

Sapiens – A Brief History of Humankind

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The book starts with a short statement pointing out that 100,000 years ago at least six human species inhabited the earth. Today there is just one – **us**.

The questions are then put:

- How did our species succeed in the battle for dominance?
- Why did our foraging ancestors come together to create cities and kingdoms?
- How did we come to believe in gods, nations and human rights?
- To trust money, books and laws; and to be enslaved by bureaucracy, consumerism and the pursuit of happiness?
- And what will life be like in the millennia to come?

The book divides the history of Sapiens into four parts:

1. The Cognitive Revolution – starting about 70,000 years ago.
2. The Agricultural Revolution – starting about 12,000 years ago
3. The Unification of Humankind.
4. The Scientific Revolution – starting about 500 years ago

The book begins by stating that matter, energy, time and space came into existence about 13.5 billion years ago and matter and energy started to coalesce some 300,000 years later, with planet Earth forming about 3.8 billion years ago.

Humans evolved in East Africa about 2.5 million years ago from the earlier genus of apes. These archaic men and women journeyed throughout North Africa, Europe and Asia. Different climates in different parts of the world ensured variations in evolution to ensure survival.

In Europe and Western Asia bulky, muscular, adapted to cold climate, Neanderthals (man from the Neander Valley), developed.

In more Eastern regions of Asia Homo erectus (upright man) developed.

There are several other Homo species, which developed characteristics based on the influence of the environment where they lived.

Human babies are helpless, absolutely dependent on elders to feed, protect and educate them in the ways of the world. In a dangerous world where humans were weak and marginal creatures in constant fear of predators it was critical that they formed social systems for defence. The large brain and skilled hands enables humans to fashion tools using stone to acquire food – including

splitting bone to extract marrow from a carcass that larger animals may have killed and eaten most of the flesh.

For millions of years the genius Homo's position in the food chain was solidly in the middle, hunting smaller creatures and gathering what they could. It is only in the last 100,000 years that humans jumped to the top of the food chain. The former top of the food chain predators (Lions etc.) evolved slowly; the sudden rise of humankind has not given the ecosystem time to adjust.

Fire was domesticated perhaps as early as 800,000 years ago. By about 300,000 years ago Homo erectus, Neanderthals and Homo sapiens were using fire on a daily basis for cooking, adjusting bushland and fighting off larger animals. Having some control of fire was a major step forward.

Despite having fire, 150,000 years ago humans were perhaps no more than 1 million living between the Indonesian archipelago and the Iberian Peninsula, with Homo sapiens a small group in East Africa.

The Cognitive Revolution

About 70,000 years ago they started to migrate into Arabia and Eurasia with perhaps some interbreeding. The book mentions the remarkable achievement of Sapiens reaching Australia about 45,000 years ago (research since the book was written suggest this might be more like 65,000 years ago – RHB).

Sapiens achieved unprecedented accomplishments in the period 70,000 to 30,000 years ago – works of art, boats, oil lamps, bows and arrows, needles for sewing. This is sometimes called The Cognitive Revolution – possibly a change in the inner wiring of the brain resulting in much improved communication by sophisticated language. Social skills were greatly enhanced and the ability to gossip and make up stories appeared to grow with the rise legends, myths, gods and religions.

The imaginative brain permitted Sapiens to collectively share an image of things that didn't really exist. This enabled larger groups to cooperate with a shared belief in the concept of a particular nation, a god or even in the modern concept of a company – Harari quotes the case of Peugeot, which was founded by a real person Jean Peugeot as a wagon manufacture in the 13th century, but is now a legal fiction called a "limited liability company". We are collectively willing to see it as a legal fiction bound by laws of the countries in which it operates, even though it has no physical presence.

The book notes that a company is established by the simple ritual of signing a wonderfully decorated pieces of paper; a hocus-pocus similar to a Catholic priest turning bread and wine into God's flesh and blood by assiduously observing established procedures believed by many Catholics.

Telling convincing stories is not easy, but it has been achieved and millions of people are convinced to believe particular stories about gods, nations or limited liability companies. The network of stories becomes incredibly powerful.

The immense diversity of imagined reality that Sapiens invented and the resulting diverse behaviours are the main components of what we call 'cultures'. The unstoppable development and alterations of cultures are what we call 'history'.

The cognitive Revolution marks the point where history took over from biology in shaping Homo sapiens development. Biology sets the behaviour parameters, but sapiens have astounding abilities to invent fiction and play games, thus developing each generation further than the last.

It is suggested that for many thousands of years Homo sapiens lived in small bands scattered around the world and their life consisted of foraging for food – mushrooms, roots, fruit, worms, frogs and small animals – and also spending much of each day in storytelling, making both useful and artistic articles, dancing, singing and learning how to live in their environment. It was a time for developing myths and mystical beliefs with occasional fights between rival bands.

During the Cognitive Revolution many tools and devices were developed, including boats suitable for travel over oceans so that Australia was settled some 45,000 years ago (more recent research suggests 60,000 to 65,000). It also seems clear that humans reshaped the environment in many ways, including driving many large animal species to extinction.

The Agricultural Revolution

Around 9500 – 8500 BC people in the Middle East noticed that spreading wheat seeds increased the yield and so they could stay for progressively longer periods in one place – starting the Agricultural Revolution. The book points out that this revolution did not make a better life for our ancestors. The hunter gatherers had spent their life in stimulating and varied ways and were less in danger starvation and disease. The extra food resulting from agriculture, increased population and farmers had to work physically harder and longer hours. On top of that, closer living and less varied diet increased illness. There is also some evidence of increased fighting over food resources.

In effect the agricultural Revolution was a luxury trap that transformed the world in ways nobody envisaged or wanted. Prior to agricultural practices people had engaged in many activities. One fascinating structure is the GÖBEKLI TEPE that was excavated in south-east Turkey in 1995. It is a monumental, deliberately carved, pillared stone structure (some stones 5 metres high and weighing 7 tonnes) dated to about 9500 BC – well before Stonehenge dated to 2500 BCE. It is not known why this was constructed, but it probably has some religious basis.

As humans spread around the world so did their domesticated animals, with a massive increase in the population of selected species of chickens, cattle, pigs and sheep. Unfortunately these animals became the most miserable creatures that ever lived, as the domestication was founded on a series of brutal practices that only became crueller with the passage of the centuries. Animals had shorter lifespans and their freedom was severely constrained.

Farming brought stresses on people worrying about future droughts and floods. Unfortunately for hard-working peasants, rulers and elites sprang-up, living off their surplus food and leaving them with, at best, subsistence. The forfeited food surpluses fuelled politics, wars, art and philosophy. They built palaces, forts, monuments and temples. Until the late modern era more than 90% of humans were peasants.

In due course, smaller groupings of people formed together into larger entities, with wealth fed by the farmers, and led by a small group ruling, sometimes despotically, and forming large armies to control their borders – Rome being a classic example.

It is perhaps surprising, but true, that myths sustained these large empires. The book considers two classic myths of history: Hammurabi of c.1776 BC in ancient Babylon and the American declaration of Independence of AD 1776, which today still serves as a cooperation manual for hundreds of millions of Americans.

Hammurabi, a powerful king of Babylonia aimed to set up a just uniform legal system and produced a large code of conduct, which was followed for many years – long after his death. The text begins by mentioning the leading deities of the time and claims they had appointed Hammurabi to make justice prevail in the land. Amongst other things the document sets out punishments for certain crimes. These punishments vary greatly depending on whether the crime is against a ‘superior man’ or ‘a commoner’. The code clearly considers that people have different status.

About 3500 years after Hammurabi’s death the inhabitants of 13 British colonies in North America declared themselves no longer subject to the British Crown and wrote a document based on the American God – somewhat different to the gods of Babylon. Amongst other things the American declaration claims all men are created equal, endowed by their Creator to have certain inalienable rights including life, liberty and the pursuit of happiness.

The book “Sapiens” points out that people have not been created, but have evolved; people are biologically different, liberty is meaningless and happiness can’t be objectively measured. It is also pointed out that many of those who signed the American declaration of Independence were slaveholders and they saw no hypocrisy in regarding Blacks, American Indians and women as lesser types than men. It also consecrated a hierarchy between rich and poor.

To sustain human rights, Christianity, democracy and capitalism it is essential that a large majority of people believe in these imagined orders. You never admit that the order is imagined. You always insist that it is an objective reality created by the great gods or by the laws of nature. You also educate people thoroughly. From the moment they are born constantly remind them of the principles of the imagined order.

At the rules and regulations for controlling an empire grew it became essential to record information. The Sumerians between 3,500 and 3,000 BC developed an effective system of writing on clay tablets; starting initially with numbers for keeping records of traded goods.

The inequality between races and sexes is discussed in the book. It is claimed that in 1865 whites, as well as many Blacks, took it to be a simple matter of fact that Blacks were less intelligent more violent and sexually desolate, lazier and less concerned about personal cleanliness than whites.

In many societies women were simply the property of men; for example a daughter is considered the property of her father – in the Bible (Deuteronomy 22:28 – 9) it is stated that if a man seizes and lies with a virgin who is not betrothed, he shall give the father of the young woman 50 shekels of silver and she shall forthwith be his wife. Raping a woman who did not belong to any man was not considered a crime at all.

Human beliefs and cultures have been in constant flux. Christianity converted millions of people, but it had inbuilt contradictions between chivalry and brutality as was highlighted in the behaviour of knights in the Crusades. There is also the ongoing conflict in contemporary American politics between wanting an equitable society and also wanting to have high individual incomes. These contradictions can be the engines for creativity and dynamism in our species. Discord in our thoughts, ideas and values tells us to re-evaluate and criticise current practices.

Over the last few centuries there have been important global unifications in the sense that empires have grown, foods and eating habits have become similar around the world, the major religions, such as Hinduism, Christianity and Islam have become more universal, while commercial corporations have merged across continents.

Hunter gatherers had no money, but from early agricultural times bartering by exchange of actual goods became common. Then various objects, barley, seashells etc., came into use as representation of goods or a service. The rise of larger cities saw the development of coins made from metals that were in short supply – silver and gold. Trust in the value of these coins depended on trust in the stability of the empire producing them. Thus Roman coins became widely accepted in many parts of the world – even as far away as India. Belief in the value of money does not require belief in the culture.

Nation-states grew from a belief in the structure and power of the ruling entity to maintain order within the defined borders. As we move into the 21st century Harari points out a move towards recognition of humanity itself as a total combined entity, with the potential for a global empire rather than individual nations. (However this book was written in 2011. Since that time major events in USA, UK, China Russia and some smaller states suggest global cooperation is still a long way off; e.g. 'America First' and Britex – RHB).

Harari posits religion as a system of human norms and values that is founded on the belief in a superhuman order. Based on the superhuman order, religions established norms and values. Many early religions were essentially local with local gods and had no intention to spread their beliefs to other groups. Current well-known religions such as Christianity, Islam and Buddhism consider themselves universal and they became missionary, with the plan to convert the world.

There have been many polytheist religions dating from hunter gatherer days. Following the agricultural Revolution several groups endorsed the idea of one single god – for example: Judaism, Christianity and Islam. The monotheists have some difficulty in explaining why a God who is said to be good can allow bad things to happen. Christians came up with the idea of a Satan – a dualism in which powerful evil forces can exist. More recently emphasis is placed on God giving people free will so that they are free to do bad things.

The last 300 years has seen a decline in theist religions with a rise in new natural-law religions or ideologies, such as liberalism, communism, capitalism, nationalism, and Nazism. These establish a system of human norms and values, just as theist religions do, but based on a concept or a person that is superhuman rather than supernatural.

The Scientific Revolution

In the year 1500, there were about 500 million Homo sapiens in the entire world. Today, there are over 7 billion. The past 500 years have witnessed phenomenal and unprecedented growth in human power and capacity for production, associated with some 115-fold increase in energy consumption.

Humans have sought to understand the universe at least since the Cognitive Revolution, but modern science differs from all previous traditions in three critical ways:

- a. Willingness to admit ignorance.
- b. The centrality of observation and mathematics.
- c. The acquisition of new powers and technologies.

Isaac Newton's publication of 'The Mathematical Principles of Natural Philosophy' (1687) is perhaps the most important book in modern history with its ability to explain and predict the movement of all bodies in the universe based on three simple laws of motion. In the past 200 years the more complex aspects of reality have been analysed by a new branch of mathematics: statistics.

The nation-states recognised the importance of science beyond its purely "curiosity driven" motivation and scientific and technological research has been increasingly funded by nations and corporations. This became very clear in the technological developments during the Second World War with many developments, including the German introduction of rocket propulsion and US creation of the nuclear bomb; both of which have had major ongoing influences on human society.

The rise of the scientific approach and the acceptance of current ignorance were the major factors that permitted the then minor region, Europe, to become the dominant force colonising the whole world. This has now reached the point where Western culture is dominant in almost all countries of the globe. Nearly all of this colonisation was achieved with brutal repression of existing people and their cultures.

The book states that modern economic history can be understood by the single word, 'growth'. The modern economy captures everything it can find and grows spectacularly. A simple example is given of a building contractor, Mr Stone, who receives \$1 million from a past job and deposits this in a newly established Greedy Bank so the bank now has \$1 million capital. Then a pastry cook, Mrs. McDoughnut, asks for a loan of \$1 million from the Greedy Bank to build a bakery and this is granted by the bank. She hires Mr Stone to do this building job and pays him \$1 million, which he deposits in his account at Greedy Bank. So his account at the bank is now \$2 million, even though the actual amount in the bank's vault is only \$1 million. It doesn't stop there. Mrs. McDoughnut could keep borrowing money from the bank and having additions built on her premises by Mr Stone. Under the current US banking law this can continue until Mr Stone has \$10 million shown in his account, even though there is actually still only \$1 million in the Greedy Bank vault.

The above story may seem incredible, but it is the basis of modern economy. It is a tribute to human imagination and represents trust in the future. Greedy Bank trusts that Mrs. McDoughnut will make great profits from her baking and payoff her loan with interest. In ancient times credit like this had not been introduced. People did not see the future as continually growing. Now credit is seen as the difference between today's money pie and tomorrow's bigger money pie. This approach has allowed entrepreneurs to develop the modern world.

An assumption behind the acceptance of growth is that everyone will benefit – the rich using their profits to open new factories and hire new Employees. The new religions of capitalism and free enterprise developed. Amongst other things capitalism has a profound effect on science. To keep the wheels of growth turning there is a need for new discoveries and new development. Governments and corporations are willing to provide funds for scientific research, even basic research, because they know it will lead to new devices and expand growth.

The modern capitalist economy must constantly increase production and hence somebody must buy the products or industrialists and investors alike will go bust. Throughout past historical times the watchword was frugality. In the modern era consumption has become the improved ethic. Consumerism has used psychology to convince people that indulgence is good for you. Manufacturers deliberately design short-term goods and invent new and unnecessary models to continue a purchasing cycle.

The Industrial Revolution has completely transformed our once green and blue planet into a concrete and plastic shopping centre with tens of thousands of railways, roads and skyscraping metropolises for the convenience of over 7 billion Homo sapiens and a huge decline in other animals. The book quotes a reference, which estimates the combined mass of all humans as about 300 million tons, domesticated farmyard animals about 700 million tons, whilst that of surviving large wild animals (from porcupines to elephants and whales) as less than 100 million tons.

Up until two centuries ago everyone depended on the family and local community. There were no policemen, no social workers and no compulsory education. Over the last two centuries the Industrial Revolution has given the market immense new powers, provided the state with new

means of communication and transportation and placed at the government's disposal an army of clerks, teachers, policemen and social workers. The state weakened traditional family bonds; encouraging people to become individuals with the state providing people with work, insurance and a pension. While this new arrangement gave all people (men women and children) more individual freedom it came at a cost – the state controlled people to operate within the established rules.

Consumerism and nationalism are both imagined constructs of the state. The state works hard to make people in a particular nation believe that they are all similar to everyone in the rest of the nation and that they should get excited at the sight of their national symbols.

The rise of the nation state has reduced the threat of violence to a very low level. Quoting statistics for the year 2002 the book shows that globally, more people (873,000) died by committing suicide than by human violence (war and crime – 741,000).

The immense improvement in material conditions over the last two centuries has been offset by the collapse in family and the local community. Studies have shown that the average person may well be no happier than a person living in 1800. Even the freedom we value so highly may be working against us – with families breaking up and people living individually in an increasingly lonely world of unravelling communities and families.

Happiness is very subjective; depending on the person's existing condition and changes that may occur or be about to happen. Furthermore, biologists suggest that there are inherent happiness levels genetically set in any particular individual. So that some people may be essentially happy even in unpleasant circumstances, while others may be dismal even though conditions seem very favourable.

Huxley's view of the world is that happiness equals pleasure – bodily sensations limited by our biochemistry. Others note that things involving brief moments of joy and long periods of drudgery can still be a great source of happiness – such as bringing up a child, even though this involves changing of nappies, washing dishes and dealing with temper tantrums. Another finding is the consideration of one's life in its entirety; if this is seen as meaningful and worthwhile, there is a lasting feeling of happiness.

From a scientific point of view, human life has absolutely no meaning. Humans are the outcome of blind evolutionary processes that operate without goal or purpose. If planet Earth were to blow up tomorrow morning, the universe would probably keep going about its business as usual. Hence any meaning that people ascribed to their lives is just a delusion. However, people can find great purpose in increasing human knowledge, defending your homeland, building a new company or many other activities, which may themselves be delusional, but do bring happiness.

The development of many religions was based on concepts that gave purpose to life; including in many cases the idea of some superhuman entity that can be served by humans. Buddha did not

invoke a deity, but he proposed that happiness could be sought not only by pursuit of external achievements, but also the pursuit of inner feelings. In essence the key to happiness is to know the truth about yourself – to understand who or what you really are. Most people wrongly identify themselves with their feelings, thoughts, likes and dislikes. They never realise that the relentless pursuit of particular feelings just traps them in misery.

The end of Homo sapiens?

By the beginning of the 21st-century humans have reached the stage where they can re-engineer their own species. For many centuries they have interfered with natural selection in their breeding of domestic creatures – for example selectively breeding slow fat chooks has been undertaken to improve diet. Castrating bullocks to increase their weight and reduce their aggression is long-standing and at one time boys with a good soprano voice were castrated to retain their singing ability. Now humans have discovered methods for direct manipulate of genes to develop desired characteristics.

As well as genetic manipulation, the potential to create cyborgs is now within human hands. Bionic ears have direct electro connections within the brain. Similar connections have been used to enable people who have lost limbs to communicate directly with computers driving artificial arms or legs. The possibility of implanting chips within the brain to provide direct communication or massive memory stores is seen as a potential reality.

The future may well see the development of an entirely new species, initially designed by Homo sapiens, but capable of further development in its own right as a super species able to focus and remember 1000 times greater than humans and never angry or sad. This new species may well regard Homo sapiens as of little importance.

The vital question that needs to be considered now is what do we want the future to become? The reality is that we can't stop scientists, nor can we be certain how things will go – predictions of the future have frequently been entirely wrong – however it is critical that, as a species, we recognise our new massive powers and try to develop desirable future goals.

Currently we are self-made gods with only the laws of physics to keep us company and we are wreaking havoc on our fellow animals and surrounding ecosystem; seeking more for our own comfort and amusement, yet never finding satisfaction.

Is there anything more dangerous than dissatisfied and irresponsible gods who don't know what they want?