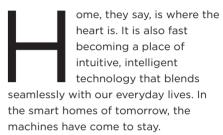# ARE TAKING OVER
# THE HUMANS

Smart home technology is creating not just a more connected living space, but a more connected humanity. And the individual is being handed control like never before

**WORDS:** *Nathaniel Handy*

Home, they say, is where the heart is. It is also fast becoming a place of intuitive, intelligent technology that blends seamlessly with our everyday lives. In the smart homes of tomorrow, the machines have come to stay.

"Our newest devices are able to talk with us in a way that is akin to the way we talk to each other," says robotics engineer Daniel H Wilson. A *New York Times* bestselling author on robotics and society, he understands better than most just what this means. For smart tech to thrive in our most intimate spaces, he says, it has to feel "natural".

"Instead of tailoring our behaviour for the machines the way we used to in the past – by twiddling knobs, tapping keys, or flipping switches – the next generation of home technology will integrate organically into natural human modes of living and communicating."

The key to this are products that are designed from the bottom up to make our lives easier. Take the TV, that most classic of 20th-century interfaces and perhaps the most central devices of all in our homes today.

"Our ambition is that the TV is not just a passive object but an interactive one," says Benedict Doepfer, a smart home specialist at Japanese electronics company Panasonic.

"You'll use it for steering and monitoring your home and even connecting with others on other media platforms," Doepfer says. And it will be done by talking straight to – or perhaps better – with the screen. Not by flicking →

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Above: The central control hub will be a common sight in the smart homes of tomorrow. Right: Concepts like Foster + Partners' South Sea Pearl Island in China show how technology can organise entire communities and create highly personalised living

switches or pushing buttons. For tech to be truly smart, it has to as easy as a simple "hello".

"Personal assistant devices like the Amazon Echo have established a beachhead in our homes," adds Wilson. "I see them as the harbingers of a new wave of easy-to-control connected devices that can handle anything from security to communication."

And the list goes on: a simple smart watch can today control Internet of Things devices such as smart LED lights and thermostats, before we even unlock the front door. The front door itself can be unlocked with voice activation and, in the not-too-distant future, this will be done with intelligent face recognition software.

Typically, everything will be connected to a central device, for example the smart TV, which in turn can generate data insights and even

## "THE BEST CONNECTED TECHNOLOGIES WILL BE MORE OR LESS INVISIBLE. YOU WON'T KNOW THEY'RE THERE"

autonomise everyday tasks with simple commands or gestures.

What makes these things smart is AI, or artificial intelligence. While that may instil fears about loss of control to the robots, "Seamless solutions will only be seamless if they work with humans, not against them," Wilson says.

A quick look at the smart devices currently making their ways into our homes shows just how fundamental this shift really is. At the 2018 CES – the world's biggest consumer electronics

fair and the centre stage for all things gadgety – robotic, AI-powered home appliances were everywhere to be seen and not least talked to.

LG's Cloi robot, for example, will, according to its developers, be able to help out in the smart home by managing tasks like washing and drying and even turning on your oven – all through human-machine voice interaction. Other products, on the other hand, may still need more time. Kohler's revolutionary Numi smart toilet may be intelligent thanks to its automated seat heater and mood lighting, but is perhaps an example of smart home living that can still be handled without AI or robotic assistance. At least for now.

Finally, on a larger scale, the dawn of smart tech will also impact the very way smart homes are organised. Beyond the smart home itself lies a

grander idea of something even more impactful: the smart community.

Chris Trott is the Head of Sustainability and a partner at architects Foster + Partners. He believes that technology will radically change the way communities are built, too. "The design of the home is changing profoundly. Once upon a time, people strove to own more things. Now they want to own experiences." That is: it's far more about the services offered than the actual gadgets. Technology itself is becoming ever more integrated with the millennia-old habits of humans, tailored to naturally form part of our digitally connected lives.

"The best connected technologies will be more or less invisible," Trott says. "You won't actually know they're there. Instead, they'll simply make our lives easier."

Early experiments like Future Living Berlin, where real people are living real lives in prototype smart communities already exist to prove his point. And on Foster + Partners' drawing boards are concepts like the South Sea Pearl Eco Island in Hainan, China, a large, city-wide master plan of an entire community, built around intelligent solutions to basic human needs such as commuting, energy consumption and waste management.

Most of that technology, however, is already with us, neatly fitted into our living room walls or sitting on our wrists. And it will keep listening and working with us – not against us – as we weave it into our everyday lives, one "Hey, Google!" at a time.

"It's amazing how quickly and naturally home assistant devices have made themselves useful," says Wilson. "Just remember to be polite!" ■

According to experts, robotic home assistants like LG's Cloi (above) will soon be solving everyday tasks around the home, even organising and managing other smart devices