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Homo Deus

A Brief History of Tomorrow

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Such threats and promises often succeed in creating stable human hierarchies and mass-cooperation networks, as long as people believe that they reflect the inevitable laws of nature or the divine commands of God, rather than just human whims. All large-scale human cooperation is ultimately based on our belief in imagined orders. These are sets of rules that, despite existing only in our imagination, we believe to be as real and inviolable as gravity. 'If you sacrifice ten bulls to the sky god, the rain will come; if you honour your parents, you will go to heaven; and if you don't believe what I am telling you – you'll go to hell.' As long as all *Sapiens* living in a particular locality believe in the same stories, they all follow the same rules, making it easy to predict the behaviour of strangers and to organise mass-cooperation networks. *Sapiens* often use visual marks such as a turban, a beard or a business suit to signal 'you can trust me, I believe in the same story as you'. Our chimpanzee cousins cannot invent and spread such stories, which is why they cannot cooperate in large numbers.

The Web of Meaning

People find it difficult to understand the idea of 'imagined orders' because they assume that there are only two types of realities: objective realities and subjective realities. In objective reality, things exist independently of our beliefs and feelings. Gravity, for example, is an objective reality. It existed long before Newton, and it affects people who don't believe in it just as much as it affects those who do.

Subjective reality, in contrast, depends on my personal beliefs and feelings. Thus, suppose I feel a sharp pain in my head and go to the doctor. The doctor checks me thoroughly, but finds nothing wrong. So she sends me for a blood test, urine test, DNA test,

X-ray, electrocardiogram, fMRI scan and a plethora of other procedures. When the results come in she announces that I am perfectly healthy, and I can go home. Yet I still feel a sharp pain in my head. Even though every objective test has found nothing wrong with me, and even though nobody except me feels the pain, for me the pain is 100 per cent real.

Most people presume that reality is either objective or subjective, and that there is no third option. Hence once they satisfy themselves that something isn't just their own subjective feeling, they jump to the conclusion it must be objective. If lots of people believe in God; if money makes the world go round; and if nationalism starts wars and builds empires – then these things aren't just a subjective belief of mine. God, money and nations must therefore be objective realities.

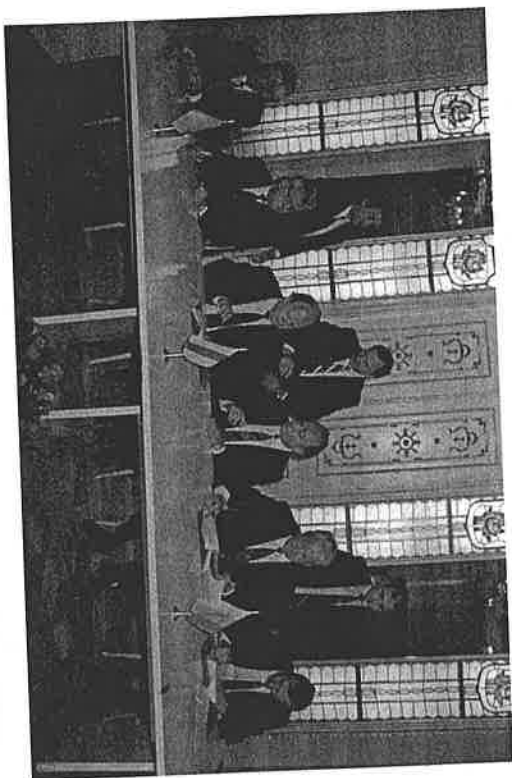
However, there is a third level of reality: the intersubjective level. Intersubjective entities depend on communication among many humans rather than on the beliefs and feelings of individual humans. Many of the most important agents in history are intersubjective. Money, for example, has no objective value. You cannot eat, drink or wear a dollar bill. Yet as long as billions of people believe in its value, you can use it to buy food, beverages and clothing. If the baker suddenly loses his faith in the dollar bill and refuses to give me a loaf of bread for this green piece of paper, it doesn't matter much. I can just go down a few blocks to the nearby supermarket. However, if the supermarket cashiers also refuse to accept this piece of paper, along with the hawkers in the market and the salespeople in the mall, then the dollar will lose its value. The green pieces of paper will go on existing, of course, but they will be worthless.

Such things actually happen from time to time. On 3 November 1985 the Myanmar government unexpectedly announced that

banknotes of twenty-five, fifty and a hundred kyats were no longer legal tender. People were given no opportunity to exchange the notes, and savings of a lifetime were instantaneously turned into heaps of worthless paper. To replace the defunct notes, the government introduced new seventy-five-kyat bills, allegedly in honour of the seventy-fifth birthday of Myanmar's dictator, General Ne Win. In August 1986, banknotes of fifteen kyats and thirty-five kyats were issued. Rumour had it that the dictator, who had a strong faith in numerology, believed that fifteen and thirty-five are lucky numbers. They brought little luck to his subjects. On 5 September 1987 the government suddenly decreed that all thirty-five and seventy-five notes were no longer money.

The value of money is not the only thing that might evaporate once people stop believing in it. The same can happen to laws, gods and even entire empires. One moment they are busy shaping the world, and the next moment they no longer exist. Zeus and Hera were once important powers in the Mediterranean basin, but today they lack any authority because nobody believes in them. The Soviet Union could once destroy the entire human race, yet it ceased to exist at the stroke of a pen. At 2 p.m. on 8 December 1991, in a state dacha near Viskuli, the leaders of Russia, Ukraine and Belarus signed the Belavezha Accords, which stated that 'We, the Republic of Belarus, the Russian Federation and Ukraine, as founding states of the USSR that signed the union treaty of 1922, hereby establish that the USSR as a subject of international law and a geopolitical reality ceases its existence.'²⁵ And that was that. No more Soviet Union.

It is relatively easy to accept that money is an intersubjective reality. Most people are also happy to acknowledge that ancient Greek gods, evil empires and the values of alien cultures exist



19. Signing the Belavezha Accords. Pen touches paper – and abracadabra! The Soviet Union disappears.

only in the imagination. Yet we don't want to accept that *our* God, *our* nation or *our* values are mere fictions, because these are the things that give meaning to our lives. We want to believe that our lives have some objective meaning, and that our sacrifices matter to something beyond the stories in our head. Yet in truth the lives of most people have meaning only within the network of stories they tell one another.

Meaning is created when many people weave together a common network of stories. Why does a particular action – such as getting married in church, fasting on Ramadan or voting on election day – seem meaningful to me? Because my parents also think it is meaningful, as do my brothers, my neighbours, people in nearby cities and even the residents of far-off countries. And why do all these people think it is meaningful? Because their friends and neighbours also share the same view. People constantly

reinforce each other's beliefs in a self-perpetuating loop. Each round of mutual confirmation tightens the web of meaning further, until you have little choice but to believe what everyone else believes.

Yet over decades and centuries the web of meaning unravels and a new web is spun in its place. To study history means to watch the spinning and unravelling of these webs, and to realise that what seems to people in one age the most important thing in life becomes utterly meaningless to their descendants.

In 1187 Saladin defeated the crusader army at the Battle of Hattin and conquered Jerusalem. In response the Pope launched the Third Crusade to recapture the holy city. Imagine a young English nobleman named John, who left home to fight Saladin. John believed that his actions had an objective meaning. He believed that if he died on the crusade, after death his soul would ascend to heaven, where it would enjoy everlasting celestial joy. He would have been horrified to learn that the soul and heaven are just stories invented by humans. John wholeheartedly believed that if he reached the Holy Land, and if some Muslim warrior with a big moustache brought an axe down on his head, he would feel an unbearable pain, his ears would ring, his legs would crumble under him, his field of vision would turn black – and the very next moment he would see brilliant light all around him, he would hear angelic voices and melodious harps, and radiant winged cherubs would beckon him through a magnificent golden gate.

John had a very strong faith in all this, because he was enmeshed within an extremely dense and powerful web of meaning. His earliest memories were of Grandpa Henry's rusty sword, hanging in the castle's main hall. Ever since he was a toddler John had heard stories of Grandpa Henry who died on the Second

Crusade and who is now resting with the angels in heaven, watching over John and his family. When minstrels visited the castle, they usually sang about the brave crusaders who fought in the Holy Land. When John went to church, he enjoyed looking at the stained-glass windows. One showed Godfrey of Bouillon riding a horse and impaling a wicked-looking Muslim on his lance. Another showed the souls of sinners burning in hell. John listened attentively to the local priest, the most learned man he knew. Almost every Sunday, the priest explained – with the help of well-crafted parables and hilarious jokes – that there was no salvation outside the Catholic Church, that the Pope in Rome was our holy father and that we always had to obey his commands. If we murdered or stole, God would send us to hell; but if we killed infidel Muslims, God would welcome us to heaven.

One day when John was just turning eighteen a dishevelled knight rode to the castle's gate, and in a choked voice announced the news: Saladin has destroyed the crusader army at Hattin! Jerusalem has fallen! The Pope has declared a new crusade, promising eternal salvation to anyone who dies on it! All around, people looked shocked and worried, but John's face lit up in an otherworldly glow and he proclaimed: 'I am going to fight the infidels and liberate the Holy Land!' Everyone fell silent for a moment, and then smiles and tears appeared on their faces. His mother wiped her eyes, gave John a big hug and told him how proud she was of him. His father gave him a mighty pat on the back, and said: 'If only I was your age, son, I would join you. Our family's honour is at stake – I am sure you won't disappoint us!' Two of his friends announced that they were coming too. Even John's sworn rival, the baron on the other side of the river, paid a visit to wish him Godspeed.

As he left the castle, villagers came forth from their hovels to wave to him, and all the pretty girls looked longingly at the brave crusader setting off to fight the infidels. When he set sail from England and made his way through strange and distant lands – Normandy, Provence, Sicily – he was joined by bands of foreign knights, all with the same destination and the same faith. When the army finally disembarked in the Holy Land and waged battle with Saladin's hosts, John was amazed to discover that even the wicked Saracens shared his beliefs. True, they were a bit confused, thinking that the Christians were the infidels and that the Muslims were obeying God's will. Yet they too accepted the basic principle that those fighting for God and Jerusalem will go straight to heaven when they die.

In such a way, thread by thread, medieval civilisation spun its web of meaning, trapping John and his contemporaries like flies. It was inconceivable to John that all these stories were just figments of the imagination. Maybe his parents and uncles were wrong. But the minstrels too, and all his friends, and the village girls, the learned priest, the baron on the other side of the river, the Pope in Rome, the Provençal and Sicilian knights, and even the very Muslims – is it possible that they were all hallucinating?

And the years pass. As the historian watches, the web of meaning unravels and another is spun in its stead. John's parents die, followed by all his siblings and friends. Instead of minstrels singing about the crusades, the new fashion is stage plays about tragic love affairs. The family castle burns to the ground and, when it is rebuilt, no trace is found of Grandpa Henry's sword. The church windows shatter in a winter storm and the replacement glass no longer depicts Godfrey of Bouillon and the sinners in hell, but rather the great triumph of the king of England over the king of

France. The local priest has stopped calling the Pope 'our holy father' – he is now referred to as 'that devil in Rome'. In the nearby university scholars pore over ancient Greek manuscripts, dissect dead bodies and whisper quietly behind closed doors that perhaps there is no such thing as the soul.

And the years continue to pass. Where the castle once stood, there is now a shopping mall. In the local cinema they are screening *Monty Python and the Holy Grail* for the umpteenth time. In an empty church a bored vicar is overjoyed to see two Japanese tourists. He explains at length about the stained-glass windows, while they politely smile, nodding in complete incomprehension. On the steps outside a gaggle of teenagers are playing with their iPhones. They watch a new YouTube remix of John Lennon's 'Imagine'. 'Imagine there's no heaven,' sings Lennon, 'it's easy if you try.' A Pakistani street cleaner is sweeping the pavement, while a nearby radio broadcasts the news: the carnage in Syria continues, and the Security Council's meeting has ended in an impasse. Suddenly a hole in time opens, a mysterious ray of light illuminates the face of one of the teenagers, who announces: 'I am going to fight the infidels and liberate the Holy Land!'

Infidels and Holy Land? These words no longer carry any meaning for most people in today's England. Even the vicar would probably think the teenager is having some sort of psychotic episode. In contrast, if an English youth decided to join Amnesty International and travel to Syria to protect the human rights of refugees, he will be seen as a hero. In the Middle Ages people would have thought he had gone bonkers. Nobody in twelfth-century England knew what human rights were. You want to travel to the Middle East and risk your life not in order to kill Muslims, but to protect one group of Muslims from another? You must be out of your mind.

That's how history unfolds. People weave a web of meaning, believe in it with all their heart, but sooner or later the web unravels, and when we look back we cannot understand how anybody could have taken it seriously. With hindsight, going on crusade in the hope of reaching Paradise sounds like utter madness. With hindsight, the Cold War seems even madder. How come thirty years ago people were willing to risk nuclear holocaust because of their belief in a communist paradise? A hundred years hence, our belief in democracy and human rights might look equally incomprehensible to our descendants.

Dreamtime

Sapiens rule the world because only they can weave an intersubjective web of meaning: a web of laws, forces, entities and places that exist purely in their common imagination. This web allows humans alone to organise crusades, socialist revolutions and human rights movements.

Other animals may also imagine various things. A cat waiting to ambush a mouse might not see the mouse, but may well imagine the shape and even taste of the mouse. Yet to the best of our knowledge, cats are able to imagine only things that actually exist in the world, like mice. They cannot imagine things that they have never seen or smelled or tasted – such as the US dollar, Google corporation or the European Union. Only Sapiens can imagine such chimeras.

Consequently, whereas cats and other animals are confined to the objective realm and use their communication systems merely to describe reality, Sapiens use language to create completely new realities. During the last 70,000 years the intersubjective realities that Sapiens invented became ever more powerful, so

that today they dominate the world. Will the chimpanzees, the elephants, the Amazon rainforests and the Arctic glaciers survive the twenty-first century? This depends on the wishes and decisions of intersubjective entities such as the European Union and the World Bank; entities that exist only in our shared imagination.

No other animal can stand up to us, not because they lack a soul or a mind, but because they lack the necessary imagination. Lions can run, jump, claw and bite. Yet they cannot open a bank account or file a lawsuit. And in the twenty-first century, a banker who knows how to file a lawsuit is far more powerful than the most ferocious lion in the savannah.

As well as separating humans from other animals, this ability to create intersubjective entities also separates the humanities from the life sciences. Historians seek to understand the development of intersubjective entities like gods and nations, whereas biologists hardly recognise the existence of such things. Some believe that if we could only crack the genetic code and map every neuron in the brain, we will know all of humanity's secrets. After all, if humans have no soul, and if thoughts, emotions and sensations are just biochemical algorithms, why can't biology account for all the vagaries of human societies? From this perspective, the crusades were territorial disputes shaped by evolutionary pressures, and English knights going to fight Saladin in the Holy Land were not that different from wolves trying to appropriate the territory of a neighbouring pack.

The humanities, in contrast, emphasise the crucial importance of intersubjective entities, which cannot be reduced to hormones and neurons. To think historically means to ascribe real power to the contents of our imaginary stories. Of course, historians don't ignore objective factors such as climate changes

and genetic mutations, but they give much greater importance to the stories people invent and believe. North Korea and South Korea are so different from one another not because people in Pyongyang have different genes to people in Seoul, or because the north is colder and more mountainous. It's because the north is dominated by very different fictions.

Maybe someday breakthroughs in neurobiology will enable us to explain communism and the crusades in strictly biochemical terms. Yet we are very far from that point. During the twenty-first century the border between history and biology is likely to blur not because we will discover biological explanations for historical events, but rather because ideological fictions will rewrite DNA strands; political and economic interests will redesign the climate; and the geography of mountains and rivers will give way to cyberspace. As human fictions are translated into genetic and electronic codes, the intersubjective reality will swallow up the objective reality and biology will merge with history. In the twenty-first century fiction might thereby become the most potent force on earth, surpassing even wayward asteroids and natural selection. Hence if we want to understand our future, cracking genomes and crunching numbers is hardly enough. We must also decipher the fictions that give meaning to the world.