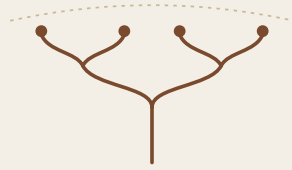


MY OWN READING OF SAPIENS · IN ELEVEN PARTS

SAPIENS

A Brief History of Humankind

Yuval Noah Harari — first published 2011



PART FOUR OF ELEVEN

History's Biggest Fraud

Chapter 5: History's Biggest Fraud

His most famous argument. It gets a part to itself.

"We did not domesticate wheat. It domesticated us."

Harari, Sapiens, Chapter 5

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 Three, in four paragraphs

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

Part Three covered the two and a half million years before farming — the overwhelming majority of our existence, and the world your body still thinks it lives in. Your craving for sugar is a correct answer to a fig tree that is not there any more.

Harari was unusually honest about how little anybody knows. He called it the curtain of silence. Wood rots, leather rots and thoughts leave nothing, so we named the whole era after the one material that survived and called it the Stone Age.

What the evidence does suggest is that foragers worked fewer hours than we do, ate a far more varied diet, and were healthier — taller skeletons, fewer signs of malnutrition, almost none of the infectious diseases that come from crowding and livestock. They were probably animists: a world full of persons, some of whom are bears, with nobody in charge.

And in Chapter 4 we saw what we did on arrival. Australia, forty-five thousand years ago: twenty-three of twenty-four large species gone within a few thousand years. The Americas, sixteen thousand years ago: the same again. Roughly half the planet's large land mammals were gone before anybody planted a seed.

WHERE THIS PART FITS

This is the chapter people remember, and the one that makes them angry.

Everybody is taught that farming was the great step forward. We stopped wandering, settled down, grew our own food, and civilisation began.

Harari says almost all of that is false. He calls it **history's biggest fraud** — not because anyone lied, but because nobody could see the trap until the door had shut.

I went into this chapter expecting to argue with him. I came out agreeing with about seventy per cent of it, and the thirty per cent I reject is in Section Eight. The idea I took away is not really about farming at all, and I use it about once a week.

The most important thing that ever happened, and nobody noticed

Where farming started, when, and the detail that shows it was not a stroke of genius.

Between roughly 9500 and 8500 BC, in the hill country of what is now southeastern Turkey, western Iran and the Levant, human beings started doing something new. They put seeds in the ground on purpose and came back later.

Wheat first. Then peas and lentils, around 9000 BC. Goats a little after. Olive trees around 5000 BC. Horses around 4000 BC. Grapevines around 3500 BC.

A WORD YOU WILL NEED — DOMESTICATION

Domestication: turning a wild plant or animal into one that lives with humans, depends on humans, and has been changed by humans — usually by breeding, over many generations, for the traits we want.

A domesticated wheat plant holds on to its seeds instead of scattering them, which is terrible for the plant in the wild and perfect for a farmer with a basket. A domesticated sheep is smaller, calmer and less able to survive alone than its wild ancestor.

Why it matters: the word sounds like something we did *to* them. Harari's whole argument is that the arrow points both ways, and possibly the other way round.

Now the detail that changes how you read all of it. **It happened independently, in several places, with no contact between them.**

WHERE

WHAT THEY DOMESTICATED

THE MIDDLE EAST

Wheat, barley, peas, lentils, goats, sheep

CHINA

Rice, millet, pigs

CENTRAL AMERICA

Maize, beans, squash

THE ANDES

Potatoes, quinoa, llamas

WEST AFRICA

Sorghum, African rice, yams

NEW GUINEA

Sugarcane, bananas, taro

Different people. Different continents. No possibility of anyone telling anyone else. Roughly the same few thousand years.

That rules out the story most of us were taught — that some clever person worked farming out and the idea spread. Nobody invented it. Something about that particular window made the same thing happen in six places at once, and the leading suspect is the end of the last ice age, when the climate steadied enough for it to be possible at all.

And only a handful of species could ever be farmed

Out of the enormous number of plant and animal species on Earth, only a few dozen were ever successfully domesticated, and almost all of the important ones were done in that early window.

Nobody has ever domesticated a zebra, though people have tried repeatedly and been bitten for their trouble. Nobody farms oak trees for acorns. The gazelle, hunted for tens of thousands of years, never became livestock.

The species have to be willing. They need the right temperament, the right breeding speed, the right diet, the right social structure. Most are not, and no amount of human cleverness changes that. We did not choose our crops and our animals from a catalogue. We took what would come.

The temple that should not exist

A site in Turkey that turns up in this argument constantly, and complicates it in a way Harari does not mention.

Before we go further, one piece of evidence worth knowing about, because it is the single most interesting thing to have come out of this period and it cuts across the whole chapter.

On a hilltop in southeastern Turkey there is a place called **Göbekli Tepe**. Excavation began properly in the mid-1990s, and what came out of the ground did not fit anybody's expectations.

It is a set of large circular enclosures made of massive carved limestone pillars — some over five metres tall and weighing several tonnes — decorated with reliefs of foxes, boars, snakes, scorpions and birds. Building it required quarrying, moving and raising stone on a scale that needs hundreds of people, organised, fed and coordinated over long periods.

The oldest layers date to roughly **9500 BC**.

WHY THAT DATE IS A PROBLEM

Nine and a half thousand BC is at the very beginning of farming in this region — arguably before it.

The people who built this appear to have been living substantially on wild food. There is no clear evidence of domesticated crops or herds in the earliest phases. Their tools are the tools of foragers.

The standard story runs: farming produces surplus, surplus feeds specialists, specialists build monuments. Temple after farm.

Göbekli Tepe looks like a monument built by people who had not yet farmed — and it sits a short distance from where some of the earliest domesticated wheat has been identified.

Which raises the possibility that the arrow runs the other way. That the need to feed and house hundreds of people gathering repeatedly at one place is part of what pushed them into farming in the first place. Temple first, farm second.

I want to be careful here, because this is a site where the popular version has run ahead of the evidence. Later work at Göbekli Tepe has found more signs of domestic life than the earliest reports suggested, and calling it purely a "temple" built by pure "hunter-gatherers" is now contested by the people digging it.

But even in its careful version it does real damage to a tidy story. Large-scale organised human effort was happening at the very start of this transition, not comfortably after it — and that means the neat sequence of *farming, then surplus, then society* is at best incomplete.

Harari does not mention it. That is a genuine gap, because it is one of the strongest available challenges to the causal order his chapter depends on.

We did not domesticate wheat

The line the whole chapter is famous for, and it is not a joke.

Ten thousand years ago, wild wheat was one unremarkable grass growing in a limited patch of the Middle East. It had no particular future.

Today wheat covers roughly two and a quarter million square kilometres of the Earth's surface.

IN REAL TERMS — HOW MUCH IS THAT?

Two and a quarter million square kilometres is about ten times the area of the United Kingdom. It is a bit more than two-thirds the size of India.

Held by one species of grass, which cannot move, cannot fight, and cannot think.

By every measure evolution actually uses — how many copies exist, how much ground they hold, how likely the line is to continue — wheat is one of the most successful organisms in the history of life on this planet.

So how did a grass manage that?

It got a clever primate to work for it.

IN HARARI'S OWN WORDS

We did not domesticate wheat. It domesticated us.

What he meansHe is not being cute. He is asking you to look at the arrangement from the outside and describe what is actually happening — which species changed its entire way of life to serve the other, and which one got everything it needed without changing much at all.

Think about what growing wheat actually demands of a human body.

Wheat does not like rocks, so you clear the field. By hand. Every stone.

Wheat does not like sharing ground, so you weed. Bent double. All day. Every day.

Wheat gets thirsty, so you carry water to it.

Wheat is eaten by insects, birds, rabbits and rats, so you guard it, and you build things to keep them out, and you sleep near the field.

Wheat exhausts the soil, so you carry manure onto it.

And wheat does not like moving, so **you** stop moving.

A body built for walking twenty kilometres, climbing, throwing and carrying is now bending, hauling, grinding and squatting for hours a day, in one place, for a lifetime.

HOW WE ACTUALLY KNOW THIS

This is not a rhetorical flourish. It is visible in the bones.

The source. Skeletons from early farming villages, compared with skeletons from forager populations in the same regions shortly before.

What they show. Slipped discs. Arthritis in the knees, ankles and lower back. Hernias. Deformed toe joints from long hours kneeling and squatting. In several populations, worn and damaged teeth from stone-ground flour, which carries grit from the grinding stone straight into the mouth.

What the source is good at. Physical stress leaves reliable, readable marks. A body that spent thirty years grinding grain is recognisable.

What it cannot show. How those people felt about it. Whether they thought the trade was worth it. Whether the village was warm or miserable. Bones record load, not opinion — and Harari's argument needs the second one more than it admits.

Worse food, more disease, and the invention of famine

Three catastrophes we treat as ancient constants. Harari argues all three have a start date.

The diet got narrower and poorer

A forager band ate several dozen species across a year. A farming village ate wheat. Wheat, and wheat, and in a good year some lentils.

Wheat fills a stomach. It is poor in vitamins and minerals, it is hard for the human body to digest, and it does very little else. Malnutrition became normal in a way it had not been.

And it made people fragile in a completely new way

This is the part I had not properly understood.

If a forager's favourite plant fails, they walk over the hill and eat something else. The failure of one food source is an inconvenience.

If a farmer's wheat fails — drought, flood, blight, locusts, a bad frost — there is nothing else. Their entire world is that field. They have no other skills for that landscape, nowhere else to go, and a village full of people in exactly the same position.

Famine is not an ancient constant. It is a farming invention. Before you have a single crop, you cannot have a crop failure.

Disease

Foragers moved, so their waste stayed behind them and their groups were small and scattered.

Farmers stayed. In dense settlements. Next to their own sewage. Sharing space with domesticated animals, which is where almost every great infectious disease of human history came from — smallpox, measles, tuberculosis, influenza — jumping the species barrier from livestock into a crowded human population that could not run away from it.

IN REAL TERMS — WHY CROWDING IS THE WHOLE PROBLEM

A disease that kills its host quickly cannot survive in a band of thirty people who move every few weeks. It burns through them and dies out with them.

Put four hundred people in permanent houses, with animals, with a shared water source, with visitors from the next village, and that same disease has somewhere to go every single day.

The village did not attract disease. The village *manufactured* the conditions a disease needs to become permanent. Measles, for example, needs a population of several hundred thousand connected people to keep circulating indefinitely — which is to say, it could not exist at all until we built one.

And then war

A forager under threat picks up their few possessions and leaves. There is very little worth fighting over and no reason to stand your ground.

A farmer cannot leave. Their wealth is a field they cannot carry, a house they cannot move, and a granary full of food.

And that granary is a problem, because it is the first time in human history that there has been a concentrated, stealable, storable pile of value sitting in one known place. Everybody hungry for a hundred kilometres now has a reason to come and take it, and the farmer has no option but to stand and fight.

Permanent property produces permanent war. Part Five picks this up, because the granary is also what produces kings.

The luxury trap

The best idea in the chapter, possibly in the book, and it is not really about farming.

So the obvious question, the one I kept shouting at the page: **if farming was worse, why did anybody keep doing it?**

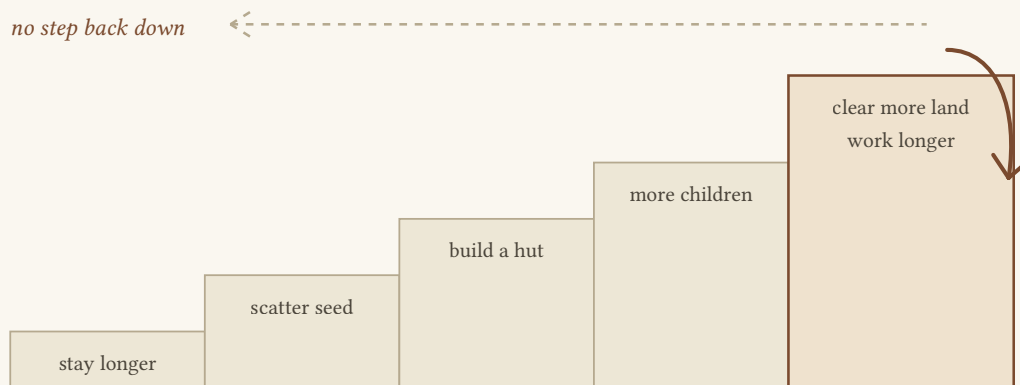
Harari's answer is the thing I have used most often since reading this book. He calls it the **luxury trap**, and the crucial part is that nobody ever chose it.

Follow the steps. Every single one is sensible.

- A band notices wild wheat grows thickly in one valley. So they stay a few extra weeks each year to harvest it. Perfectly reasonable.
- They scatter some seed to help it along. Small effort, obvious payoff.
- Since they are around anyway, they build a hut rather than a shelter. More comfortable.
- More food means women can have children closer together. A foraging mother has to carry a child for years and physically cannot manage two at once. A settled mother can.
- So the population grows. It grows **on the new food supply**.

And now the door has shut behind them, and nobody heard it.

Because there are now more mouths than the wild land could ever feed. Going back to foraging is no longer a lifestyle choice — it means most of the children starving. So they clear more land, plant more wheat, work longer. Which produces more food, which supports more children, which requires more land and more work.



EACH STEP RAISES THE POPULATION THAT THE NEXT STEP MUST FEED

FIGURE 1 *The luxury trap. Every step is voluntary, small and sensible. The staircase only goes one way, because the population grows to fit each step before the next one is taken.*

Luxuries become necessities, and then they create obligations.

And here is why nobody rebels. Each generation is born into slightly more work than the last, and none of them remembers an alternative. Nobody experiences it as a trap. It is simply what life is.

MY TAKE — THIS IS THE IDEA WORTH STEALING

I have used this more than anything else in *Sapiens*, and never once about farming.

The washing machine was going to give people free afternoons. Instead the standard of what counts as *clean* rose to absorb the time, and now nobody has free afternoons and nobody can manage without a washing machine.

Email was going to save time. Instead the expected reply time fell from a week to about an hour. We got the technology. We did not get the leisure.

The phone was going to keep you in touch with people. Now being unreachable for six hours requires an explanation.

Same mechanism every time. Ten reasonable steps, no villain, no decision, and a cage at the end that everyone is now dependent on. If you ever catch yourself thinking *I do not remember choosing this* — that is the luxury trap, and it is twelve thousand years old.

THE THING NOBODY QUESTIONS

Everybody arguing about the Agricultural Revolution — Harari, his critics, the textbooks — takes it for granted that it was a **decision**. A good one or a catastrophic one, but a decision.

Look at the words. *Revolution. Adopted agriculture. Made the transition. History's biggest fraud* — a fraud needs a fraudster.

There was no moment. No meeting. No vote. Nobody in 9000 BC weighed foraging against farming and picked wrong, because nobody in 9000 BC could see either option whole. What existed was ten thousand years of individual families making small reasonable choices about this valley, this season, this baby.

The vocabulary of decision smuggles in a decider who never existed — and once you have imagined a decider you can be angry at them, which is much more satisfying than the truth.

The truth is worse. This was not a mistake anybody made. It is what happens when a species that can plan a season lives inside a process that runs for ten thousand years. And that means the same thing can be happening to us right now, and there would be nobody to blame and nothing to notice.

Successful for whom?

The single most useful distinction in the book. If you take one thing from these eleven parts, take this and the luxury trap.

Now the question that quietly rearranges everything. Evolution has exactly one scoreboard: **copies of DNA**. How many of you are there, and will there be more tomorrow. That is the whole measure. There is no other column.

By that scoreboard, farming is a triumph beyond argument. There were perhaps five to eight million foragers on Earth. By the first century AD there were around two hundred and fifty million humans.

Wheat won. Rice won. Cattle won. *Homo sapiens* won, enormously.

And here is the sentence.

A species can be spectacularly successful while every individual inside it is worse off.

Those two things are not connected. They were never connected. And we confuse them constantly, in almost every argument about almost every subject.

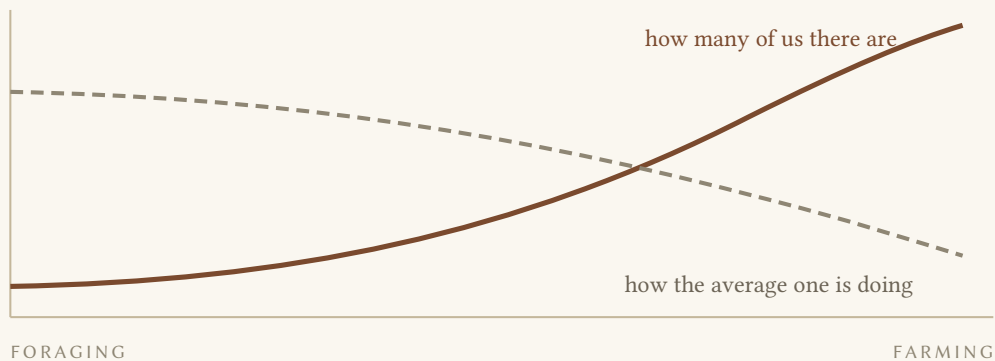


FIGURE 2 Two scoreboards, running at the same time, in opposite directions. Almost every argument about progress is two people looking at different lines and each assuming the other is lying.

IN REAL TERMS — WHERE YOU HAVE SEEN THIS THIS WEEK

A country's economy grows while the people in it feel poorer. Both statements can be true and usually are.

A company is worth billions while the people who work there are exhausted and replaceable. Both true.

A city's population doubles, which every report calls growth, while the water table drops and the average commute goes from twenty minutes to ninety.

The trick is always the same. Somebody counts the number that is going up, and calls it success, and the number that is going down does not appear on the form.

So the question to carry out of this chapter is: **which number is being counted, and is it the one that matters to the person living inside it?**

The animals

The hardest section in the chapter, and the clearest proof of the point above.

Harari does something here that history books almost never do. He treats the suffering of animals as a historical fact rather than a footnote.

Chickens, cattle, pigs and sheep are among the most numerous large animals on Earth. Tens of billions of them. By the only measure evolution uses, they have won more completely than any wild animal alive — the wolf is a rare and protected creature and the dog is everywhere.

And the individual life of a modern farmed chicken or dairy calf is one of the most wretched things our species has ever produced.

A calf is separated from its mother within days so the milk can be sold. That bond is not sentiment; it is a biological requirement, and the same machinery is in you. Cows call for their calves for days afterwards.

An egg-laying hen may spend her life in a space too small to spread a wing. Male chicks, commercially useless, are killed at a day old, worldwide, in the billions.

Breeding sows in some systems are held in crates barely bigger than their bodies, unable to turn around, for most of their adult lives — while carrying an intact and powerful drive to build a nest, which they will perform on bare concrete with nothing to build from.

HIS POINT, IN MY WORDS

These animals are, at the same time, the greatest evolutionary success story in the history of life and the greatest mass of individual suffering our species has ever created.

It is not two facts. It is one fact, looked at from two directions.

And that is exactly why the distinction in Section Five matters. If you only count the number that is going up, industrial livestock farming is the most successful thing that ever happened to a chicken.

Harari comes back to this much harder in Part Ten, where he uses a phrase I still find difficult. Whatever you eat and whatever you conclude, I do not think the argument can be waved away, and I have not managed to.

Where I think he is wrong in this chapter

More pushback here than in any part so far. The core survives; a lot of the confident detail does not.

1. The health evidence is real but much patchier than he says

The claim that early farmers were shorter, sicker and worse-fed than the foragers before them is not invented. It comes from a genuine body of work comparing skeletons across the transition.

But it varies enormously by region and by era. Some early farming populations look perfectly healthy. In some places stature drops sharply and then recovers. In others the pattern barely appears at all. The strongest signals often come from particular regions at particular moments, and the global generalisation is doing more work than the underlying studies support.

Harari gives you the cleanest version of a genuinely messy picture, which is a habit I have flagged in every part so far.

2. The chicken-and-egg problem, which he steps around

WHERE THE EXPERTS ACTUALLY FIGHT — WHICH CAME FIRST?

Harari's version. Farming came first. It produced more food. More food produced more people. More people made going back impossible. The trap closed.

The other version. Population pressure came first. Foraging populations in the richest regions had already grown to the limit of what wild food could support — helped by a warming, stabilising climate. Once you are at that limit, intensifying food production is not a trap you wander into, it is the only remaining option that is not mass death.

Why the difference matters enormously. In Harari's version, humanity took a wrong turn and did not notice. In the other version there was no wrong turn available. Nobody was defrauded, because there was no alternative on the table.

Where it stands. Genuinely unresolved, and it may be circular — population and food production plausibly pushed each other upward, with no first mover. Several archaeologists also point out that in some regions, sedentary villages appear *before* domesticated crops, which is awkward for both stories.

What would settle it. Very fine-grained evidence of population density immediately before domestication in each independent centre. That is extremely hard to get, which is why the argument is decades old.

Harari's chapter title requires his version to be true. He does not tell you the other one exists.

3. "The average person was less happy" is not a measurable claim

This is the deepest problem and it sits under the whole chapter.

Nobody in 8000 BC left a diary. There is no record of what any of these people felt about their lives. Harari is inferring inner experience from bones, calorie estimates and working hours — and inner experience does not follow from those things in any reliable way.

People adapt. People find meaning in hard work. People are made happy by children, and farming produced more children. A society can be objectively harder and subjectively fine, and the reverse, and there is no instrument that reaches back and tells us which.

He knows this. He returns to it properly in Chapter 19, where he admits history has barely studied happiness at all. But in Chapter 5 he needs the claim, so he makes it, and he makes it look easier than it is.

4. What survives all of that

Quite a lot, and this is the same verdict I reached on Darwin.

Strip out the confident health statistics, the settled causal order and the unmeasurable happiness claim, and you are left with two things.

The luxury trap. Small voluntary steps, each sensible, adding up to a situation nobody chose and nobody can leave, because the population has grown to fit it. That mechanism is real, it is observable in modern life, and it is the best idea in the book.

The two scoreboards. Evolutionary success and individual wellbeing are different measurements, and confusing them is the most common mistake in every argument about progress. That one is not contested by anybody, and it is worth the price of the book on its own.

The chapter's title is journalism. The chapter's machinery is excellent.

WORTH REMEMBERING

Farming started independently in at least six places within a few thousand years, so nobody invented it and nobody spread it. Something about the end of the ice age made it possible everywhere at once.

Wheat did very well out of the arrangement. Two and a quarter million square kilometres, tended by a species that reorganised its entire body and way of life to serve it.

Famine, plague and war are not ancient constants. One crop makes famine possible. Crowding plus livestock makes epidemics possible. An immovable granary makes war worth it.

The luxury trap: every step voluntary, every step sensible, the destination a cage — and by the time it is a cage, the population has grown to fill it, so the exit is blocked by arithmetic rather than by force.

And the two scoreboards. A species can be thriving while every individual in it is worse off. Always ask which number is being counted, and whether it is the one that matters to the person inside.

Words from this part

Everything I stopped to explain, gathered up.

WORD	WHAT IT MEANS
AGRICULTURAL REVOLUTION	The shift from foraging to farming, beginning around 12,000 years ago. "Revolution" is misleading — it took thousands of years and nobody decided it.
DOMESTICATION	Turning a wild species into one that lives with humans, depends on them, and has been physically changed by them.
LUXURY TRAP	When small voluntary improvements each make sense, and the sum is a situation you cannot leave.
EVOLUTIONARY SUCCESS	Copies of DNA. The only thing evolution measures. It has no column for suffering.
SEDENTARY	Staying in one place rather than moving with the seasons. The thing farming requires, and the root of almost everything that follows.
GÖBEKLI TEPE	A site in southeastern Turkey, from around 9500 BC: huge carved stone pillars raised by people who appear not to have been farming yet. It complicates the usual order of events.
SURPLUS	Food produced beyond what the growers eat. The thing that makes kings, priests and armies possible. Part 5 is about what happened to it.

The timeline so far

Carried forward, with this chapter added.

WHEN	WHAT
16,000 years ago	Sapiens reach the Americas. Megafauna collapse follows.
9500–8500 BC	Wheat, barley, peas and lentils domesticated in the Middle East. Farming begins independently in China, the Americas, Africa and New Guinea over the following millennia.
9000 BC	Peas and lentils. Goats.
5000 BC	Olive trees.
4000 BC	Horses.
3500 BC	Grapevines. First cities in Sumer. Part 5 starts here.

WHEN

WHAT

1st century AD

Roughly 250 million humans, up from perhaps 5–8 million foragers.

Part Five

Chapter 6: Building Pyramids · Chapter 7: Memory Overload

Farming produced a surplus, and a surplus is the beginning of everything else. Part Five is about the two things that surplus made necessary.

Chapter 6 asks the question that follows directly from this part. Once you have a city of fifty thousand people, or a kingdom of a million, how do you keep them cooperating? You cannot do it by personal relationships, because that ran out at a hundred and fifty back in Part Two. You cannot do it by force alone, because you would need someone watching everyone and someone watching them. So you do it with a story — and Harari compares two documents, written three and a half thousand years apart, that both claim to describe eternal justice and that flatly contradict each other.

Chapter 7 is about a problem so boring that it changed the world. A kingdom generates more numbers than a human brain can hold. Your brain is superb at faces and hopeless at figures, and administration is almost entirely figures. So somebody invented writing — and the first thing anybody ever wrote down was a receipt for barley.

Here is what Part Five takes on:

- Why "history is something very few people have been doing while everybody else was ploughing fields"
- The Code of Hammurabi and the American Declaration of Independence, side by side, both certain, both eternal, both incompatible
- The three mechanisms that keep any large society standing, including the one that reaches inside you and manufactures what you want
- The difference between objective, subjective and inter-subjective — the most useful three-way distinction in the book
- Why the first named human being in recorded history may have been an accountant
- And why storing knowledge outside the brain gave us bureaucracy, categories, and the very modern experience of being told you are at the wrong window



End of Part Four of Eleven · History's Biggest Fraud

My own reading of *Sapiens* — Lovepreet Singh

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