

Sapiens Summary

By Yuval Noah Harari

'I encourage all of us, whatever our beliefs, to question the basic narratives of our world, to connect past developments with present concerns, and not to be afraid of controversial issues.' (Yuval Noah Harari)

Sapiens examines how humans went from being seemingly insignificant, to the most dominant species on the planet. By tracing our history and evolutionary processes, Yuval Noah Harari gives us a fascinating contemporary insight into power, survival, and what drives us.

We'll briefly delve into a few of the book's critical insights, and learn how *Homo sapiens* came to dominate the planet as we know it. By tracing the three major revolutions, the Cognitive Revolution, the Agricultural Revolution, and the Scientific Revolution, we'll explore a brief history of our kind.

Subject Matters

It all happened 13.5 billion years ago when "the fundamental features of our universe" came into being. Matter, energy, time, and space emerged through a phenomenon known to us as the "Big Bang." We learn about these things in physics.

After some 300 thousand years of matter, energy, time, and space, things began to develop. Matter and energy formed a bond that we've come to understand as atoms, and atoms combine to form molecules. We learn about these things in chemistry.

It took quite a long time to move on from this point. 3.8 billion years ago, molecules started to do some strange and wonderful things on planet Earth. They started to form structures called organisms. We learn about these things in biology.

Then things started to get even more exciting and complex about 70 thousand years ago when organisms formed *Homo sapiens*. *Homo sapiens* created what we know today as cultures. We learn about these in history. In history, we also learn about revolutions. Aside from the revolutions you may have studied at school and university, *Sapiens* looks at three revolutions that probably didn't make it into your history textbooks. The Cognitive Revolution, the Agricultural Revolution, and the Scientific Revolution.

Standing Out From the Crowd

When humans first appeared on the scene, they weren't particularly noteworthy. They shared the landscape with animals and other organisms, and behaved in much the same way. As Harari states, 'There was nothing special about humans.'

Before we delve into how we came to be unique and special, we need to look at a few helpful definitions. Remember that matter and energy form atoms, atoms form molecules, and molecules form organisms. Organisms are classified into species.

For the purposes of this exercise, we belong to the same species if we tend to mate with each other, resulting in offspring that are fertile. As an example, let's look at horses and donkeys. Despite sharing similar characteristics, donkeys and horses are not from the same species, and therefore when they do very rarely mate, their offspring, a mule, is sterile. In contrast, despite the differences between different breeds of dogs, they will breed with each other because they're from the same species. Their offspring may look a bit unorthodox, but two dogs of different breeds will produce a fertile puppy.

So how does this relate to us?

Species evolve from a common ancestor or "genus." So if we look at *Homo sapiens*, our genus is Homo, meaning man, and our species is sapiens, meaning wise. *Homo sapiens* belong to a family that can be traced back to the great apes. Our closest relative is the chimpanzee, and Harari argues that 6 million years ago, a female ape had two daughters. One is the ancestor of the chimpanzees, and the other is our ancestor.

For 10 thousand years, *Homo sapiens* have had the run of things because we've been the only species. However, and this is where things get interesting, before *Homo sapiens*, there were many other species from the genus Homo. These people were all humans of the genus Homo, but they differed in terms of species.

Interestingly, for those of us who've looked at museum exhibits or textbooks on human evolution, we tend to think that things run on a continuum and that humans have evolved from one species to the next. What we've learned is that different species of the genus have coexisted.

In East Africa, about 2.5 million years ago, humans evolved from *Australopithecus*. Over time they migrated to different parts of the world, and as they did, they evolved to suit their distinctive surroundings. For example, *Homo neanderthalensis* were sturdy and muscly, which allowed them to cope with the cold climate of western Eurasia. *Homo erectus*, the hardiest of all human species, managed to survive for a whopping 2 million years, and populated east Asia. Fascinatingly *Homo floresiensis*, a dwarf species, emerged because smaller humans survive on less food. Despite the enormous differences among the various species, the overarching fact is that they were all humans, and many of them coexisted.

The Brain Drain

Have you ever asked yourselves why we're the only ones with truly magnificent giant brains?

Harari jests, 'We are so enamoured of our high intelligence that we assume that when it comes to cerebral power, more must be better. But if this were the case, the feline family would also produce cats who could do calculus, and frogs would by now have launched their own space programme.'

The problem with having a big brain, is that it saps a considerable amount of energy. The *Homo sapien* brain consumes 25% of the body's energy

when we're resting, yet it only accounts for about 3% of our total body weight. Our brains do little for survival in the wild. Although now that we've come up with some ingenious technological solutions by way of weapons, transport, food preservation, and so forth, we've got the edge when it comes to being apex predators.

However, for the 2 million years where our brains evolved and developed, we didn't do much with these developing brains, minus creating a few tools. Our ability to stand upright had a significant impact on our progress, and the ability to develop fine motor skills in our hands, allowed us to create more sophisticated tools. There's a downside to walking upright though. Backaches, neckaches, and smaller birth canals meant we've had to work through a lot of natural selection to get to where we are today.

For a long time we were not at the top of the food chain. In fact, we were somewhere near the middle. So what made us jump to the top of the food chain?

It's been argued that our rapid ascendancy to the top of the food chain meant that our ecosystem did not have time to catch up. Other apex predators evolved a lot more slowly, and so the world adapted around them. In the case of *Homo sapiens*, we rose quickly, and in many cases, the ecosystem did not have time to adjust.

A Tale of Two Theories

So you might be asking yourself how *Homo sapiens* came to win the race when it came to human survival? Well, there are two theories.

One hundred fifty thousand years ago, *Homo sapiens* were part of the landscape, but occupied a relatively small portion of Africa. Then 70 thousand years ago, they began to migrate. Over time they began to populate other regions, and the other human species began to dwindle. Why this is, has caused a lot of debate.

The first theory is that of interbreeding. The premise is that the human species from Africa bred with other humans and contemporary humans are thus a product of interbreeding. This means that Eurasians are a mix of Sapien and Neanderthal, and Chinese and Koreans are a mix of Sapien and Erectus.

On the other hand, the "replacement theory" argues that population groups remained entirely separate from each other and did not mate. Some argue the different human species may even have warred with each other. In the end, Sapiens won, and thus if we're guided by replacement theory, we're all "pure Sapiens."

Of course many ideological debates arise from these two theories. And, if we're to be swayed by the first theory, there's a veritable hotbed of racial discourse that could be used to fuel political and social tactics.

We're only just beginning to put some of the puzzle pieces together, and there are still many questions about why *Homo sapiens* became the only surviving human species. What were some of the things that gave us the survival edge? There are many debates about this, but according to Harari, it all comes down to language. '*Homo sapiens* conquered the world thanks above all to its unique language.'

Sapiens have the ability to tell stories, not just to quickly describe events

that are meaningful in the moment. We have the power to convince others to buy into our narratives and invest in them. Harari explains, 'Telling effective stories is not easy. The difficulty lies not in telling the story, but convincing everyone to believe it. Much of history revolves around this question: how does one convince millions of people to believe particular stories about gods, or nations, or limited liability companies?' The need to communicate the abstract is essential. Hence one of the key factors of developing language was to communicate religion in order to bond people and get them to communicate and cooperate around a shared belief.

Let's now take a look at some of the things that assisted in helping *Homo sapiens* to "rule the world."

Fire: Gave us power

How did fire give us power?

Well, by 300 thousand years ago, humans were using fire in their daily lives. Fire provided light, warmth, and protection from predators. However, fire also allowed us to have access to foods that were otherwise inedible. Fire changes the chemistry and biology of food. Not only do certain ingredients need to be cooked to be consumed, but other foods need to be cooked to get rid of bacteria and parasites. What's more, cooked food takes a lot less time to consume.

The human body evolved with the advent of fire, and the domestication of fire was a watershed moment in human evolution. We could use power to our advantage, and it became a way to make more food edible, a source of heat, a form of power, and a weapon.

Farming: Made us hungry for more

Unless you're a farmer, it's unlikely that you give farming and agriculture much thought. Most Sapiens were nomadic and changed their position according to the food supply. Before the Agricultural Revolution, the world's human population was smaller than Cairo.

For 2.5 million years, we were hunter-gatherers. However, about 10 thousand years ago, we started to intervene in nature and cultivate crops and domesticate animals. So the Agricultural Revolution was born.

Where food supply was rich, these Sapiens learned to preserve food. However, the focus wasn't just on food security; *Homo sapiens* had a thirst for knowledge and studied plants and territories. It's argued that the *Homo sapien* forager had a larger brain than us because they were such experts on the natural world. Harari even suggests that 'ancient foragers were the most knowledgeable and skillful people in history.' Furthermore, he says that when industry and agriculture exploded onto the scene, this paved the way for experts, and thus "'new niches for imbeciles" were opened up.' Farming and agriculture also had another knock-on effect. The typical forager had a varied and seasonal diet, whereas a farmer ate what they grew. The average premodern Chinese farmer relied on a single crop, meaning it was usually a breakfast, lunch, and dinner consisting of rice.

Agriculture also brought with it a lot more infectious diseases that domesticated animals passed on. It led to an over-exuberance for wheat and cereals, and domesticated animals have overrun the planet and don't typically lead the happiest of lives. Harari believes that the 'Agricultural Revolution is one of the most controversial events in history. Some partisans proclaim that it set humankind on the path to prosperity and progress. Others insist it led to perdition.' Whatever your belief, farming and agriculture changed how humans, vegetation, and animals inhabited the earth. It was a turning point, 'where Sapiens cast off its intimate symbiosis with nature and sprinted towards greed and alienation.'

Money: Gave us purpose

Agriculture made us think about time in a different way. When you're living as a hunter-gatherer, you have a sense of finding your next meal, but you don't focus on the long-term success of crops and what the next year will bring. It really is a case of having all of your eggs in one basket.

The surplus generated by farms created new civilizations. Farmers would join commercial networks, villages would emerge, and so forth. However, how do you control these systems, and who is in charge? Invariably land and power disputes would result, and bloody wars and periods of violence would ensue. As Harari explains, 'Most human cooperation networks have been geared towards oppression and exploitation. The peasants paid for the burgeoning cooperation networks with their precious food surpluses, despairing when the tax collector wiped out an entire year of hard labor with a single stroke of his Imperial pen.' Harari describes such civilizations as "imagined orders," which are created around narratives, ideologies, and myths. And it's these imagined orders that feed into things such as desires, needs, aspirations, experiences,

consumerism, and so forth.

It appears that it's human nature to be dazzled by shiny, bright, and new objects. When Hernan Cortes invaded Mexico, they were utterly hypnotized by this shiny yellow metal called gold. The Aztecs bartered with cocoa and cloth, but for some reason, the conquistadors wanted nothing but gold. The obsession spread, and eventually, everyone wanted more and more gold.

But let's backtrack slightly. When civilizations started cropping up during the Agricultural Revolution, villages and towns began specializing in products. Depending on the landscape, different crops and specialties emerged, so certain regions became renowned for specific products. To start with, it was easy for people to trade and barter, but as with the way of these things, it began to get very complicated. For example, if you're an apple farmer and need a new pair of boots, how many apples do you need to barter? And does the person who makes the shoes even want a tonne of apples? The solution was to develop money.

Once again, the idea of money and currency depends on this idea of "shared imagination." While we may think it's about coins and paper, it's not. Money is a symbol. Take for example, prisoners who use cigarettes as currency. Although a lot of prisoners don't smoke, they use cigarettes as a form of exchange. And, if we take it a step further, most money doesn't even exist. It's just a number on a computer screen, housed in a server.

However, because money is a "psychological construct," it's one of the significant drivers of Sapiens.

Science: Made us deadly

The world is constantly changing in profound ways, and every year new and important scientific advances are being made. Harari explains that, 'The last 500 years have witnessed a phenomenal and unprecedented growth in human power. In the year 1500, there were about 500 million Homo sapiens in the entire world. Today, there are 7 billion.'

With this population explosion came the advent of scientific achievement, and individuals and groups wanting to extend themselves in new ways. In 1945 we discovered a way to obliterate the earth when scientists detonated the first atomic bomb in New Mexico. This discovery would change warfare as we knew it.

We landed on the moon in 1969, which was as much about history as it was about evolution. However, much of the Scientific Revolution is about the intersection between science, economics, and politics. It's impossible to think of science without thinking about imperialism and capitalism.

We need to be careful about our relationship with science. The discourse around it is that it's here to solve all of our problems. If we look at how technology is advertised and sold to us, it's with lashings of techno-joy. However, as we know, 'with great power comes great responsibility,' and many of the disasters we've faced have been from scientific failures or oversights. Not to mention, scientific endeavors are expensive and time-consuming.

However, science is at the root of many of our dreams. If we want something we can invent it, or we can buy it. We're a culture of

consumers with a belief that technology and science will save us from whatever we need saving from. But at what cost? Are we happier, or is it just a collective delusion?

In Conclusion

Sapiens is a masterclass in human history. Yuval Noah Harari is the history teacher that we all wish we had at school. Who else could compare ancient societies foraging and bingeing from a fig tree, with contemporary humans stuffing Ben and Jerry's into our faces? We've come so far, but yet we're still the same.

We're told not to discuss religion, politics, sex, or money around the dinner table. Yuval Noah Harari proves unequivocally, that we shouldn't just be discussing these things; we should be diving headfirst into these topics. And, as with all books of this size and scope, it's not always about being correct; it's about getting us out of comfort zones to question the "basic narratives," so that we can truly think about what it means to be Sapien.

Perhaps most poignant are the questions around the cost of all our advancements. With great power comes great responsibility and great suffering. And maybe our happiness is the ultimate price that we have to pay?