against individuality draw heavily from psychological experiments on brain-split patients who tell one story when they speak and a different one when they write. Harari concludes that, rather than a unified self, people possess two distinguishable selves: a narrative self (mainly located in the brain's left hemisphere) and an experiencing self (right hemisphere). For Harari, such scientific facts indicate the limits of our uncritical belief in humanism and associated ideas. Sapiens did not dominate nature because of their sanctity but rather because, as algorithms, they outperform other species. In this light, our faith in democracy and free-market economies could well be misplaced...

But the scientific debunking of humanism is also significant because it prefigures how the quest for immortality, bliss and divinity could shape humanity's future. And here, Harari

imagines two scenarios in which unenhanced human beings become economically useless because of human enhancement, robotisation and artificial intelligence (pp. 313-27). In the first scenario, humanism continues to act as a guiding ideology for the development of technologies that will control our socio-economic life (think of algorithms purchasing securities) while offering us ever more control over our bodies (think of genetic engineering) and over our minds (think of people wishing for socially acceptable sexual desires). This pursuit will reach its limits, however, when ‘the sacred human will become just another designer product. We can never deal with such technologies as long as we believe that the human will and the human experience are the supreme sources of authority and meaning.’ (p. 366).

In the second scenario, a new religion takes humanism’s place. Dataism, as Harari calls it, ‘says that the universe consists of data flows, and the value of any phenomenon or entity is determined by its contribution to data processing.’ (p. 367). In this view, Sapiens is superior to other animals because its algorithms process more data. For dataism, human beings are not the apex of anything but rather a stepping stone, agent and component, of the forthcoming Internet-of-All-Things. In this brave new world, people willing to know themselves (humanism’s principle commandment) will get their genome sequenced, they will wear biometric devices that continuously measure heart-rate and blood pressure, they will buy a camera and microphone, and put online everything they do. Dataism’s principle commandment thus amounts to: ‘allow Google and Facebook to read all your emails, monitor all your chats and messages, and keep a record of all your Likes and clicks. If you do all that, then the great algorithms of the Internet-of-All-Things will tell you whom to marry, which career to pursue and whether to start a war.’ (p. 393). At this point, some readers might be tempted to guess the algorithm’s answer: marry a geek, pursue a fashionable though

ultimately meaningless career, and wage war against those still concerned with privacy and obsolete humanist ideals

At times, I was left with the impression that *Homo Deus* had been written more to entertain and challenge than to establish a basis for sound discussion. This impression was sustained by the fact that Harari's arguments proceed disjointedly rather than dialectically. Harari likes to present a theory (say the illusion of the unified self) and illustrate it with fascinating experiments. However, rather than presenting the most defensible, if nuanced, version of the theory, he chooses a spectacular strawman. And rather than attempt a synthesis between the theory he is presenting and any inconvenient facts that could be opposed, he simply introduces another exciting theory, without worrying too much about in/coherence. The book is thus replete with sudden twists regarding economic theory (p. 373), psychology (pp. 298-9), and even the conception of humans as algorithms on which the whole book is built (p. 395).

That said, the feature that really made me cringe was the caricature of humanism that Harari draws on. Harari's version of humanism could perhaps be termed *consumerist humanism*. It consists in believing that the world exists mainly for human consumption, that there exists an original self that just waits to be discovered, and that our immediate feelings are ultimate sources of authority. The problem is that most contemporary philosophers who identify with humanism would also reject Harari's version of it. Perhaps Harari could have acknowledged that there exist different variants of humanism? And perhaps he could have considered the more sophisticated, and equally fascinating, approaches inspired by Buber (1958) and Levinas (2003) for whom what is both specific and valuable about human beings is that their subjectivity is formed within intersubjective I-Thou relationships. Under such a conception, caring for others is not justified because it soothes one's feelings, but rather because one's

continuous subjectivity is sustained through one's relation to others. And our individuality is not given at birth but painfully and tentatively constructed throughout our life.

Once Harari's conception of humanism is recast as consumerist humanism, many of his examples lose their glitter. Harari is right to point out that I have not chosen to feel a death-wish whenever I felt tempted to kill my annoying neighbour rather than turn the other cheek. Unfortunately, Harari's discussion of this example, and many others, stops precisely where human reflexivity begins. I may have not chosen my desire to kill my neighbour but I can reflect on it. I can put it in perspective along other desires (avoiding jail, but also nurturing a nice neighbourhood). I can imagine the suffering caused to my neighbour's family and I can question the kind of person I would become if I ever let such desires govern my actions.

Moreover, the impoverished conception of human beings conveyed by both (consumerist) humanism and dataism made me wonder where Harari stands himself on the question of the worth of human beings and their capacity for deep reflection? Isn't there a performative contradiction in taking the pain to write a 400 pages book on the future of humanity if humans are either consumption dopes or a mere algorithm among others? A charitable interpretation is that Harari is dissatisfied with both (consumerist) humanism and with dataism, and that he would like to provoke readers into questioning both ideologies' assumptions and their foreseeable consequences.

Despite its inconsistencies, *Homo Deus* could inspire novel avenues of study for organisation studies. While the ailments of consumerist humanism have already been studied by Cederstrom and Spicer (2015), Fleming (2009), and Willmott (1993) among others, dataism could perhaps provide another fruitful topic of cultural critique. Without presuming of the content of yet-unwritten papers, I would personally expect to witness dataist ideas to surface

both as a theoretical framework in the discourse of scholars in organisational studies and as a form of legitimisation for members of contemporary organisations.

More generally, Harari's macro-historical account oscillates between grand developments and individual experiences. The organisational meso-level is missing, and this is significant since most persons producing or consuming trans-human innovations do so because they are members of organisations. While Harari mentions Google and Facebook, he treats them as he treats the ancient gods of Mesopotamia, that is as 'fictitious legal entities that own property, lend money, hire employees and initiate economic enterprises' (p. 156-7). Without disagreeing that corporations are fictitious legal entities, I would immediately add that they operate through specific dynamics that are well-worth understanding if we want to explain why decent persons end up producing human enhancements and artificial intelligences that corrode human dignity. A story recounted in terms of economic competition, lobbying of parliaments, business models and HR practices would certainly refine the picture while indicating possible points of inflexion and resistance.

While the production of trans-human innovations happens in organisations, so does their consumption. Harari remarks that Israeli students are waging an arms race on performance-enhancing drugs, but the wider synergy between workplace competition and adoption of human enhancements is well worth examining further. After all, in a period of precarious employment and meagre safety nets, many workers might feel under pressure to enhance their work capacity compared to colleagues, especially if the latter are already enhanced humans. Through what patterns, if any, are enhancements adopted? What are the various attitudes of participants regarding the latter? How do they justify their choices? And how do they attempt to resist?

Talking about resistance, Harari's view that algorithms are gaining ever wider and deeper influence on our lives is very plausible. Missing from his account are, however, the acts and campaigns of resistance that I would also expect to witness. No doubt that OS scholars interested in resistance and/or in social movements might bring a contribution to understanding whether, how, where and why people and organisations attempt to resist the power of algorithms.

Finally, the near-absence of organisations in Harari's account made me wonder who will own the robots and the human enhancers? While Harari never mentions this question, I believe it could make the difference between a utopia and a dystopia. Call me a post-Marxist if you will but I believe that collectively owned robots could mean lives dedicated to art, to caring for one's friends, and to proudly performing the most complex jobs that no robot can. Privately owned robots could easily result in large populations of ex-workers facing poverty because their skills have lost market value. Conversely, collectively owned patents on human enhancements might allow us some room to debate which enhancements are worth adopting but also how they should be distributed so as to avoid a schism between enhanced and unenhanced humans. The History of Tomorrow is still to be drawn, and fought.

## **References**

Buber, M. (1958). *I and Thou*. New York: Scribner.

Cederstrom, C. and Spicer, A. (2015). *The Wellness Syndrome*. Cambridge: Polity Press.

Fleming, P. (2009). *Authenticity and the Cultural Politics of Work*. Oxford: Oxford University Press.

Harari, Y. N. (2014). *Sapiens: a Brief History of Humankind*. London: Random House.



Harari, Y. N. (2017). *Homo Deus: a Brief History of Tomorrow*. London: Vintage.

Levinas, E. (2003). *Humanism of the Other*. Chicago: University of Illinois Press.

Lindebaum, D. (2015). Book review: Sapiens: a brief history of Humankind. *Management Learning*. 46(5), pp. 636-8.

Willmott, H. (1993). Strength is ignorance; slavery is freedom: managing culture in modern organisations. *Journal of Management Studies*. 30(4), pp. 515-52.