

The Morse Things project investigates the nature of living with everyday things that are networked together and communicate in ways that are thing-centred rather than human-centred. We designed and fabricated six sets of networked bowls and cups to be given to designers, artists, and researchers to live with for several weeks in order to explore the Internet of Things from a thing perspective.

## EXPERIMENTAL TOOL

The Morse Things are ceramic bowls and cups that can communicate over the Internet. These objects digitally communicate between themselves. Over time, their degree of connectedness on the network can evolve from being 'aware' of being alone, to being a pair of things, to being a group of things, to being part of a larger network of things. The data messages sent by each Morse Thing is in Morse code. Each message is expressed sonically in Morse code by each bowl or cup and is simultaneously broadcast on Twitter. All the while, the Morse Things can be used like any other bowl or cup for eating, drinking, and containing items. There are six sets of Morse Things, each consisting of a large ceramic bowl, medium bowl, and cup. The form of each Morse Thing is made of ceramics that is shaped around the embedded electronics, signalling the design intention to create a hybrid between an everyday object and a computational one.

In Morse Things, we adopt a material speculation approach to design research. Material speculation is the design of a counterfactual

artefact that is experienced and lived with on an everyday basis as a way to ask certain types of research questions<sup>[4]</sup>. A counterfactual artefact is a realised, functioning product or system that intentionally contradicts what would normally be considered logical to create, given the norms of design and design products.

»On the one hand, the Morse Things are just ceramic bowls and cups. On the other hand, they are computational and connected things. I am not quite sure yet how these two identities blend.«

Audrey Desjardins

Morse Things are counterfactual IoT artefacts for the home in that their digital capabilities are at the service of things rather than people. Their human functionality is of an everyday nature that already exists in homes today, shifting the question from what they 'do' to how they 'are' in our homes. The Morse Things embody the proposition that our relationships with Internet-enabled things is a matter of negotiation over time rather than predefined or prescribed as a service or functionality.

## WHAT HAPPENED?

We asked our six households of designers, artists, and researchers who lived with a Morse Things set what that experience was like and what new design ideas were inspired by the Morse Things.

The experiences of living with the Morse Things can best be described as a series of paradoxes. The bowls and cups were very familiar and usable in an everyday sense while puzzling and odd at the same time. The Morse Things formed attachments with participants who liked a particular bowl for example, while the same participants could easily forget them, only to be pleasantly surprised and happy when they heard a bowl's Morse code message. The virtual and connected lives of the Morse Things generated many questions: What do they say to each other? Can we trust them? Do they know what is around them? Do they know what a network or the Internet is? What do they think of us?

There were many ideas and concepts generated by living with the Morse Things:

### GAPS

The designer inquires about the spaces between the Morse Things and other objects. A network contains the set, but there are many other things in a home. A home can also be seen as a container for things, bringing them together or in proximity through physical design. The idea of 'gaps' begins with a textile or cloth that can contain or connect things, wrapping objects as if they are being taken care of and bringing together connected objects like the Morse Things with other things.

## WHO ELSE?

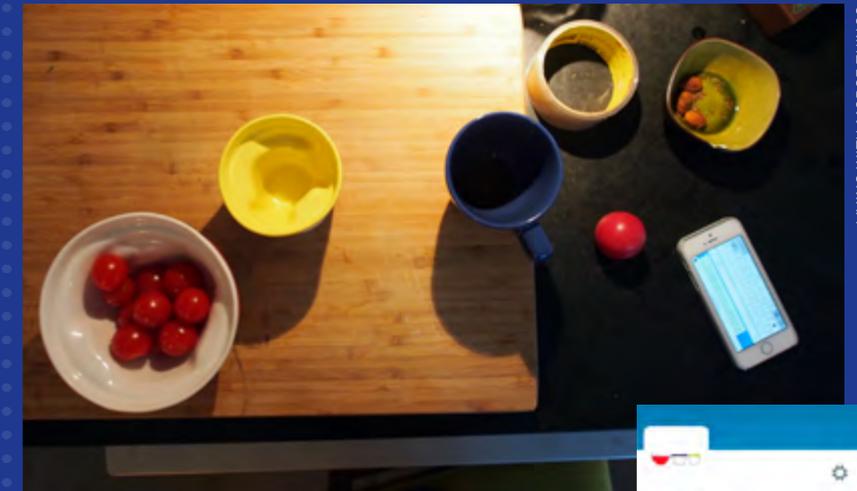
The designer asks, how can Morse Things enrol other everyday things into their network? Is there a simple attachment that can be added to non-networked things to bring them into the Morse Things world?

»Brilliant. Interesting. Strange. After living with Morse Things for a short period, we are at a point where we're left with more questions than opinions – a very interesting position to be in.«

Travis Kirton

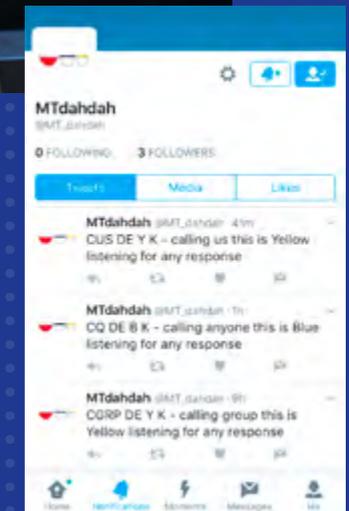
## TECH OR NO TECH

The designer wonders if the Morse Things sets should have Morse Things bowls and cups that are not connected or have no digital technology. The idea asks why a set has to be defined by technology. The designer would have loved to have many more Morse Things but would only need some within the set to be the 'smart ones' while others could enjoy a simpler life of not being on the network.

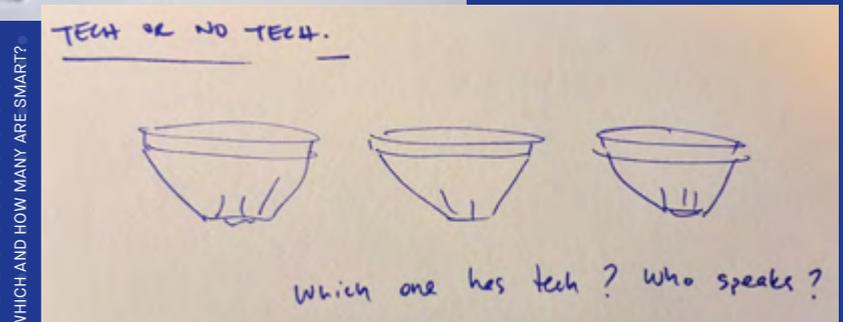


LIVING WITH MORSE THINGS

MORSE THINGS SET



COMMUNICATING ON TWITTER



WHICH AND HOW MANY ARE SMART?

## WHAT DID WE LEARN?

### THE MORSE THINGS ARE A THIRD THING IN THE HOME.

The Morse Things are not typical, everyday things like other bowls or cups in the home but you can just as easily use them like an everyday bowl or cup. Also, they are not devices like mobile phones or digitally connected thermostats; however, they are Internet-enabled and connected. The form and material of The Morse Things as everyday things made them easy to live with and 'use' but this was also supported by the minimal simplicity of the digital aspects of the Morse Things. Nevertheless, we learned that there is more work to be done in terms of understanding how designers can best design for transparency and clear communication of the digital aspects.

»There's clearly much work to be done uncovering how to design networked objects so that our relationships to them are lasting and valuable.«

### THE MORSE THINGS FORM A 'QUIET' ATTACHMENT OVER TIME.

After the initial curiosity subsided in living with the Morse Things, they could be forgotten or ignored. At the same time however, participants formed attachments with their set. For example, two sets were accidentally swapped and both households demanded their own sets back. In many instances, if a bowl or cup sent a message and the Morse code was heard, this would create a pleasant surprise and comfort. The Morse Things were routinely checked on Twitter and participants spoke about taking care of their sets.

### IT IS DIFFICULT TO TAKE ON THE PERSPECTIVE OF THINGS.

Understanding experience from the perspective of objects is a difficult task for people since we tend to relate to non-humans as surrogate humans. That is, we anthropomorphise while, philosophically speaking, non-human perspectives 'withdraw' from human understanding into a non-human world that we can neither fully comprehend nor articulate [2,3]. In addition, non-human worlds are formed in a language of materials and performance rather than language [1]. It was difficult for our participants to see the Morse Things without seeing themselves.

## REFERENCES

1. Baird, D. (2004). Thing Knowledge: A Philosophy of Scientific Instruments. University of California Press, Berkeley, Ca.
2. Bogost, I. (2012). Alien Phenomenology, or What It's Like to Be a Thing. University Of Minnesota Press, Minneapolis, Mn.
3. Verbeek, P.P. (2005). What things do: Philosophical reflections on technology, agency, and design. Pennsylvania State University Press, University Park, Pa.

## KEY INSIGHTS

Designers can design a 'third thing' for the home between digital devices and analogue things but designers need a **new vocabulary** for making it transparent and **communicating the digital aspects of a third thing**.

What a networked, digital thing is exactly is still open to interpretation and will best emerge from the experiences of living with digitally connected things. However, this type of openness is best served if the designers **design for attachments between people and things** rather than prescriptive actions and functionality.



## Things2Things

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# MATERIAL SPECULATIONS

LIVING WITH ALTERNATIVES