Café Economics

Humankind's Comparative Advantage



Humans have dominated the planet by telling stories; **Yuval Noah Harari** says we may soon no longer hold the pen

Note: the fictional Homo economicus, the hyperrational model used to explain our financial choices, the decisions of Homo sapiens have always been highly influenced by social settings and the emotional drives prompted by stories.

A seeker at an early age, Yuval Noah Harari has written about human evolution as a philosopher and historian. *Sapiens: A Brief History of Humankind*, published in 2014, became an international phenomenon and is available in nearly 40 languages worldwide. His latest book, *Nexus: A Brief History of Information Networks from the Stone Age to AI*, looks at the evolution of human communication networks and how artificial intelligence could ultimately beat us at our own game.

Harari is currently a lecturer in history at the Hebrew University of Jerusalem and a distinguished research fellow at Cambridge University's Centre for the Study With the rise of AI, the stories that sustain human societies are generated by a nonhuman intelligence, Harari tells F&D. of Existential Risk. He spoke to F&D's Bruce Edwards about storytelling, trust, and AI.

F&D: One of the basic principles you build your history of sapiens on is our unique ability to imagine the future. How has our storytelling allowed us to prevail over other species evolving alongside us?

YNH: Our power is cooperation. Chimpanzees, for instance, can cooperate only in very small numbers, but Homo sapiens can cooperate in unlimited numbers. You have 8 billion people in the world today who-despite many differences and many conflicts-are almost all part of the same trade networks. The food we eat, the clothes we wear, the energy we consume-it often comes from the other side of the world, from people we've never met. These large networks of cooperation are our superpower and are based on trust. So how do you build trust between strangers? The answer is "stories."

We build trust by inventing stories that many people believe. It's easiest to understand in the case of religions, where millions of people can cooperate on charitable enterprises, like building hospitals, or on waging holy wars, because millions of strangers believe in the same mythology. But it's also true in the case of the economy and the financial system, because the most successful story ever told is the story of money. It's basically the only story that everybody believes.

F&D: And yet you've described money as being nothing more than a cultural artifact.

YNH: Yes. Money is a story, a fiction it has no objective value. You can't eat or drink currencies like banknotes and coins. However, you can go to a stranger and hand them a worthless piece of paper in exchange for some bread that you can eat. It's all based on everybody believing the same stories about money, and when people stop believing in the story, everything collapses. We've seen examples of this throughout history, and we also see it today with the rise of new types of currencies. What are Bitcoin, Ethereum, and all these cryptocurrencies? They're stories. Their value depends on the stories that people tell and believe about them. And you see the rise and fall of people's trust in the story in the rise and fall of the value of Bitcoin.

F&D: In your latest book, *Nexus*, you say we're moving away from the money economy to one based on the exchange of information rather than currencies. What does the information economy look like?

YNH: To start with an example, one of the most important corporations in my life is Google. I use it every day, throughout the day. But you would never know from my bank account, because no money is changing hands. I don't pay Google anything in money, and Google doesn't give me money. I get information from Google.

F&D: And Google gets information from you.

YNH: Exactly. Google gets a lot of information from me about my likes, dislikes, opinions-whatever-and then uses this information. More and more transactions in the world follow this format of information in exchange for information and not something in exchange for money. And power, wealth, the meaning of wealth shift from having a lot of dollars to having a lot of petabytes of information. What happens if the most powerful people and corporations are wealthy in the sense that they have huge stores of information that they don't even bother to monetize, to exchange for money, because they can get anything they want in exchange for information? Why do we need money? If you can buy services and goods with information, then you don't need money.

F&D: So Nexus builds on this idea that our power structures and belief systems have emerged throughout human evolution from stories and puts it in the context of today's technology. What does the book tell us "Al is fundamentally different from everything we've invented so far. It's the first technology in history that can make decisions and create new ideas by itself."

about the perils of these increasingly sophisticated information networks?

YNH: The first, almost philosophical, message is that information isn't truth. Most information is fiction, fantasy, and delusion. The truth is costly; you need to do research, you need to gather evidence; you need to invest time, effort, money in producing the truth. And the truth is often painful, so the truth is a very small subset of information.

Another message is that we're in the process of unleashing on the world the most powerful technology we've ever created: AI. AI is fundamentally different from printing presses, atom bombs from everything we've invented so far. It's the first technology in history that can make decisions and create new ideas by itself. An atom bomb could not decide who to bomb; AI can. AI can make financial decisions and invent new financial devices by itself, and the AI that we're familiar with today, in 2024, is just the very primitive first step in the AI revolution. We haven't seen anything yet.

And one important thing, especially relevant for the IMF, is that a very small number of countries are leading the AI revolution. Most countries are very far behind and, if we're not careful, this will be a repeat of the Industrial Revolution, on steroids. In the 19th century a few countries—Britain and then the US, Japan, Russia—industrialized first. Most countries did not understand what was happening. What is this thing with steam engines and telegraphs? Yet within a few decades the entire world was either directly conquered or indirectly dominated by those few industrial powers. There are many countries that are only now beginning to recuperate from the damage done as a result of this industrial conquest.

And now we have this tsunami of AI. Think of what the steam engine and the telegraph did to equality in the world, then multiply it by 10, by 100, by 1,000. Then you start to understand the consequences of just a few countries monopolizing the enormous power of AI and all the others left behind to be exploited and dominated in ways we have no precedent in history for.

F&D: So unchecked AI is dangerous, as you say in your book *Nexus*. But humans, as you also make clear in *Sapiens*, have run roughshod over the planet with impunity, "like gods who don't know what they want." Is there something that economics can offer to soften the impact of these two potentially destructive forces coming together?

YNH: Economics is all about shaping priorities. You have limited resources with

so many different desires and needs, so there is the truth question and the desire question. What are the facts, and what do we want?

When it comes to the desire question, the best system we've come up with is democracy, where you ask people what they want. And the desires of somebody with a PhD in economics or a Nobel Prize are no more important than the desires of somebody who did not finish high school. The aim of the democratic system is to give equal weight to everyone's desires. Then you have the question of truth: what are the facts? Democracy is not an ideal system for deciding that. If you want, for instance, to know whether the earth's climate really is heating up, and whether this is a consequence of human action or of some natural cycle of the sun or whatever, this should not be a question for democratic elections. This is a question of truth, not a question of desire.

One thing we've learned about humans over thousands of years is that people often desire the truth to be different from what it is—for personal reasons, for religious reasons, for ideological reasons. If you want to know the facts, you need to build institutions of experts who know how to analyze the evidence, but they should not dictate our desires or tell us what to do. You have experts telling us, yes, climate change is real, these are the causes—then the ball goes to the democratic playground.

F&D: But the democratic decisions people make are based on the stories they hear, so what happens when those stories are no longer told by humans?

YNH: We have an earthquake. Human societies are based on trust; trust is based on information, on communication, and a major change in communication technology destabilizes trust between people. The result is a social and political earthquake. With the rise of AI, we see for the first time that the stories that sustain human societies are generated by a nonhuman intelligence.

These can be religious stories or financial stories: all previous financial

devices in history have emerged from the human imagination. But now we will start seeing financial devices invented by AIs. The danger is that AIs could invent financial devices that no human being is capable of understanding, let alone regulating.

AI can do enormously beneficial things for us, but it's an existential danger if it gets out of our control. I think of AI as an acronym-not for artificial intelligence, but for alien intelligence. Not alien in the sense that it's coming from outer space, but in the sense that it's coming from our own laboratories. It's alien in the sense that it makes decisions and invents ideas in a fundamentally different way than human beings. It's an alien type of intelligence. And it's very dangerous to release billions of alien agents into the world without having a way to control them and make sure they use their enormous power for our benefit. F&D

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