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The Automagic Home

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The Automagic Home

I study imaginaries of emerging and new technologies, and how they are entangled with people's daily practices. Because our imaginaries are crucial for the ways our future will unfold. How paths are taken and choices are made, in this case in relation to AI. I have chosen domestic places, the home, as my point of departure. I research: connected homes and distant infrastructures.

We hear much about smart homes today. Are we really on the brink of something new? Will AI and robotic technology finally deliver the automagic home? Yes, with AI and other emerging technologies of today, we are on the brink of something new. The question is what this novelty will mean? Let's scrutinise this by looking at three different entry points: magic, care and separation.

Magic

What is magic? You have probably heard the statement by science fiction author Arthur C. Clarke that "any sufficiently advanced technology is indistinguishable from magic." AI could be magic. But the magic has been around for a long time. Think about electricity, and how it can be symbolised by the power button. This is a very mundane interface today. Once upon a time it was a new controversial technology, linking small actions by the finger to vast systems of electrical connections, power stations, wires, transformers etc.

Today we use this system on a daily basis. It has become totally commonplace. It has shifted from being visible and debated, at the center of awareness, into being invisible. This is how the magic happens. It is actually so very boring; when the real magic happens, we do not think about it. It has become mundane. Part of the infrastructure. It is more or less only visible when it doesn't work.
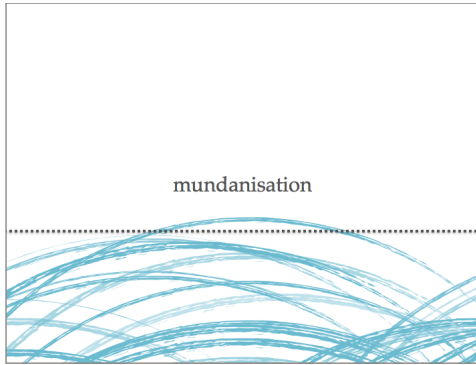
Successful technologies slip into the hidden infrastructure. Into the backdrop of everyday life. It goes through a process of *mundanisation*. Layers of technological and organisational complexity are hidden. Generating the black boxes of systems. We have seen a number of technologies going through this process of mundanisation over the years. That is how the automatised, automagic home is constantly taking form; electricity, running water, central heating, radio transmissions, screen-based media. All of this is so smart that we more or less don't have to think about it to use it.

Today, with AI-equipped technology, the complexity is extended even further. Much AI or technologies of machine learning are still spectacular, controversial. But some, probably several of the technologies that are around today, will be widely utilised and slip into the invisible, to form yet another layer of infrastructure, affording comfort, convenience and entertainment.

Who will decide in the future? The ones controlling the invisible underpinnings, the invisible magic of infrastructures. And most likely, AI will be part of these infrastructures.

Care

When new technological infrastructures are introduced, like 5G and systems of machine learning, when more and more devices can be connected in novel ways, we will see a race of innovation. People's domestic spheres will be part of this race. And when it comes to innovation, the story often includes disruption. New technologies, stakeholders and businesses tear up and change the techno-social-economical ecosystem.

You know how the story goes; the winner takes it all, survival of the fittest. The home as a site for innovation wars, a site of disruption.

Is this what people really associate with the domestic? The home as a site of disruption? I should rather say that the home is, or should be, a place of care and even love.

Could we get business models, technologies and systems that harness care? Instead of disruption: love and care. We have to move away from an innovation

imaginary of war games. Away from the image of, mostly men, like boys playing with toy soldiers in the sandbox. "My tank is stronger and faster than yours, so I will win", "it is my sandbox".

Who will decide in the future? It depends on the imaginaries that we choose. The narratives of human futures has to be shifted away from simplistic stories about competition and disruption, to stories about care and responsibility. Away from primitive socio-political imaginaries of greedy corporations and rude autocratic politicians. We should move to imaginaries about care for future humans, technologies and ecology. Less disruption, more care.

Separation

Let's use this as an object to think with. This is an electrical insulator. Made of porcelain, used as part of electrical grids. Many of you have probably seen these out in the landscape. What can we learn from this object, when it comes to AI? Electricity is about connectivity, to wire stuff, to create grids and circuits of power and energy. But it is also about separation. In order to make the connections work, electricity has to be controlled, harnessed and insulated. In separate circuits, not everywhere. This is a lesson we should learn when it comes to AI today. This object says something about the way we can utilise electric current. Let's think in a similar way when it comes to data streams: Which things to connect, and which things not to connect. Which data to harvest and which data not to harvest. We should connect things, but not everything.

Wide-spread infrastructures of electricity has been around for over a Century. But everything in a home is not electrical today. And everything should not be part of the Internet of Things either. Connection and separation. These are issues we have to constantly negotiate, discuss and be aware of.

Which things, systems and stakeholders do we want to interconnect? It is one thing to connect sensors on radiators or electrical devices to some kind of AI-equipped

heating or energy system, it is a different story if we connect microphones or even surveillance cameras in our homes to various social networks.

Data is an asset, it can be very valuable, especially when you run it through systems of machine learning. But as with all assets, there's the risk of greed. Data greed. We should prevent data greed and promote data care.

Who will decide in the future? It depends on where and how we draw the line between connectivity and separation. And the line is not just drawn between man and machine, but between different humans and organisations. Which man-machine combinations do we want to take control? The answer to this question will influence what will come. If the magic will be good or bad. So, consider magic, care and separation when thinking about AI in the future.

Transmission over, and take care.