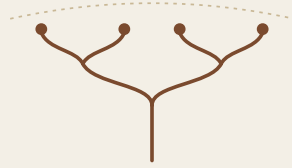


MY OWN READING OF SAPIENS · IN ELEVEN PARTS

SAPIENS

A Brief History of Humankind

Yuval Noah Harari — first published 2011



PART TWO OF ELEVEN

The Tree of Knowledge

Chapter 2: The Tree of Knowledge

The most important chapter in the book. It gets a part to itself.

“There are no gods in the universe, no nations, no money, no human rights, no laws, and no justice outside the common imagination of human beings.”

Harari, Sapiens, Chapter 2

READ AND EXPLAINED BY LOVEPREET SINGH

I read the whole book myself. This is what I understood,
written the way I'd explain it to a friend.

Part One, in four paragraphs

So this part stands on its own, even if you have not read the last one.

Part One left us looking distinctly unimpressive. Humans are animals, sitting on the top floor of a building whose lower floors are physics, chemistry and biology. For most of our two and a half million years we were nothing special — one of at least six kinds of human alive on Earth at the same time, and by no means the most promising. Neanderthals were stronger than us, better built for cold, and carried larger brains on average. We had paid for three expensive things. A brain that burns a quarter of your energy while you sit still. An upright spine that fails early and forces our babies to be born unfinished — which turns out to be the reason culture can get inside us at all. And fire, which was the first time in the history of life that a small animal got hold of a force much bigger than its own body. And for all of that, for around two million years, we sat in the middle of the food chain, waiting for lions and hyenas to finish so we could crack open the bones and eat the marrow nobody else could reach.

WHERE THIS PART FITS

Part One ended on a question, and this part is the answer to it.

Six or more kinds of human. Only one left. Why us?

Harari's answer is not *we were cleverer*. I expected that answer and I did not get it. His answer is stranger, and once you have understood it you will start seeing it everywhere — in money, in offices, in cricket, in religion, in your own passport.

This is the chapter the whole book stands on. Everything from here to Chapter 20 is an application of it. That is why it gets a part of its own, the way Darwin's Chapter 4 did in my last series.

We tried once, and we lost

The fact that sets up the whole puzzle, and almost nobody knows it.

Here is a thing that surprised me, and I suspect it will surprise you.

Around 100,000 years ago, *Homo sapiens* walked out of East Africa and into the Middle East.

Neanderthals were already living there — had been for a very long time, and knew the ground.

We lost. We were pushed back into Africa. Whatever we had at that point was not enough.

Then, around 70,000 years ago, we came out again. And this time it was not a close contest. Within a few tens of thousands of years, we were everywhere, and every other kind of human on Earth was gone.

WHEN	WHAT HAPPENED TO WHOM
100,000 years ago	Sapiens move into the Middle East. Neanderthals push us back.
70,000 years ago	Sapiens leave Africa again. This time we do not stop.
45,000 years ago	We cross open sea and reach Australia — a thing no human had ever done.
30,000 years ago	The last Neanderthals disappear.
13,000 years ago	The last of <i>Homo floresiensis</i> , on their island, disappear.
Today	One human species. Just us.

Now hold those two attempts side by side, because the gap between them is the whole puzzle.

Same species. Same bodies. Same brain size — the skulls do not change measurably between the two attempts.

The Sapiens who failed and the Sapiens who swept the board were, as far as any bone can tell us, identical animals.

So what changed in between?

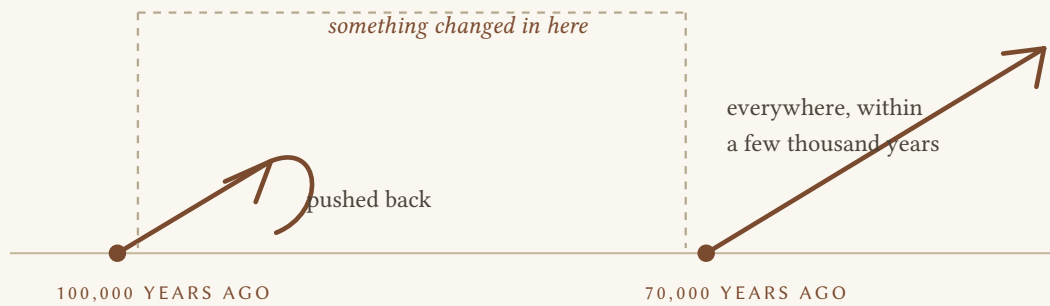


FIGURE 1 *Two attempts, thirty thousand years apart, by an animal that had not visibly changed. Whatever happened in the gap is the single most important event in our history, and we cannot see it in the bones.*

Whatever happened in that gap, it left no trace in the skeleton. That is worth sitting with for a second. The most consequential change in the history of our species is invisible to the main tool we have for studying it.

The Tree of Knowledge

Harari's answer: the wiring changed, not the size. And he is honest that this part is a guess.

His claim is that something happened **inside** the Sapiens brain. Not a bigger brain — a differently wired one. He calls the whole period the **Cognitive Revolution**, and dates it roughly 70,000 to 30,000 years ago.

A WORD YOU WILL NEED — COGNITIVE REVOLUTION

Cognitive just means *to do with thinking*. Nothing more technical than that.

The Cognitive Revolution is Harari's name for a change in how Sapiens brains worked, somewhere around 70,000 years ago, which gave us new ways of thinking and — above all — a new kind of language.

Why it matters: this is his answer to why we are the only human species left. Everything else in the book is downstream of it, so if this is wrong, a lot is wrong.

And here is why he thinks something happened. Look at what turns up in the ground before and after.

Before, for a million years and more: stone tools, changing very slowly. Fire. Not much else that survives.

After, quite suddenly in archaeological terms: boats. Oil lamps. Bows and arrows. Sewing needles. Beads and jewellery. Cave paintings. Carved figurines. Objects made of material that came from hundreds of kilometres away, which means trade. Graves with items placed in them, which means beliefs about death.

That is not a gradual accumulation. That reads like a switch being thrown.

What caused it?

Harari's honest answer: **we do not know**. His best guess is accidental genetic mutations that rewired the internal connections of the brain.

A WORD YOU WILL NEED — MUTATION

Mutation: a random copying error when a living thing passes its instructions to its offspring. Most do nothing. Some are harmful. A very few happen to be useful, and those spread.

Nobody chooses a mutation. It is not aimed at anything. That is the whole point of it.

Why it matters: if Harari is right, the reason you can read this sentence is a copying error in somebody's DNA around seventy thousand years ago. Nothing earned it and nothing intended it.

He nicknames it **the Tree of Knowledge mutation** — a joke pointing at the Bible, where eating the fruit of the tree of knowledge is precisely what gets humans thrown out of paradise and into history.

It is a lovely name. Notice, though, what a name does. There is no identified gene. There is no dated mutation. There is a change in the archaeological record and a proposed cause, and the proposed cause has been given a memorable label that makes it feel more solid than it is. I will come back to this hard in Section Nine.

Did we kill them, or absorb them?

For decades this was one of the fiercest arguments in the field. Then somebody read the DNA.

Before we get to language, there is a question sitting in the way. What actually happened to the Neanderthals?

For most of the twentieth century there were two camps, and they disliked each other.

WHERE THE EXPERTS ACTUALLY FIGHT — REPLACEMENT OR INTERBREEDING?

The Replacement side. Sapiens came out of Africa and replaced every other human species entirely. No mixing — either because we could not interbreed, or because we did not. On this view every living human descends from that one African population, and Neanderthals are a dead branch that simply ended. The strongest evidence was early genetic work on mitochondrial DNA, which pointed at a single recent African origin for everyone alive.

The Interbreeding side. Sapiens met the others, mixed with them, and modern populations are a blend. On this view Neanderthals did not vanish so much as get absorbed. The strongest evidence was skeletal: certain features in some early European fossils that looked, to some specialists, like a mixture.

Where it stands. In 2010 a team led by Svante Pääbo published a draft of the Neanderthal genome, read out of ancient bone. The answer turned out to be *mostly replacement, with some mixing*. People with ancestry outside Africa carry roughly **one to four per cent** Neanderthal DNA. People in Melanesia and among Aboriginal Australians carry up to about **six per cent** Denisovan DNA. So there was interbreeding, and it produced fertile children, and those children have descendants — you may be one of them. But it was not a blending of equals. The other humans are overwhelmingly gone.

What settled it. Not a better argument. A better technique. Neither side could have won this with the bones they had; the question was decided by machinery that did not exist when the argument started.

Why people cared so much. Because "we replaced them" and "we merged with them" carry very different feelings about what our species is, and because the older versions of this argument were tangled up with nineteenth- and twentieth-century ideas about race. The stakes were never purely evidential, and pretending otherwise would be dishonest.

HOW WE ACTUALLY KNOW THIS

Reading DNA out of a bone forty thousand years old sounds impossible. It nearly is.

What survives. DNA breaks into short fragments over time. In a warm, wet place almost nothing readable is left after a few thousand years. In cold, dry caves, fragments survive far longer. This is why so much ancient DNA work happens in Siberia and northern Europe, and so little in the tropics — a geographical bias in what we know, not a fact about where humans lived.

The main problem. Contamination. A bone handled by archaeologists is covered in modern human DNA, and modern human DNA is exactly what you are trying to distinguish it from. Most of the technical effort goes into clean rooms, controls, and statistical methods for separating ancient sequences from the sequences of the person holding the tweezers.

What it can show. Relatedness. Roughly when populations split. Whether two groups exchanged genes, and roughly how much.

What it cannot show. Whether the mixing was affection, trade, capture or violence. The genome records that children were born. It has nothing whatever to say about how.

What our language can do that theirs could not

Not the ability to communicate. Every animal has that. Something much stranger.

So: the new brain gave us a new kind of language. Fine. But be careful here, because the obvious version of this claim is wrong.

Animals communicate all the time. Green monkeys have one call meaning roughly *careful, an eagle* and a different call meaning *careful, a lion* — and the other monkeys respond correctly to each. Bees dance the direction and distance of flowers. Whales sing across oceans.

So "we can communicate and they cannot" is simply false, and Harari clears it out of the way early.

He gives three things that make human language different. The first two are useful. The third is the one that changes the world.

One: our language is flexible

A limited number of sounds, combined into an unlimited number of sentences.

A monkey cannot say: *there was a lion near the river this morning, but it went north, and it was limping*. We can. And packed into that one sentence are time, place, direction, detail and a piece of useful uncertainty. For an animal that hunts and gathers in a group, that is an enormous practical advantage before you get anywhere near philosophy.

Two: gossip

The second is the one people laugh at, and then stop laughing at.

One well-known theory says human language evolved mainly to talk about **other humans**. Not lions. People. That sounds petty. It is not. Think about what cooperation actually requires. It is only safe to work with someone if you have some idea whether they will hold up their end. Who is lazy? Who took more than their share last time? Who holds a grudge? Who is sleeping with whose partner, and which two men are therefore about to become a problem for the whole band?

That is a serious information problem, and gossip is the software that solves it.

IN REAL TERMS — WHY GOSSIP IS HARD WORK

Take a band of fifty people. How many two-person relationships is that?

The sum is fifty times forty-nine, divided by two. **One thousand two hundred and twenty-five** separate pairs. Every one of them can be warm, cold, indebted, resentful or romantic, and every one of them can change this week.

And that is only the pairs. Add the alliances of three and four, the old family grudges, and the fact that any of it can shift after one argument at a waterhole.

Now hold all of that in your head, keep it current, and act on it correctly every day. That is what a forager brain was doing, and it is why gossip is not a weakness of character. It is the maintenance work.

Harari points out, drily, that most human communication today is still gossip. Messages, phone calls, most of the internet, most of what any group of friends actually says to each other. That is not a modern decline. It is the original purpose, running as designed.

The ceiling of about a hundred and fifty

Gossip works beautifully, up to a point. This is the point.

Gossip can hold a group together — but only while everybody can hold everybody else in their head. Look at human groups that form naturally, without a rulebook: a village, a tight workplace, an army company, a clan. The number that keeps turning up is around **150**. Chimpanzees hit their own version of the wall at around 50.

A WORD YOU WILL NEED — DUNBAR'S NUMBER

The figure of about 150 is usually credited to the anthropologist **Robin Dunbar**, who noticed a relationship between the size of a primate's brain and the size of the group it lives in, and then applied the same relationship to humans.

Below the ceiling, a group can run on personal knowledge alone. You know everyone. You know who owes whom. No rules are needed because everybody is watching.

Above it, the personal knowledge runs out. People become strangers, strangers cannot be trusted by reputation, and the group either splits or invents something to replace the missing trust.

Why it matters: everything large you have ever encountered — a city, a company, an army, a religion, a country — exists above this line and would fall apart without whatever replaces personal trust. Naming what that replacement is, is what the rest of the chapter does.

A warning I will repeat in Section Nine: this number is far shakier than the confident way it is normally used.

So we have a wall. Fifty thousand people cannot run a city on gossip. A million people cannot run a kingdom on knowing each other. And an army of a hundred thousand cannot be held together by reputation, because no soldier can possibly know a hundred thousand faces.

And yet cities, kingdoms and armies exist. So something breaks the ceiling.

The superpower: talking about things that are not there

This is the idea. If you read one section of these eleven parts twice, make it this one.

Here it is.
Sapiens can talk about things that do not exist. No other animal can. And that is why we run the planet.

You have never seen a lion that guards a tribe. Nobody has ever seen a god, a nation, a company, a rupee's worth of value, or a human right. None of these things are out there in the world the way a stone is out there. You cannot trip over one, photograph one, or hand one to somebody. And Harari's claim is that this ability to describe what is not there is the most useful thing our species has ever developed.

IN HARARI'S OWN WORDS

There are no gods in the universe, no nations, no money, no human rights, no laws, and no justice outside the common imagination of human beings.

What he meansHe is not saying these things do not matter, and he is not saying they are lies. He is saying they exist in one specific place — the shared imagination of large numbers of people — and that this is a completely different kind of existence from a rock, a river or a tiger. Different, and in human affairs, far more powerful.

Why it works

Two chimpanzees who have never met cannot cooperate. There is no basis for it. Chimp trust is built one relationship at a time, over months, by grooming and sharing and fighting, and it does not scale.

Two humans who have never met can hand each other large sums of money, work in the same building for thirty years, march into gunfire side by side, or hold a door for each other in a country neither of them was born in — because they believe the same stories.

The same god. The same nation. The same currency. The same law. The same company. The same team.

Shared fiction lets total strangers cooperate, in unlimited numbers, and lets them change what they are cooperating on without waiting for evolution. That is the sentence the entire book stands on.

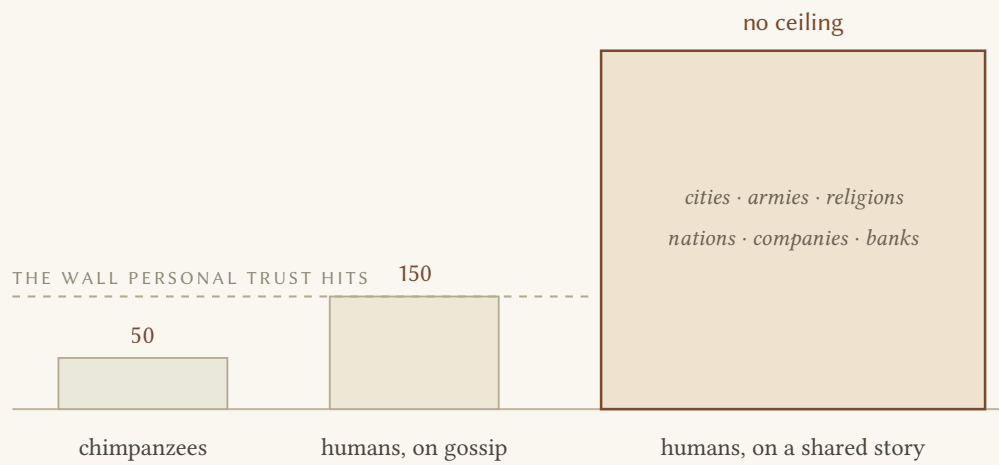


FIGURE 2 *The three ceilings. Personal knowledge takes chimpanzees to about fifty and humans to about a hundred and fifty. A shared story removes the ceiling entirely — and everything large that humans have ever built sits above that line.*

Why a car company is a ghost

Harari's best example, and the one that finally convinced me this was an argument and not a slogan.

Take any large company. Harari uses the French carmaker Peugeot; use whichever one you like. Now ask the simple question: **what is it?**

It is not the cars. Sell every car in every showroom tomorrow and the company still exists.

It is not the factories. Burn them all down and the company can rebuild — it has done so before, in wars.

It is not the workers. Every single one of them can retire and be replaced, and the company continues.

It is not the managers, or even the owners. Shares change hands every day. The people who own it this afternoon are not the people who owned it this morning.

So what is left?

A story. Specifically, a story that a lawyer told, in the correct ritual words, according to the rules of a country — and the country is itself another story.

A WORD YOU WILL NEED — LEGAL FICTION

Legal fiction: something the law agrees to treat as a person even though it obviously is not one.

A company can own land. It can be taken to court. It can owe money and be owed money. It can, in some countries, be found guilty of a crime. And it can outlive every single human being who ever worked for it.

None of that is metaphor. It is how the law actually operates.

Why it matters: it is the cleanest available proof of the whole chapter. Something that does not physically exist owns buildings, employs thousands of people, pays tax, and can be sued — and the only reason any of that works is that enough people behave as though it is real.

I found this the moment the argument stopped being clever and started being true. I had spent years working inside arrangements — an employer, a bank, a state — and had never once asked what they were made of. The answer is: an agreement, held by enough people, written down.

THE THING NOBODY QUESTIONS

Everybody discussing this chapter — Harari, his fans, his critics — takes it as obvious that **large-scale cooperation is an achievement**. The word "cooperation" arrives wearing a halo.

Look again at what it actually enabled.

Slavery is large-scale cooperation. So is an empire. So is an industrial war. So is a genocide, which requires timetables, budgets, transport, paperwork and thousands of people doing their small piece correctly while believing the same story about who counts as a person.

None of those things are possible for a chimpanzee, and not because chimpanzees are kinder. Because they cannot organise.

So what the Cognitive Revolution actually gave us was not *goodness at scale*. It was **scale**, full stop — and scale amplifies whatever the story happens to be. Harari knows this and shows it repeatedly in later chapters. But the word "cooperation" keeps quietly doing the work of an approving adjective, and neither side of the argument stops to strip it.

The bit that makes history possible

Once your behaviour rests on a story rather than on your genes, you can change it in an afternoon.

There is one more consequence, and it is the one that turns a biology argument into a history one. An animal changes its behaviour by changing its genes. That takes generations — usually thousands of them. A troop of chimpanzees cannot hold a meeting next Tuesday and abolish its hierarchy. To change how chimps behave, you have to change what chimps are, and that is slow. But human behaviour rests on stories. **And a story can be rewritten in a year.**

HIS POINT, IN MY WORDS

In 1789, the population of France believed that kings ruled by the will of God and that this was simply how the world was arranged.

Within a very short time, the same population believed that authority comes from the people, and acted on it, and rebuilt the entire structure of the country accordingly.

Not one gene changed. Nothing biological happened at all. The French of 1793 were the same animal as the French of 1788, with the same brains and the same instincts.

Somebody changed the story, enough people bought it, and the whole social order rearranged itself around the new version.

This is why Harari says human history "declared independence from biology" at the Cognitive Revolution.

He does not mean biology stopped mattering. He means biology stopped being *enough*. If you want to know why humans in one place live completely differently from humans in another — same species, same brains, same DNA — biology cannot tell you. You have to know which stories they are living inside.

That is his job description for the remaining eighteen chapters.

And that is why we won

Now put it together and the Neanderthal question answers itself.

An individual Neanderthal was stronger than an individual Sapiens, better built for the cold, and carried a larger brain. In a straight fight between two people, we lose.

But five hundred Sapiens who all believed in the same ancestral spirit could plan, coordinate, trade with the band across the valley, agree a rendezvous, split into groups and drive prey towards each other. Fifty Neanderthals could not do any of that, because they had no way to make five hundred of anything.

It was never a fair fight. And notice that it was not really a fight about intelligence either. It was a fight about **numbers**, and stories are how you get numbers.

THE THING NOBODY QUESTIONS

Both sides of the Neanderthal argument take it for granted that the thing needing explanation is **why we won**.

Turn the question over.

Neanderthals existed as a distinct kind of human for something like three hundred and fifty thousand years, through repeated ice ages, in one of the harshest environments any human has occupied. *Homo sapiens* has been around roughly three hundred thousand years and has spent the last two hundred of them changing the atmosphere.

By the measure "survived a long time in difficult conditions," they did rather well. By the measure "still here," we are ahead — for now.

The assumption hiding underneath the whole discussion is that **being the one left standing at this particular moment is what success means**. That is a scoreboard we chose, and we chose it while standing on it. *Homo erectus* lasted two million years and nobody writes books asking what its secret was.

I do not think this overturns Harari's argument. I think it should make us less pleased with ourselves while reading it.

Where I think he is wrong in this chapter

The central idea survives. A surprising amount of the scaffolding does not.

This is my favourite section to write and the one that took the longest, because the honest answer here is layered.

1. The "sudden revolution" is not agreed

Harari gives you a switch being thrown around 70,000 years ago. Plenty of archaeologists do not accept that. The evidence for symbolic behaviour in Africa goes back a good deal further than the European cave-painting explosion. Pieces of ochre marked with deliberate cross-hatching from Blombos Cave in South Africa are dated to roughly 75,000–100,000 years ago. Shell beads, pierced for stringing, turn up at several African and Middle Eastern sites earlier still. Pigment use goes back further again.

On this reading there was no switch. There was a long, uneven build-up over a hundred thousand years or more, mostly in Africa, and what looks like an explosion in Europe is really the moment a population with long-developed capacities walked into a region where the caves happen to preserve things well.

That is a serious challenge and Harari does not engage with it.

2. There is no mutation. There is a name for a mutation.

"The Tree of Knowledge mutation" is a beautiful phrase and it is doing something slightly unfair.

No gene has been identified. No date has been fixed. No mechanism has been described. What exists is a change in the archaeological record and a proposed cause — and the proposed cause has been given a memorable name, which makes it feel like a finding rather than a hypothesis.

Harari does say it is a guess. He says it once, early, and then uses the phrase confidently for the rest of the book. That is how a guess becomes furniture.

3. The number 150 is much softer than it sounds

Dunbar's number gets used here — and used everywhere else, in management books and technology writing — as though it were a physical constant like the speed of sound.

It is not. It comes from a correlation between brain measurements and group sizes across primate species, extrapolated to humans, with genuinely wide error bars. Estimates derived the same way have ranged from under a hundred to several hundred depending on the assumptions. Later attempts to test it against real human networks have produced mixed results, and some statisticians have argued the original method cannot support a single precise figure at all.

Something real is being pointed at: personal-relationship networks do have limits. But "about 150" is a rough indication dressed up as a law.

4. "Cooperation beat the Neanderthals" is one theory among several

Harari gives you a clean cause. The specialists have a list.

Climate instability during this period was severe, and Neanderthal populations were small and fragmented, which makes a population vulnerable to bad luck in a way a large one is not. Disease travelling with an incoming population is a live candidate. Simple numbers may have done it — we may have arrived in larger, better-connected groups and absorbed them, which the DNA partly supports.

And there is an awkward fact for the "they had no symbols" version of the story: Neanderthals made ornaments, used pigment, and buried their dead. Whatever separated us, it was not a clean line between a species with symbols and a species without.

So how much damage does all of that do?

Less than you would think, and this is the same shape as my verdict on Darwin.

Strip out the crisp date, the named mutation, the precise number and the single cause, and what is left is this: **humans cooperate flexibly in very large numbers, no other animal does, and the reason is that we can invent things that are not there and agree to act as if they are.**

That claim is not contested. It is close to universally accepted, and it explains an extraordinary amount.

Everything specialists argue about is the *when*, the *how* and the *how fast*.

Harari's problem in this chapter is not that his idea is wrong. It is that he delivers a settled idea and four contested details in exactly the same confident voice, and nothing in the prose tells you which is which. That is the whole reason I am writing this series.

WORTH REMEMBERING

We tried to leave Africa twice. The first time, around 100,000 years ago, the Neanderthals pushed us back. The second time, around 70,000 years ago, we took the planet. Same bodies both times.

Something changed in how we think, not in how big our brains are. Harari calls it the Cognitive Revolution and admits the cause is a guess.

Language's first job was gossip — keeping track of who can be trusted — and gossip works up to about a hundred and fifty people, after which personal knowledge runs out.

The superpower is fiction. We can talk about things that do not exist, get millions of strangers to believe the same ones, and cooperate around them without limit. A company is a ghost that owns factories.

And because our cooperation runs on stories rather than genes, we can change how we live in a single generation — which is the reason we have history at all, instead of just biology.

Words from this part

Everything I stopped to explain, gathered up.

WORD	WHAT IT MEANS
COGNITIVE REVOLUTION	Harari's name for the change in Sapiens thinking around 70,000 years ago. Cognitive simply means <i>to do with thinking</i> .
MUTATION	A random copying error when instructions pass from parent to child. Unaimed. Most do nothing.
DUNBAR'S NUMBER	The rough ceiling — often given as 150 — on how many people you can hold in a personal-trust network. Much softer than it is usually made to sound.
IMAGINED REALITY	Something real because a large group jointly believes in it. Money, nations, gods, laws. Not a lie, because nobody is pretending.
LEGAL FICTION	Something the law treats as a person although it is not one. A company can own land, be sued, and outlive everyone who worked for it.
REPLACEMENT THEORY	The view that Sapiens replaced all other human species without mixing.
INTERBREEDING THEORY	The view that Sapiens mixed with the others and modern people are a blend. The DNA says: mostly replacement, with some mixing.
ANCIENT DNA	Genetic material recovered from old bone. Powerful for relatedness and population splits. Silent on everything human.

The timeline so far

Carried forward from Part One, with this chapter added.

WHEN	WHAT
2.5 m years ago	The genus <i>Homo</i> appears in East Africa.
300,000 years ago	<i>Homo sapiens</i> appears. Daily use of fire across several human species.
100,000 years ago	First attempt to leave Africa. Neanderthals push us back.
100–75,000 years ago	Marked ochre and pierced shell beads in Africa — the evidence that troubles the "sudden revolution" story.
70,000 years ago	The Cognitive Revolution. Second exit from Africa. Boats, art, trade, burials.

WHEN

WHAT

45,000 years ago

Sapiens cross open sea to Australia. **Part 3 starts here.**

30,000 years ago

The last Neanderthals.

Part Three

Chapter 3: A Day in the Life of Adam and Eve · Chapter 4: The Flood

Part Two gave us the tool. Part Three asks two questions about what we did with it, and the second one is the most uncomfortable in the book so far.

Chapter 3 asks what our lives were actually like for the two and a half million years before farming — the overwhelming majority of our existence, and the world your body is still designed for. Harari does something here that raised my opinion of him: he keeps stopping to tell you how little we know. He calls it the curtain of silence, and it covers most of human history.

Chapter 4 is short, and it is the one that changed how I see my own species. Around 45,000 years ago we crossed open sea and landed in Australia — a thing no animal had ever done. Within a few thousand years, almost every large animal on that continent was gone. Then we walked into the Americas and did it again. Here is what Part Three takes on:

- Why you crave sugar, and why that craving is two and a half million years old and not your fault
- Why "the Stone Age" is a misleading name, and what it should have been called
- Whether foragers really worked a thirty-five hour week and ate better than we do — and how much of that famous claim actually holds up
- What animism is, why it has no gods above nature, and why farming destroyed it
- Why the biggest chunk of human history is simply unknowable, and why saying so matters
- And how a species with stone tools managed to wipe out roughly half the planet's large land mammals before anybody planted a single seed



End of Part Two of Eleven · The Tree of Knowledge

My own reading of *Sapiens* — Lovepreet Singh

Sapiens: A Brief History of Humankind, Yuval Noah Harari, 2011