

OpenDoTT

Year 2

This document provides an overview of activities developed during my second year of research (2020/2021) at the OpenDoTT project. My research topic is "waste prevention and smart cities".

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Openness in question

The typical textbook definition of **open design** suggests that working open can help create solutions that reverberate on actual users' needs - instead of the biased preconceptions designers may have. It is possible however to go deeper and explore other ways to understand what "openness" even means. The Internet Health training module, based on Mozilla Foundation's Open Leadership program, was a timely start for the second year of research. Technology-inspired open design was not at all a new subject to me. But revisiting it at this point in time gave me the opportunity to reflect on my previous experience working in diverse contexts over a couple of decades. That renewed perspective would prove relevant when it came to designing new research activities for this phase.

Throughout the year I have conducted a series of activities that did not follow a linear path. In other words, I did not go from concept to prototype and finally implementation. In alignment with open and agile methods well-known in the technology industry, I would experiment, learn, discuss and return with updated plans. Soon into that process I realised that not only non-linear or circular, my research was taking the form of a spiral.

Adopting the spiral as a metaphor for research activities allowed me to keep moving further even when I was returning to earlier ideas.

That was an ongoing process, underlying all of my work while creating and organising the **reuse.city** online co-design lab, **prototyping** and **interacting** with people and organisations both inside the consortium as well as beyond its reach.

I was interested in advancing the discussion from “open” to “commons”. Instead of allowing people to participate on my research, I set out to cultivate a community to engage with my research along the way.

A spiral of openness

Research blog entry

“What is ‘working open’ opposed to? A usual take is to think in terms of binaries, ‘open vs proprietary’ being a prominent one. But what does that opposition denote? There is a well-documented perspective according to which it is chiefly a matter of ‘licensing’, or determining the terms in which a given set of digital information will circulate.

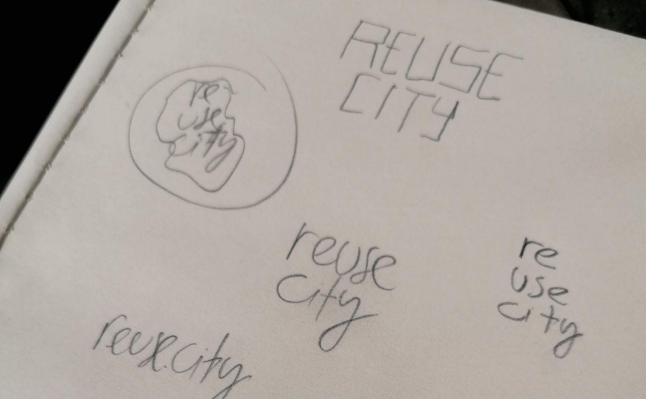
That view, of course, owes a lot to the vocabulary of ‘free software’ and ‘open source’, both positioned against ‘proprietary software’. If that definition tends to work relatively well to describe how software and its source-code are distributed, however, trying to extend it to other realms proved to be tricky at best.

(...)

What if we think instead of open as **open-ended**? Not only open as non-proprietary, non-linear, or not enclosed. Doing things without the need to decide previously what their purposes, methods or goals are.”



Image: Unsplash

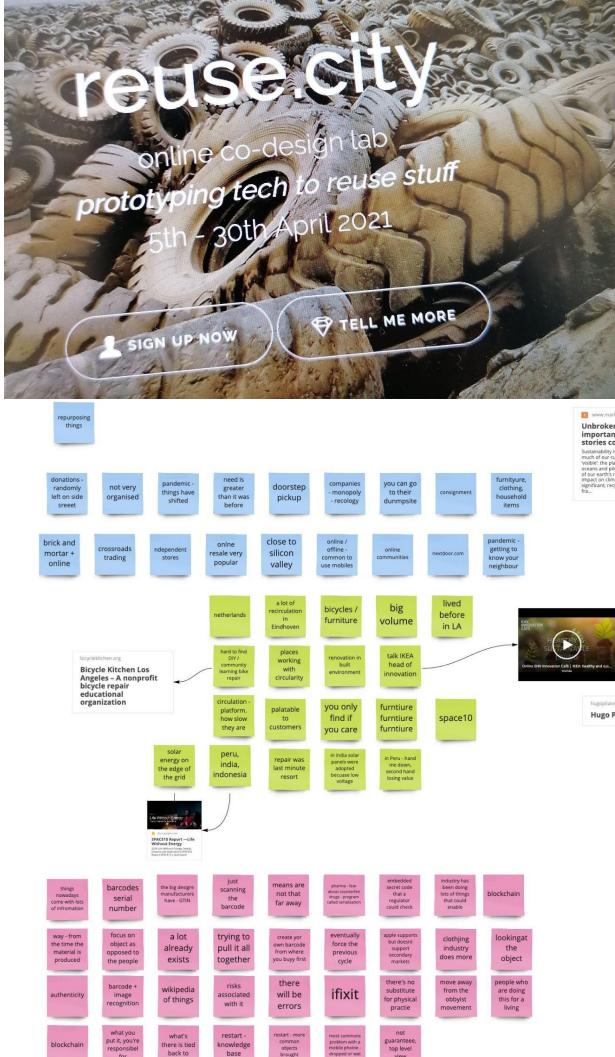


reuse.city

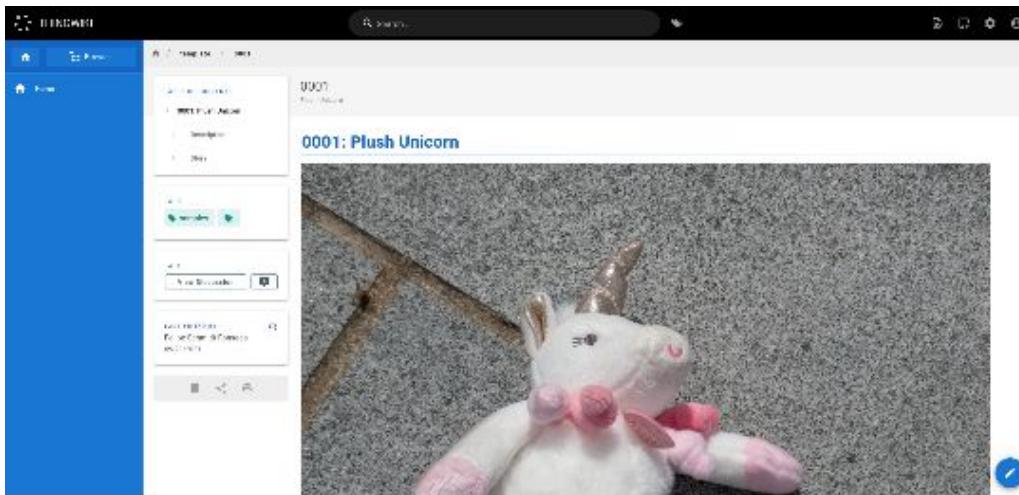
The research study *reuse.city - online lab* was created to co-design updated versions of earlier concept ideas with practitioners, researchers and other interested parties who were familiar with topics of reuse and repair, coming from diverse localities and backgrounds.

The co-design process shaped my prototyping activities, driving discussions on the potential implications of such ideas in real-world scenarios.

Participants from three continents joined the calls and online interactions. As well as providing in-depth feedback and inspiration for the research, the lab was itself the prototype of a community that will remain important in future stages of the project.

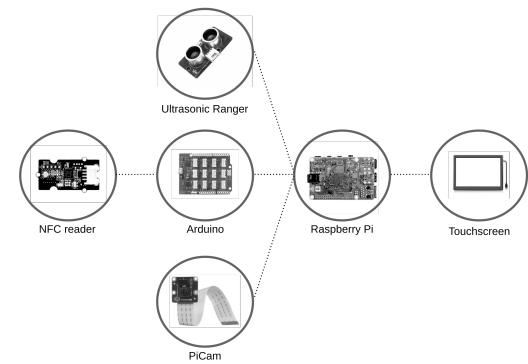
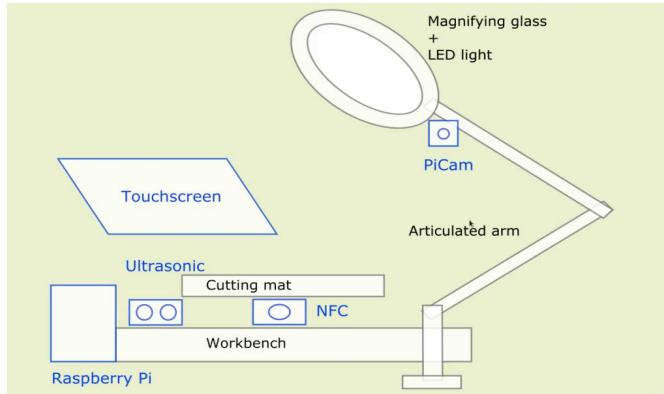
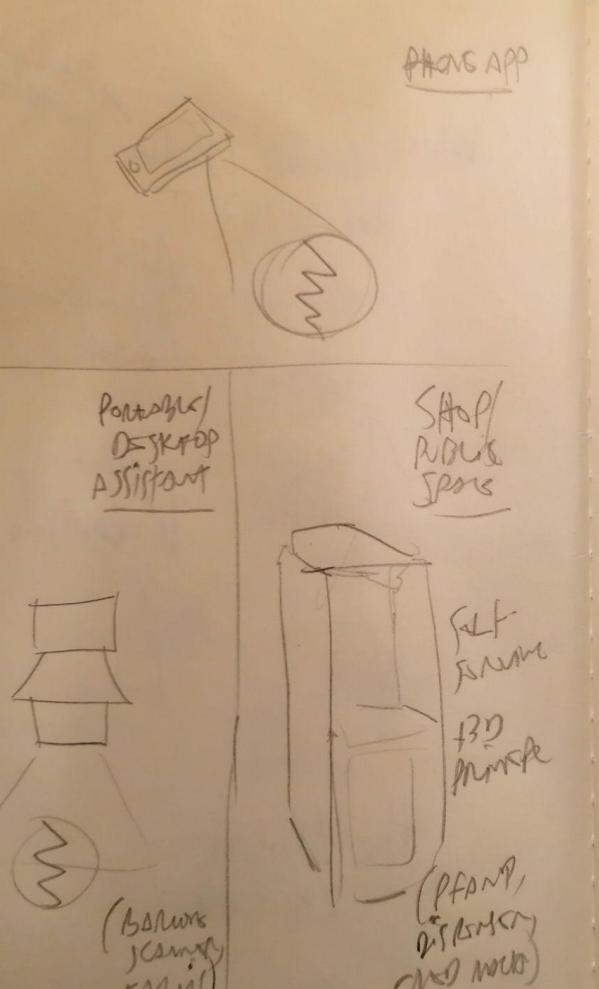


Hands-on



I was already familiar in conceptual terms with using open hardware for prototyping - I have been involved in the past with a number of projects based on iterative making. However, this was the first occasion that it happened as a full turn of the spiral: from defining the focus of research, to inviting participants and understand the topic in a deeper level, and then having the opportunity to create concept ideas and to experiment with concrete expressions of them. Then back to think of the research focus and so on.

The process was supported by the training modules on open hardware and privacy by design, which brought awareness of the required balance between possibilities and restrictions on technology as well as implications on ethics and legality.



Hands-on: E-I

A combination of speculative technologies conceived to help cities and regions to reuse discarded materials.

Hands-on: ThingWiki

An experimental implementation of the Universal Registry of Things. The prototype is a website with information about different object samples. The data is public and machine-readable.

The screenshot shows the ThingWiki web application. At the top, there's a navigation bar with links like 'Dashboard', 'Thingpedia', 'Indexer', 'Metadatabase', and 'Explorer'. Below the navigation is a search bar and a sidebar with various filters. The main area displays a table of objects:

ID	description	published	date	tags	editor	dateCreated
1	Plush Unicorn	yes	2021-09-21 19:27:07 UTC	sample	metaknow	2021-09-21 19:27:08 UTC

Below the table, a specific object is highlighted: "0001: Plush Unicorn". It features a large image of a white unicorn plush toy with pink horn, ears, and hooves, sitting on a grey surface. To the right of the image is a detailed description card:

0001: Plush Unicorn

Description
Name
Licorne (from product label)

Manufacturer
Doudou et Compagnie
48/52 Avenue des Châtaigniers
95150 Taverny
France

(from product label)

Manufacturer website
<https://www.doudouetcompagnie.com>

The screenshot shows the E-I mobile application interface. At the top, it says "E-I v0.1" and has "START" and "RESET" buttons. The main area has a "THINGWIKI" header with a search icon and a camera icon. Below the header is a "Description" card with fields for "Name" (Licorne (from product label)), "Manufacturer" (Doudou et Compagnie), and "Manufacturer website" (https://www.doudouetcompagnie.com). To the right of the card is a camera viewfinder showing a close-up of a white unicorn plush toy. The status bar at the top right says "Object identified Plush Unicorn".

```
14
15 ## Basic data
16
17 ### Name
18
19 Licorne (from product label)
20
21 ### Description
22
23 Plush Unicorn
24
25 ### Manufacturer
26
27 **Doudou et Compagnie**
28 48/52 Avenue des Châtaigniers
29 95150 Taverny
30 France
31
```

Secondment

Even if I had to adapt my expectations for the research period in Berlin in the absence of the Mozilla office, being in Berlin was a good opportunity to engage with initiatives both at local as well as EU level. I have engaged with ongoing network activities, organisations and public events in themes relevant to the research such as zero waste, circular economy, smart cities, platform cooperativism and open technologies.



My engagement with common practices of re-circulation of goods in Berlin gave rise to an auto-ethnographic strand of research that will likely be important in developing my thesis.



**OpenDoTT
Studio**

On another front, the OpenDoTT Studio sessions provided a good way to re-engage with the other research fellows and compensate for the distance. I have co-hosted the first such meeting with a colleague and was glad with the results.

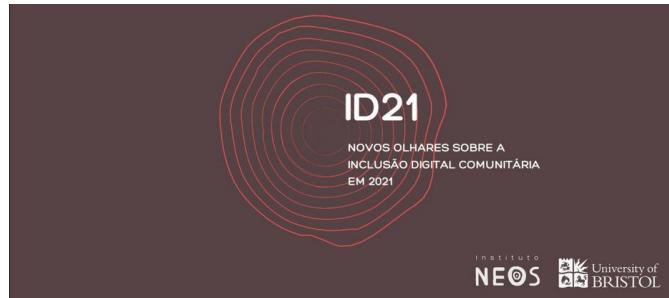
Cooperation, teaching and outreach

During the course of the second year, I engaged with some activities beyond the reach of my individual research at Northumbria.

Tales of **Care & Repair**

Tales of Care and Repair is a British Council Creative Commission led by Professor Teresa Dillon (UWE Bristol) in partnership with Gambiologia (Brazil) and Toxics Link (India). The goal of the project is to position repair in the context of climate change discussions, by collecting 1000 stories of repair and organising a series of international seminars and workshops in the wake of COP-26 in Glasgow. I helped organise the Brazilian seminar and was invited to join the final seminar in November.

ID21 was a study on community-based digital inclusion in Brazil developed by Instituto Neos and supported by the University of Bristol's Impact Acceleration programme. I volunteered to help shape the study and curate the selection of interviewees, as well as to review and comment on the report made by Instituto Neos. The project will unfold into a web-based video game promoting the critical appropriation of digital technologies in communities, as well as an open repository of educational materials on digital policies in Brazil.



ENCONTROS DO LAB404

REUSE.CITY

21/05
14:30 HORAS
NO YOUTUBE.COM/LAB404UFBA

Debatedores

Felipe Fonseca

André Lemos

Thalis Moura

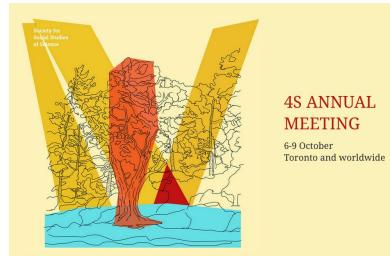
I was also invited to present my research to lab404, a centre of digital media, networks and space based in the University of Bahia, Brazil.

Finally, I ran a seminar to 3rd year students of Design for Industry at Northumbria. My topic was "Open Design Contexts", which brought the opportunity to put in perspective my current explorations as a PhD researcher as well as my past experience in open and commons-based projects.

Conferences and events

The restrictions to mobility imposed by the COVID-19 pandemic were a double-edged sword. For one, I could not travel to participate on conferences and festivals in person. On the other hand, I was able to attend events in different parts of the world, sometimes simultaneously.

Even though it can be said that the quality of human connections is more superficial in such a context, it also allows interesting networking opportunities. I tried to make the best use of those.



Workshop MAB20
29 June 2021

Introduction Workshop Organisers Participants

Subversive Citizen Manual for the More-Than-Human City

A photograph showing several people holding up a large white sheet of paper, possibly a manifesto or document, in an industrial or workshop setting.

Complete documentation about the second year of research is available on this public repository:
<https://github.com/opendott-smartcities/II/>