

They Promised me Robots

F They promised me robots. What I wasn't expecting was a foyer that was something between luxury spa and elderly day centre. I was in Stoke Gifford, ExtraCare's still-under-construction retirement complex outside Bristol, home to over 200 elderly residents and a brand-new innovation apartment, the reason for my visit.

Alex meets me at the oversized reception and leads the tour. You've come on a quiet day he says swiping me in. We don't have residents in the apartment at the moment, which means we get to have a closer look. Alex is the on-site roboticist. He manages the apartment, a living lab and test-bed operated in collaboration with the nearby Bristol Robotics Laboratory, and funding agency Innovate UK.

Inside, the apartment is much like any British new-build. Except for the tech infrastructure. Low-ceilinged rooms have more sensors than usual. Monitors are semi-hidden on walls. There's a sensitivity pad tracking sleepers' movements in and out of bed. The curtains are voice-controlled via an Amazon Alexa. Various operating systems manage data flow. And the fridge talks back. But there's only one robot – a waist-high Pepper model – powered-down in the sitting room. I'm a little disappointed but that's okay. The robots were a bonus. I'm here to put the testers to the test.

"STS RESEARCHERS LIKE ME HAVE A THING ABOUT NOSING AROUND OTHER PEOPLE'S LABS."

STS researchers like me have a thing about nosing around other people's labs. Ignore us, we say. Won't bother you. We're just here observing your routines, your cultures, your politics, and how you stir them into technology in the making. That was exactly my pitch to roboticists at BRL. They were taking technology from their lab and testing them in care homes amongst actual users. Or was that on actual users. Either way, I was here to find out the hows and whys of robotics testing in the wild.

Alex had established a series of trials, device borrowing schemes and focus groups. But looking around the apartment, I had more questions than answers. Where exactly were the boundaries of these



A TIAGo robot from PAL Robotics in the Bristol Robotics Laboratory living lab. Photo courtesy of BRL. (Download: <https://www.dropbox.com/s/vezbjvuqovggsn/TIAGOkitchen.jpg?dl=0>)

tests? After all, residents could come in and out, sometimes taking the technology with them. Could the technology, or the users fail? Or was the real story about demonstrating success of emerging tech, building a case for 'user acceptance'? And what about adapting the tech to the local contexts of care in Bristol? Or was this about reshaping local settings so they would be technology ready?

These are important questions, not least because of the setting, amongst potentially vulnerable people. Research has shown that when elderly people and robots are tested together, it's the people that tend to be objectified. The world is shaped to suit the robots, it's then up to people to adapt. Studies of smart cities have revealed how tech firms have a habit of trying to shape the behaviours of people to fit their technology rather than the other way around, emphasising social control, while promising emancipation.

Chatting to BRL researchers later, they seem alive to these challenges and admit technology infrastructure is a necessary but insufficient component of testing – though living labs and test-beds do help win funding. They tell me about their ongoing research, what they call the "mutual shaping of robots and society", which broadens participation and attempts to put people and issues

traditionally locked-out of innovation in the driving seat. The hidden labours of workers, or social classes excluded from social care services for example. To reach these people they are building research networks with organisations like ExtraCare, the British Red Cross and local care charities.

Covid-19 and decades of policy neglect have exposed unprecedented vulnerabilities in the UK's care sector. Innovation as usual, narrowly focussed on speed, scale and markets, won't cut it. What's exciting about BRL's approach to innovation is that it goes beyond testing only tech. Their focus on local networks, appropriate technology and capability building offers and opportunity to foster real strength, resilience and ultimately care in communities. That's something worth testing.

Words: Dr Cian O'Donovan

[Cian O'Donovan](#) is a researcher at UCL's Department of Science and Technology Studies
 ORCID: <https://orcid.org/0000-0003-4467-9687>
 Twitter: [@cian](#)