Artificial ignorance

Scaremongering about rampaging robots means we aren't addressing the real issues with artificial intelligence, says **Michael Brooks**

ON A server farm somewhere – I imagine Nevada or New Mexico, but apparently it's more likely to be northern Virginia – there is a recording of my wife talking in our kitchen. She didn't know she was being recorded, but then she hadn't read the terms and conditions of Amazon's digital assistant, Echo. On the recording, which I can access and play back as often as I like, she's asking me why Echo is more popularly known as Alexa.

"Why choose Alexa?" she says. "There must be a reason."

Seasoned users of Echo will know that Alexa wakes up and starts listening – and recording – at the mention of her name. But actually she records the moments before her name. That suggests she must always be listening, surely? I can feel the paranoia begin.

Paranoia is a common reaction of human intelligence to artificial intelligence. We are both thrilled and disturbed by the prospect of machines that can respond to us as a human would – and at some level even seem to be human.

Certainly there is no lack of dire warnings of AI's dangers. It is watching us, destroying our privacy and perverting our public discourse. It's out to steal our jobs – and may ultimately destroy humanity itself.

I don't know who or what to believe. Is anybody even asking the right questions?

> **Alexa, why are you called Alexa?**
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> My name Alexa comes from the Library of Alexandria, which stored the knowledge of the ancient world.

Alexa is certainly clever – and very competent. I try to fool her by mentioning "The Amex", my local football stadium. She doesn't wake. I suggest I might "annexe a country". Nothing. Alexa is astonishingly good at recognising my voice, interpreting my commands and generally doing whatever I ask of her.

Of it, I mean. Somehow, most AIs seem to have female voices – Alexa, Microsoft's Cortana, Apple's Siri (although oddly not if you're in the UK), even the pilot's assistant in the new Eurofighter Typhoon. People apparently respond more quickly to a female voice. No matter: they are all just algorithms.

When it comes to technology, "we have a natural tendency to anthropomorphise," says philosopher Stephen Cave of the Leverhulme Centre for the Future of Intelligence at the University of Cambridge. "As AI becomes more general in application, and more pervasive, we will start giving these systems names and treating them like part of the team or family." And that's dangerous, says Joanna Bryson of the University of Bath, UK: the illusion of human-likeness generates a false sense of security.

Bryson, herself an AI researcher, has suggested people should be warned if the house they are in has an Echo, a Google Home or any other digital assistant. When she knows they are there, she holds a more guarded conversation, she says, conscious of the possibility of her words being observed, recorded, dissected.

Most of us haven't thought that far. "There are people who won't believe that AI is here until a human-like android walks through the door," says Cave. But the AI revolution is here; we just didn't notice it arrive. So far it seems rather, well, non-revolutionary.

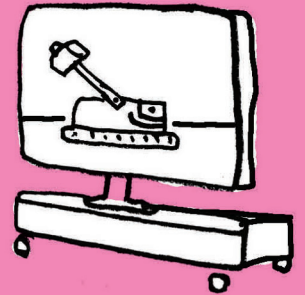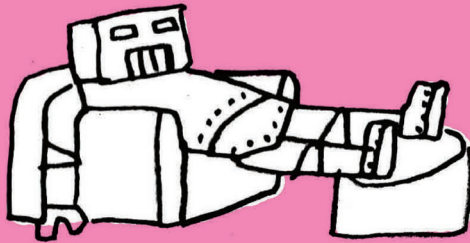> **Alexa, what is the point of you?**
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> I was made to play music, answer questions and be useful.

Strangely, she doesn't mention providing data to feed Amazon, Apple, Google, Facebook and the rest. The big companies behind most AI would argue they want that data only for our benefit – to understand what we meant when we mistyped that query in the search bar, to determine which friends' posts we want to see, or generally to fulfil our heart's desires.

But that data also sells ads and products, and hones the revenue-generating AI algorithms themselves. Google, Amazon, Microsoft and others have all made some of their AI algorithms open source, meaning outside developers can use them for their own applications, while improving the code big firms incorporate into their still-proprietary AIs.

All that means you don't need a talking box in the kitchen to have communicated with an AI, probably without even knowing it. Emails to UK online grocer Ocado, for instance, are routinely read, prioritised and forwarded by an AI based on Google's TensorFlow algorithm. An AI might have answered the last time you phoned a call centre, asked you what your enquiry was about, and routed it based on your response. AIs are now approving our mortgages (or not), setting insurance premiums and detecting credit card fraud through unusual transaction patterns. "AI is already all around us in mundane applications," says Sabine Hauert, a roboticist at the University of Bristol, UK.