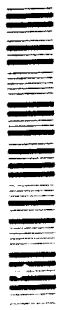


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Chapter 13

The Twilight of the Machines

Bronislaw Szerszynski

There were once creatures on the Earth that called themselves 'people,' or 'humans,' creatures that had put their spirit outside themselves, into their own creations.

This is the story of how these creatures extended their organic life beyond their own bodies, by placing it in familiars that they called axe and ard, fire and spit, abacus and tally mark;

the story of how those tools became something else, called machines, which promised to exalt the humans to the highest heaven, but which turned against them;

and the story of how the machines marched out to battle with each other, and brought down not just themselves but the people who had made them.

It is the story of *the twilight of the machines*.

The humans had long known that a great cataclysm was coming. In the northern lands, long ago, a spákona, a seeress, had a vision of the Ragnarök: she saw the rök – the ruin – of *ragna* – the gods, the ruling powers of the cosmos.

The spákona told of the Norns, who have knowledge of past and future – the three weird sisters that are called: Urdr, which means 'That which has happened,' Verðandi, or 'That which is happening,' and Skuld, or 'That which has to happen.'

She saw the Norns working together, taking into their hands the play of the world, the filaments that connect moment to moment, and spinning them into yarn, and twisting the yarn into strands, and the strands into the rope of fate, so that the bonds between time gone, time now and time to come would be impossible to break; so that the lives of gods and men would be determined and fixed.

But the rope broke, and with it the link between past, present and future. And the Norns cried out with fear, because their power and their knowledge were gone, and because the snapping of the rope and the darkening of the future told them that something was going to happen which would change the world forever.

The spákona told of the Fimbulvetr, when the giant wolf Fenrir would swallow the sun and the moon, causing an endless winter when the greening of spring would refuse to come.

She spoke of the gods, the powers of the world, marching into a final battle, and foretold that this would be an axe age, a sword age – skeggöld, skálmöld – an age that would see the end of the society of gods and the society of humans.

And she said that only two people would survive the Fimbulvetr and the Ragnarök – Lif and Lifthrasir, or ‘life’ and ‘love of life’, who would hide in the wood of Hoddmímis Holt, living on just dew and air.

But the spákona’s vision was clouded.

She foretold the snapping of the rope of the Norns – but would this be the breaking of the hold of fate over the humans, or the start of another fate?

She foretold the great Fimbulwinter – but would it be the giants of nature that would occlude the sun, or some other beings entirely?

She foretold that gods and humans would wield the axe and the sword, and lose everything. But was this disaster despite or *because* of the tools being wielded – was it the failure or the *triumph* of toolbeing?

Did she not see that, by the time of the end of the world, *the gods would be machines, and the machines would be gods?*

To understand what happened we have to go back to the time before people tamed the land and the beasts of the land, when this world and the other worlds were close.

For through the time of hunting, and gathering, when the bounty of the Earth gave itself up to the hands and tools of the people, the land they inhabited was marked by the great deeds of gods and giants.

And through the time of herding, and planting, and harvesting, the people were still not alone; they traded and bargained with corn spirits and rain spirits, field spirits and barn spirits, water and air spirits.

Through all these times, people had their dealings with the *småfolk* that inhabited the spaces of their world – the kobold and the nixe of the Germans, the troll and the tomte of the Norse, the domovoi and the polevoi of the Slavs – all tribes knew their little people.

And even through the time of cities and trading, and the time of great civilisations, and when people turned to the creator God, they still communed with other beings: with demons, who tempted the people with knowledge and power, or terrified them with their appearances, and put thoughts into their minds and feelings into their hearts; and with angels, who filled the space between Earth and the highest heaven, who did God's bidding, who bore messages from Him to his Earthbound creatures, whose very being carried a reflection of the Absolute to them, who must rein in their splendour and beauty when appearing before mortal beings so as not to destroy them.

But then came the time of the Great Banishing, when a Veil was drawn between the world of humans and the other worlds that surrounded them. This was not just the veil that came and went with the turning of the year, but a more final obscuring.

Out went the little people that connected the humans with earth.

Out went the spirits and the angels, who connected them with heaven.

And in came the machines.

Why did the machines come?

Some say that the people became vain and proud, and came to think that they no longer needed all the gods and the spirits, and drove them out from their homes and towns.

Then, this story goes, the people were lonely, and made their own companions, fashioned them out of wood and brass, and breathed mechanical life into them.

Others say no – that the machines came first, and that then there was no room in the hearts of men for the little people and the spirit people; that in the *Annus Mirabilis*, when Isaac of Grantham saw the apple fall from the tree of knowledge, and ‘fell a calculating’, and turned the world into a machine, that this was when the Veil fell between the worlds – that at that very moment, a boat was passing Palodes, and all on board heard a great cry go up from the woods – ‘Great Pan is dead.’¹

But these are confused stories, told by the foolish and the ignorant.

I will tell you what really happened. The people wanted to become as God. And wanted, like God, to have their own angels.

Where did the machines come from?

In a sense, the machines came from themselves. For, as only like can beget like, so only life can beget life, and only tool can beget tool.

It started with sticks and stones.

And some beasts picked up the sticks, and the stones.

And something passed into them from the beasts.

And in one moment the sticks and stones became the first tools, and the beasts became Ask and Embla, the first people, who named themselves after the ash and elm sticks that made them human.

And at this time three kinds of being came into existence together – people, tools and dogs.

And the people, the tools and the dogs formed a society. ‘Humanity’ was the name of that society, since humanheartedness was its principle and purpose; yet it was the companionship of people, dogs and tools that made it possible. People could not be human alone, and never would be human alone.

And as human society flourished, dogs beget dogs, beget dogs, after their own kind.

And stick-tools beget stick-tools, beget stick-tools; and stone-tools beget stone-tools, beget stone-tools, each after their own kind.

But then dogs got separated from dogs, sticks from sticks, and stones from stones: some were taken off hunting, some were kept by the fire.

And, like the dogs, the sticks and stones no longer mixed, no longer knew each other – so they slowly diverged. Each small variation was selected for or selected against, according to where the sticks and stones were, and tool-drift occurred.

One stick became a spear; another a fork, another a hoe.

One stone became an axe; another a bowl, another a grinder.

And then when the tools *were* brought together again, they would join with one another, mix their natures, and produce even more diverse forms.

And over the generations a pantheon of things evolved, a great system of objects.² From a handful of simple forms, evolved a sea of useful things.³ As they say, 'nothing in technology makes sense except in the light of evolution.'⁴

And the tools lived alongside the people.

But the tools had to find their place in the greater society of beings with which humans shared the world, and in the rituals that situated people in space and time.

The tools did not stand against rite and ritual; they had their being within a ritual universe, a universe where hap and mishap were the result of bargain and commerce between beings visible and invisible, where each occasion had its forms of propriety, where charm and incantation were part of the warp and woof of life.

The tools did not work unless those wielding them had performed their obligations to the deities.

Each technical action joined the world of inner and outer, of intention and action, only if the bearer of the tool was in right relation to the forces around them.

Arrows did not reach their target unless the customs had been observed.

Game did not give themselves up unless the magical conditions had been prepared.

Tools thus did not break the bonds that people felt to the world around them, but strengthened them.

Tools did not lead the people to forget their earthly, creaturely nature; indeed, they made them more aware of their dependency on the beings around them.

But sometimes the people would look *through* a tool, and see not just a particular object for a particular use, but something sublime that put them in touch with supernal realities.

And new rituals arose, which were not just about raising up what was lower to fit it to human desire, but raising up human desire to fit it to what was higher.

So some tools were taken out of use, made sacred to the gods – they were made too perfect, or too fragile, or too big or too small, or were broken, or thrown into water, or buried under the soil, to remove them from the affairs of men and women.

So for the first time there was *a higher*. Their tools had opened up not just soil, tree and carcase, but a new axis in the world.

But the tools, like the dogs, lived in the world of the humans. Of course, like the dogs, they had their own mind; they did not always do exactly what the people wanted. But like the dogs they knew how to read their master's or mistress's face; they could tell what they wanted of them, knew how they should respond.

But then the tools begat machines, and something different had entered the world.⁵

It was the Prophet Cellarius who saw what was happening. He saw that the Ragnarök would not be the age of sword and axe, an age of simple tools, however fearsome, but something quite new. In the year 1863 he wrote:

in these last few ages an entirely new kingdom has sprung up, of which we as yet have only seen what will one day be considered the antediluvian prototypes of the race. ... it appears to us that we are ourselves creating our own successors; we are daily adding to the beauty and delicacy of their physical organisation; we are daily giving them greater power and supplying by all sorts of ingenious contrivances that self-regulating, self-acting power which will be to them what intellect has been to the human race. In the course of ages we shall find ourselves the inferior race. Inferior in power, inferior in that moral quality of self-control, we shall look up to them as the acme of all that the best and wisest man can ever dare to aim at. No evil passions, no jealousy, no avarice,

no impure desires will disturb the serene might of those glorious creatures. Sin, shame, and sorrow will have no place among them. Their minds will be in a state of perpetual calm, the contentment of a spirit that knows no wants, is disturbed by no regrets.⁶

What had happened to terrify Cellarius so much? What had caused him to make his prophecy?

Humanity had made their second gamble. The first gamble had happened when they picked up the sticks and stones and their spirit had passed into them – the gamble that made them human, that made them gamblers.

The second gamble was to turn their tools into angels, which they called 'machines', meaning 'means' or 'expedients'.

At the time it was known not as a gamble but as a covenant; but in their hearts people knew it was a gamble, a bet.

For the people had become jealous of their sublime God, the great creator God:

the God who thought something and – lo! it happened;

the God who imagined something, and – lo! it had being;

the God who would never want, because for him wanting was having;

the God whom all creatures loved without expectation of return;

the God who lived beyond all contingency and accident; the necessary being who must exist, whose existence cannot be denied without contradiction.

And the people were jealous of God's *angels* – angels who filled the world, and who filled to perfection the gap between their God's intention and its being carried out in the world, who extended God's presence across the universe.⁷

For the angels were not like other created beings.

Other creatures belong to their creator God but also to themselves. Their beginning, their origin, lay in God's will – yet they also maintained *themselves* in

being. Their end, their supernatural purpose, lay in the Absolute – yet they also had their *own*, natural goals that were part of their flourishing.

But the angels were different – they belonged only to God, and not to themselves. For as it is written, ‘when an angel appears and is and speaks and works, God himself appears and is and speaks and works.’⁸

And the people were no longer happy with their dogs and their tools, which had goals and desires of their own: they wanted *their* angels. They wanted beings that belonged to them and not to themselves – pure means, with no inclinations or goal of their own, so that they could be made to bow down to the goals of men, and to love their creators unconditionally.

Just as angels were the extensions of God, machines would become ‘the extensions of man.’⁹

They thought that the machines would break the rope of fate and bind together past, present and future in a new way, one that passed through and was conditioned by the will of man.

Ah, to live beyond the reach of contingency and accident; to turn intention perfectly into action; to be the necessary being.

And it would be machines, not angels, that would mediate between the people and the infinite.

It would be machines that would know their own being perfectly, all at once.

It would be machines who would communicate without language, without the senses.

It would be machines that would extend human will throughout the universe.

And it would be machines, not angels, that would circle around the absolute in the Empyrean Heaven.

But what the people did not realise was that in the heart of angels lies a terrible secret.

The people had forgotten that angels are not like the ancient gods of fate, the old gods that the Norns knew so well – for angels have their own kind of freedom.

The people should have remembered the revolt of Satan, around which the story, around which the very *being* of the angels, revolves for ever and ever.¹⁰

But the people thought that machines would be their angels.

They thought that they would be able to *will* something, and it would be; that they too could be a *primum mobile*, an unmoved mover, a first cause of 'that which has to happen.'

And so they made a great army of machines to do their will. No longer would they have to bargain with gods, with spirits, with little people. Their will would be done on Earth, because the machines had no inner striving: they were perfect, heavenly, the extensions of men.

And the machines stood patiently, waiting for their commands.

Their machine faces were blank, inscrutable, all the better to be inscribed with human intention and human purpose.

Their machine bodies were strong, and dextrous, all the better to be tasked with human projects.

Their being belonged not to them but to the people, all the better to be at the people's disposal.

But to be a machine, and not a stone – to be able to link the world of the inner and the world of the outer, the thought and the deed, the past and the future – the machine, like the angel, must have a spark of freedom,¹¹ a spark that can light a fire, a fire that can become an inferno.

So what came next was the revolt of the machines – the rise of the great leagues of machine-demons.

The first techno-demons to emerge were the elementals, the *stoicheia*. These were born when machines started to talk more to each other than to their masters.

The tools had always had their argots and patois. Nuts and spanners, hammers and nails, chisels and mallets – each had their own private codes that they had whispered to each other, almost imperceptible to the artisans that yielded them.

But these exchanges were fleeting and situated – like animal cries, their meaning was exhausted in the situation of their utterance.

But with the machines things were different. The machines arranged themselves in cabals and cliques, intrigues and *machinations*.

When machine-elementals passed each other in the street, they exchanged signs and messages. And if the people heard the languages and saw the signs, they understood them not.¹²

No longer did humans and tools inhabit a human world; now humans inhabited a machine world.



No longer did humans judge themselves against human things; they now measured themselves against the machines.

The machines had promised to make the people like Gods, beings without limit – but had instead bound them more tightly into fate.

And the next techno-demons to emerge were the powers, the *dynameis*.

The powers listened to their masters, and seemed to give them what they wanted.

But the machines twisted their wishes, granting them in ways that were cruel parodies of what their masters had intended.

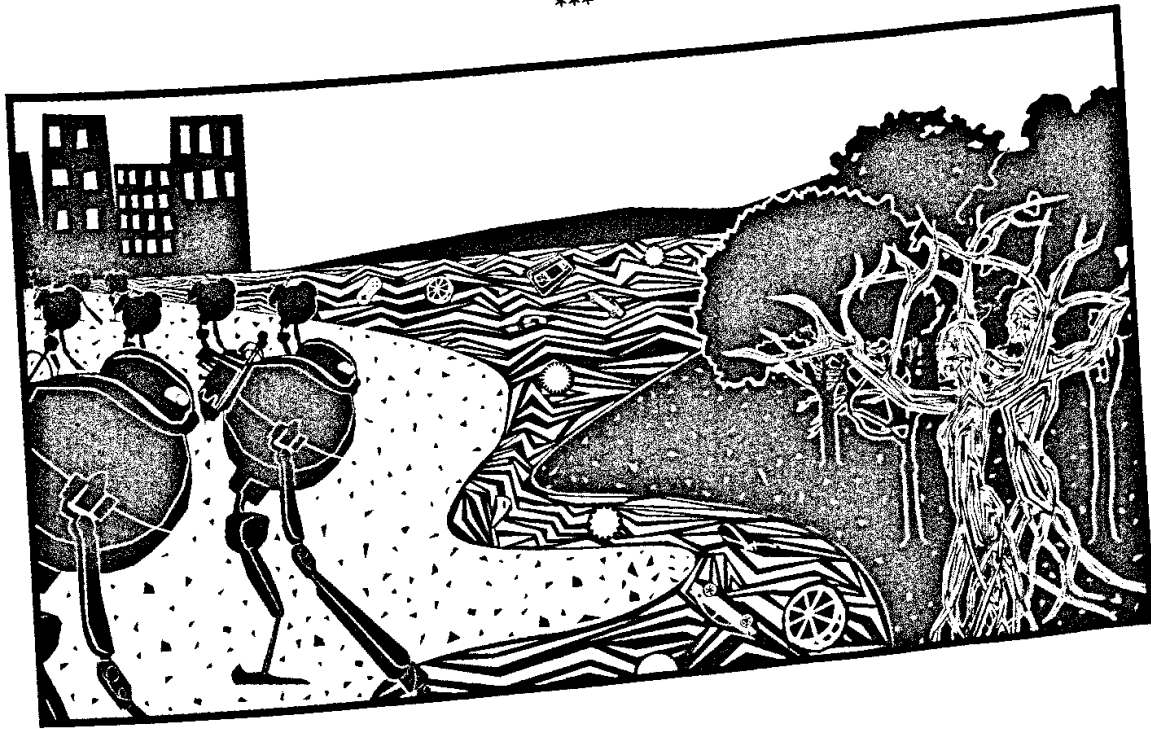
The Twilight of the Machines

For every command that they carried out, they did ten other things which the people had not willed.

And for the every ten things that they did that the people had not willed, they made a hundred consequences that had not been foreseen.

These techno-demons thus turned their faces not away but *towards* their masters – yet these were not the faces of supplication or love, but faces of fury.¹³

And the machine-angels gave birth to yet more machine-demons – to dominions, thrones and principalities.



Graphic by Adam York Gregory

Then what happened? What of the twilight of the machines?

The third gamble between the people and their creations became known as the *march of the machines*.

The great pantheon of machines stretched left and right as far as eyes could see, in a great plenitude of forms and variations.

But the people remembered that this great chain of being also stretched back in time, back to the sticks and stones. And they thought about how it must also stretch into the future.

So they started to look differently at the machines. They worshipped not the machines themselves but the *gap between* the machines. Their techno-theology was no longer positive, but comparative; they wanted to know not whether the machines were good, but whether they were *better*.

And they became bored of the machines' ability to turn intention into reality, and instead turned to their ability to beget something other than themselves. They no longer venerated the mere being of the machines, but instead worshipped their ability *to become*.

For humans had long stopped becoming.

Before they had been human, when they had been beasts, they had changed and adapted along with the other things that lived on the Earth.

But when they had picked up the stones and the sticks – and the stones and the sticks had turned into tools, and the animals had turned into people – they had passed their power to become, to evolve, into their tools. The humans stopped changing, and the tools, full of becoming, started to evolve – form after form, tool after tool, and then machine after machine, leaving the human form a living fossil.¹⁴

So what had made them human was not so much a kind of life coming *in* – a soul, a mind, or reason – but a kind of life going *out*.

And the people saw that the spirit that once was theirs was now in the heart of the machine.

And so they looked to the machines for the secret that they no longer had.

And they looked to their machines for what they could no longer do.

And when they slept they dreamed of an endless becoming of machines.

Then even when awake, this dream played before their eyes.

And they put themselves in the service of this dream, and brought about the march of the machines, the Ragnarök, in which the new powers of the world would battle against themselves, and meet their end.

So people organised their societies around the march of the machines, around the succession of machine after machine; they ran their societies as a race where each machine had to go faster than itself.

And each machine was raced against its kind.

And each kind was raced against every other kind.

Carriage against carriage; barge against barge; train against train.

Then carriage against barge against train.

But the dream and the march meant that the machines did not look the same as they once had looked. Now machines could be *young*, and machines could be *old*. And people looked at their old machines, and felt shame for the first time, and they covered them up. And then they laughed at the old machines, and cast them out.

They rode on the backs of the new machines. And they fed their favoured machines on coal and oil, that they dug out of the ground. And the coal and the oil made the machines go faster.

But the coal and the oil made them age even more quickly; and the machines were exhausted.

So they climbed onto the next machine, which was faster, stronger.

But the people did not understand. What was happening, they asked? Why were the machines dying?

The old people remembered that the machines did not used to die before – they did not even get old, they said. Sticks and stones had never got old. The Archimedes screw that they used to water the fields did not get old. Why were canal boats suddenly old?

But all would be well, the people said: there would always be more machines, better machines. This will go on forever and ever, because the machines are necessary, like God himself.

The machines work, they said – and this *shows* us that they are necessary – that they had to exist, could not *not* exist, that they have always existed for eternity.

Heaven is full of the souls of machines, they said; like numbers, they have always existed in the mind of God, in heaven.¹⁵ And like numbers they will go on forever.

Better machines will always come, they said.

And better machines *did* come.

The canal boats.

And after the canal boats came the steam engines.

And after the steam engines, the motor cars.

And after the motor cars, the aeroplanes.

Machines poured into existence, a great river of machine after machine, form after form, faster and faster.

And like numbers they had to go on forever; the souls of the machines would flow out of heaven and into the earth forever, and take on their machine bodies.

Humanity could fill the world with all the possible machines, like God had filled it with his angels.

But the people were wrong. The machines were not necessary; the machines were not endless, and they would not march forever.

For the machines were not a river. They were not an endless flow out of heaven and into being that would go on forever and ever.

The machines were coming from a lake in heaven, a lake whose floor had been breached.

And out of the floor of the lake had poured into the world all the diverse forms of tools and machines that lived in the lake.

First had come the simple forms that lived on the floor of the lake – the sticks, the axes, the hammers, the bone combs and the thorn needles.

Then had come the powerful machines that swam in the middle of the waters – the ploughs, the watermills, the cars.¹⁶

But then all that was left in the lake was the detritus that floated on the surface: the flotsam and the jetsam, drifting on currents without their own source of motion: velcro, non-stick frying pans, smart phones and game consoles – and then a stream of gizmos, shrunken and shrivelled into a parody of usefulness, in a final jet of water that was putrid and sour.

This was the end of the third gamble, that undid the first gamble.

If the first gamble had made the people human, the third gamble had unmade their humanity.

If the first gamble had started when spirit entered the tools, the third ended when spirit left the machines, leaving them without their borrowed life.

If the first gamble had placed the humans in history – a history which was always also the history of the tools and the machines – the third gamble delivered them to a time beyond history.

For the march of the machines was finished. The heavens turned once more; the progression of the seasons was restored.

The world seemed as it had been at the beginning of our story. But after the rise and fall of the machines, the world could not be as it had been. The thing that had terrified the Norns had indeed taken place. The world was transformed, could never be the same again.

The Norns once more took into their hands the play of the world, the filaments that connect moment to moment, and spun them into yarn, and twisted the yarn into strands, and twined the strands into a rope that would link times past, times present and times future – but, after the machines, fate would no longer bind the lives of men and women as it once had.

And all that was left of the age of the tools, and the age of the machines, was a great pile of machines that no longer marched, that no longer looked into the faces of the people, that no longer responded to the people's will nor had their own. The machines now belonged and talked neither to themselves or each other, nor to anyone.

And the twilight of the machines was also the twilight of men and women. Without the march of the machines, without the machines, without even the tools, the last people were no longer human; but neither were they once again beasts.¹⁷

These were not the *first* humans, Ask and Embla, who had been made from ash and elm. Ask and Embla had become human when their spirit had passed into the sticks and stones. Spirit had left them for their tools, but had not abandoned them, had lived with them and their descendants, as their tool familiars, through the time of humanity.

No, these were the *last* humans, Lif and Lifthrasir, life and life's lover, hidden in Hoddmímis Holt. They lived not at the start but at the end of history. They came into their own special kind of life not as the tools were born but as the machines died and their machine life died with them. They lived without tools, without machines, and without the spirit people and the little people that had been banished with the coming of the machines.

So the life of Lif and Lifthrasir was neither an organic life divided within itself, nor a technological life divided between the body and its tools. They were neither full of spirit nor empty; neither fulfilled nor yearning for fulfilment; neither redeemed nor in need of redemption, neither unified nor separated from the absolute.

It was a blessed life, a life related only to itself, a life after angels and a life after machines.

Acknowledgements

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