

Repair and Reuse in Urban Contexts



Fixfest UK - June 2020
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Tonight, 25/06/2020

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Intro



University
of Dundee

moz://a



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 813508.

[OpenDoTT](#) (Open Design of Trusted Things) *"is a PhD programme* to explore how to build a more open, secure, and trustworthy Internet of Things"*. I have moved to Dundee to work at the [Duncan of Jordanstone College of Art and Design](#) in the first phase of the programme, and will be relocating to Berlin soon.

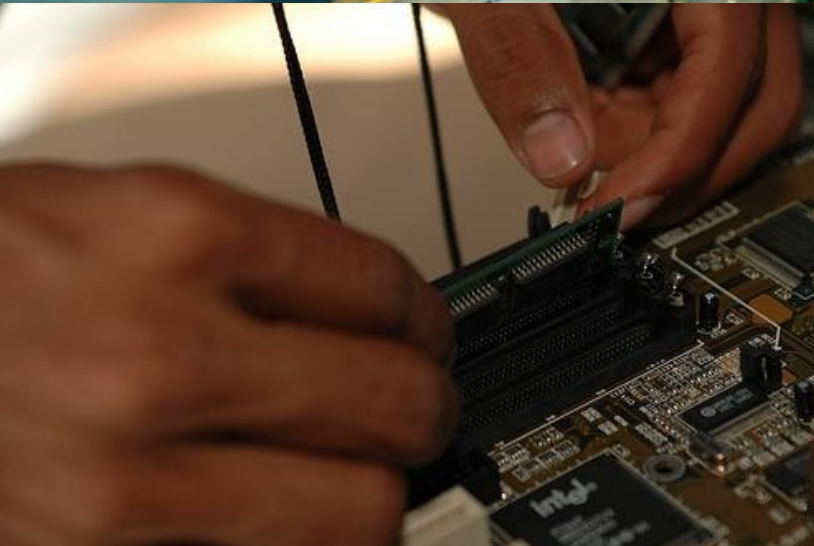
My topic in the project is "smart cities". I am documenting in this blog what I am reading, learning and discovering as I go deeper into my research. I will also maintain a list of links with the *opendott* tag in my [infinite bookmark collection](#)..



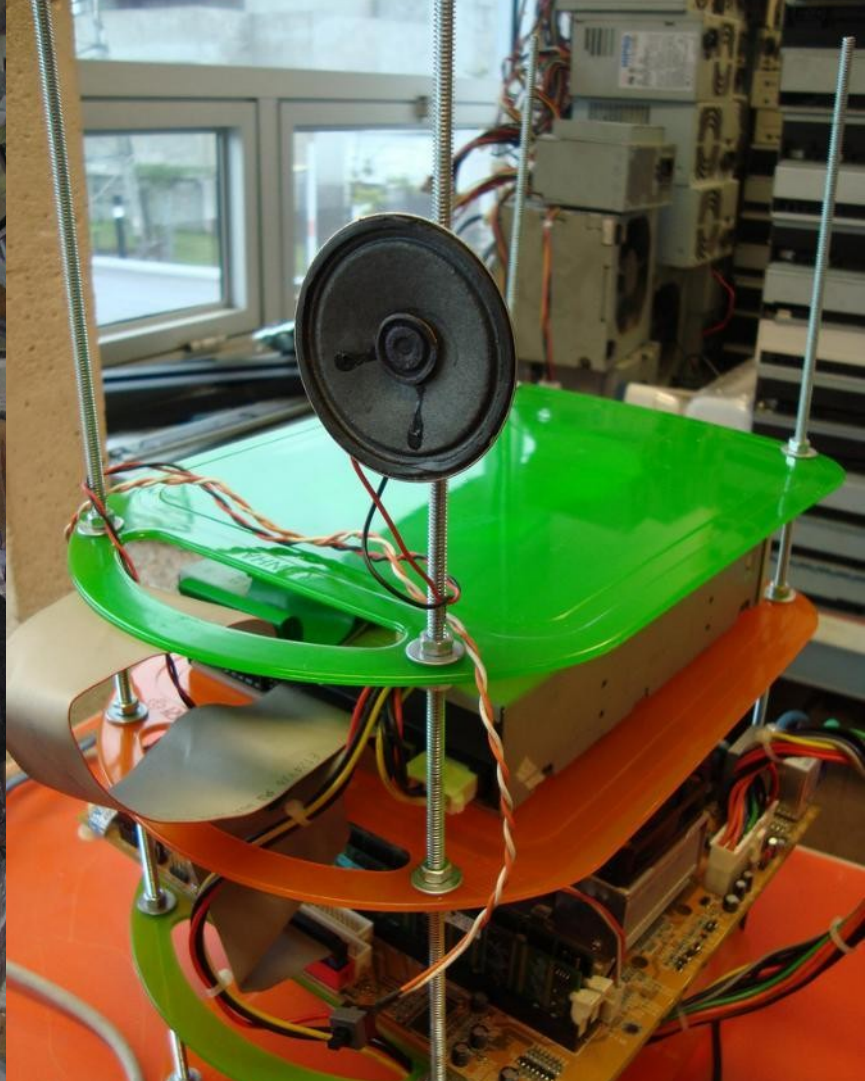
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** The project started as a partnership between the [University of Dundee](#) and [Mozilla Foundation](#).
By mid 2020 it is migrating to the [Northumbria University](#)*

<https://is.efeefe.me/opendott>







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Smart Cities







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Waste and Reuse







A man with white hair, wearing a black protective mask and a silver watch, is working on a light fixture on a wooden workbench. He is using a soldering iron to connect wires. On the workbench, there is a red digital multimeter, a black power supply unit, a white light bulb, a red-handled screwdriver, a blue marker, a white plastic cup, and a black remote control. A white sign with the text "OBJETS RÉPARÉS" is placed in front of him. To the left, a long, white, segmented light fixture is visible. The background shows a red storage bin and some papers on the wall.

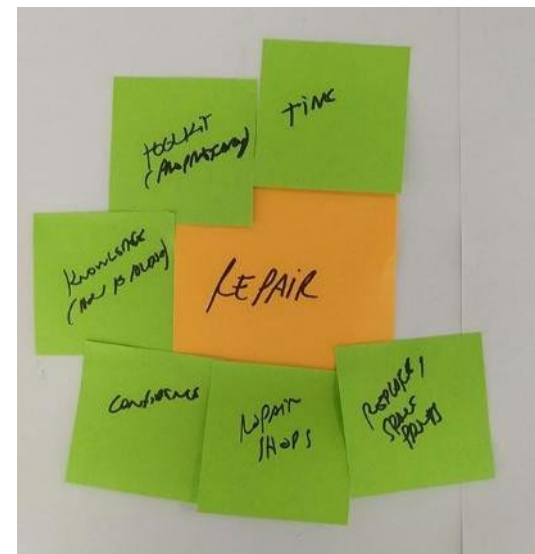
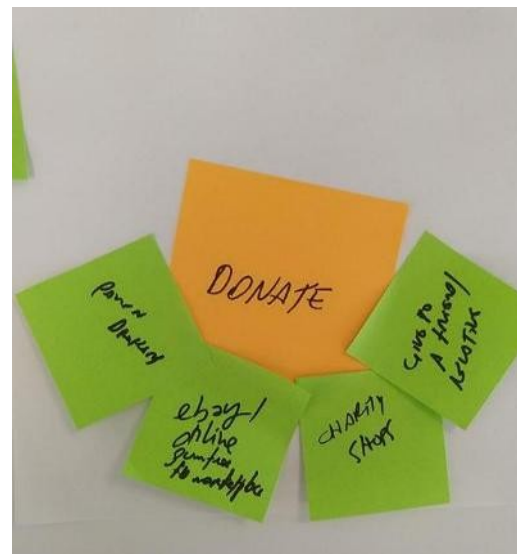
**OBJETS
RÉPARÉS**

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Repair Journey

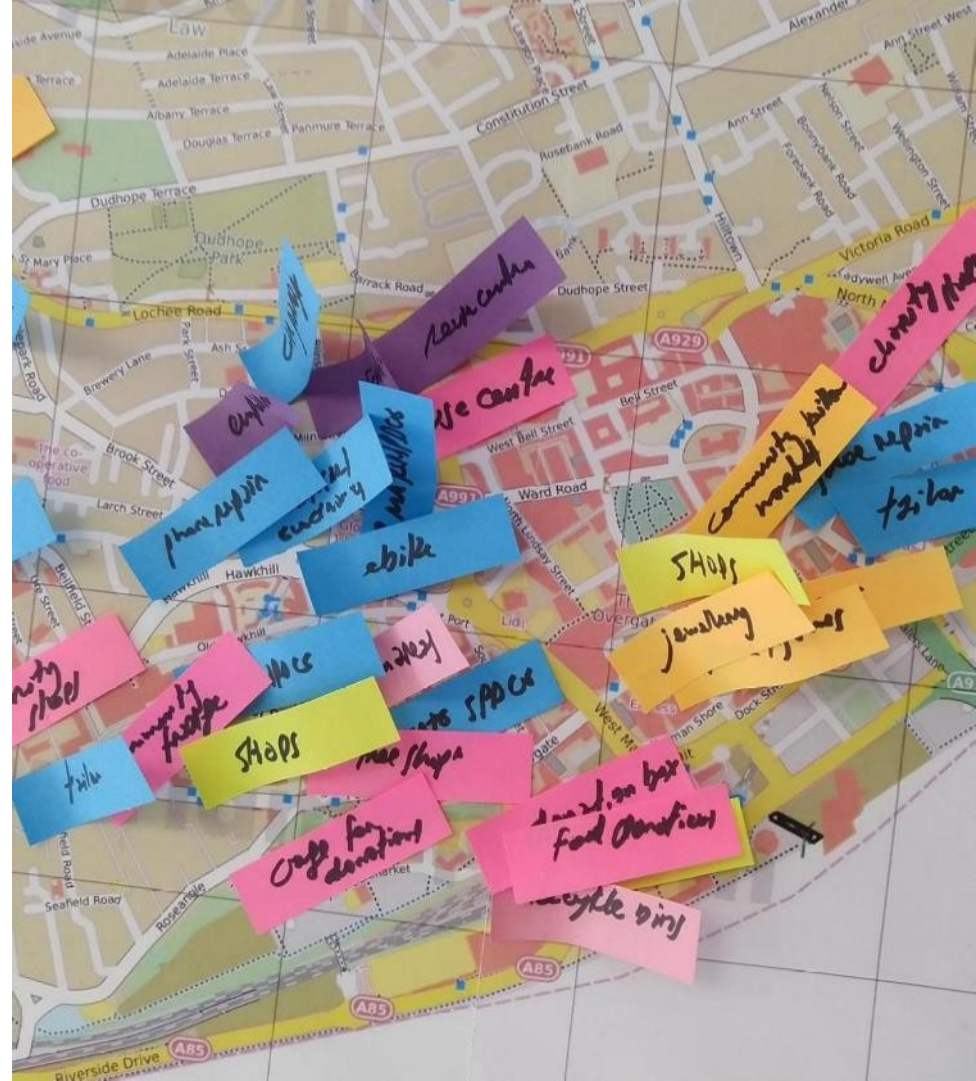


Decision flow - value



Mapping repair and reuse in Dundee

Systems view
Inform subsequent research
plan

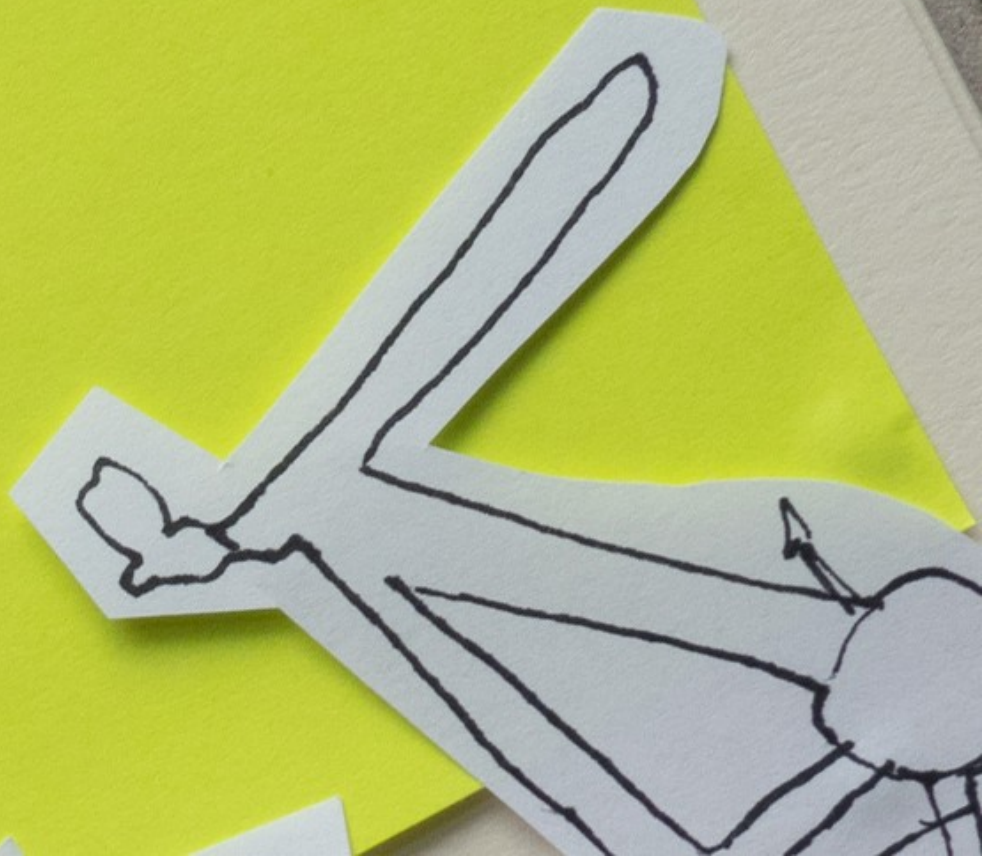


Repair Journey

“The research will investigate in what ways can materials that are broken, obsolete or otherwise inadequate be repaired, adapted or transformed in urban contexts. In particular, the study expects to understand how the value of an object is perceived in different situations. It is part of a wider research project investigating alternatives for handling discarded materials in the city. You will be a central part of this exercise by sharing your experience on how materials can be repaired, adapted or transformed locally.”

<https://opened.org/repair-diaries/>

THE
FREE
Bicycle
DIARY



Ecosystem Mapping

“The goal of the project is to understand how discarded materials circulate in the urban context, as well as where and how they are handled and transformed. I’ll be looking particularly into how potential value is assessed in different kinds of facilities, and what types of equipment, methodologies and data sources can aid in that.”

Actors operating in the reuse / repair space

- Repair/mend/customize shops
- Pawn brokers / cash generation
- Hardware stores
- Charity shops
- Jumble Sales / Car trunk sales
- Ebay / Gumtree / FB Market ...
- LA reuse schemes
- Makerspaces / hackerspaces
- Men's sheds
- Repair cafes
- Cloth exchange events

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Design Concepts

Value

High end, expensive

High upfront cost

Emotional
attachment

Sense of
exclusivity

Often well
designed +
documented

In between - consumer brands

When purchasing,
people are
removed f/ impact

Often, no service
manuals or spare
parts

Screwdriver - last
resort?

When / why is that
decision made?

Guilt?

Pain of keeping it?
space / clutter

(a book can have
value even if
inexpensive)

Worth trying even
if repair fails - see
“joys of repair”

Sometimes the
repair just takes a
firmware upgrade.

How much we rely
on software side
of things...

Low end, not worth repairing

Cheap electronics
(e.g. powerbank)

Designed to last N
cycles

Can be repaired,
but people won't
usually

Process of repairing

1 Investigate story of the object

2 Clean its outside

3 Open it up

4 Identify the problem

5 Repair / repurpose

Service manuals

Clean internals

Learn how things are made

Prior experience

Buy tools / replacement parts

Joys of repair

Overcome planned obsolescence

Internet

Use alternative parts

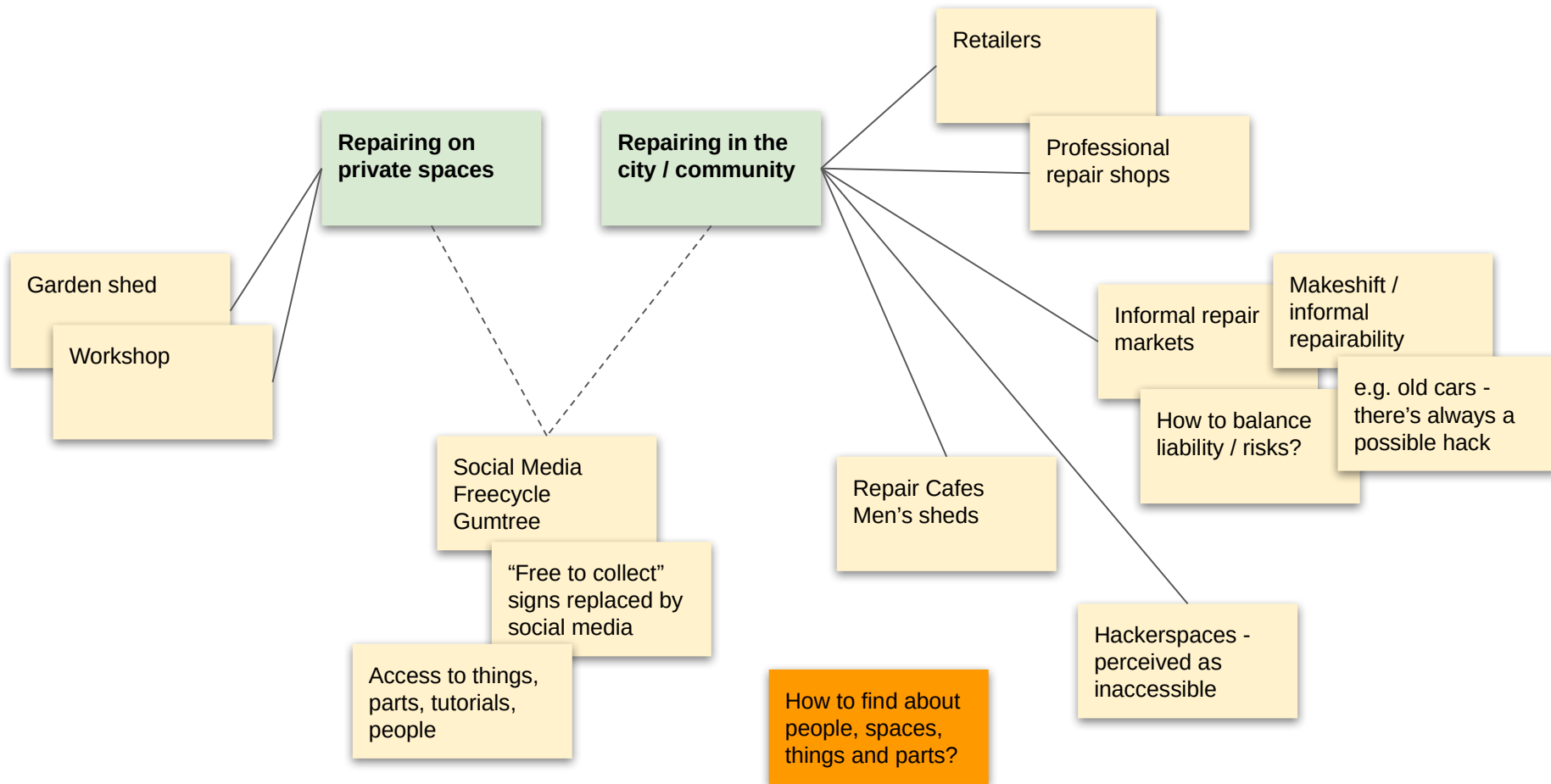
Document - be useful to others

Avoid damage / environmental impact

Play / Experiment

Transform

Social value of repair/reuse





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Repair bin

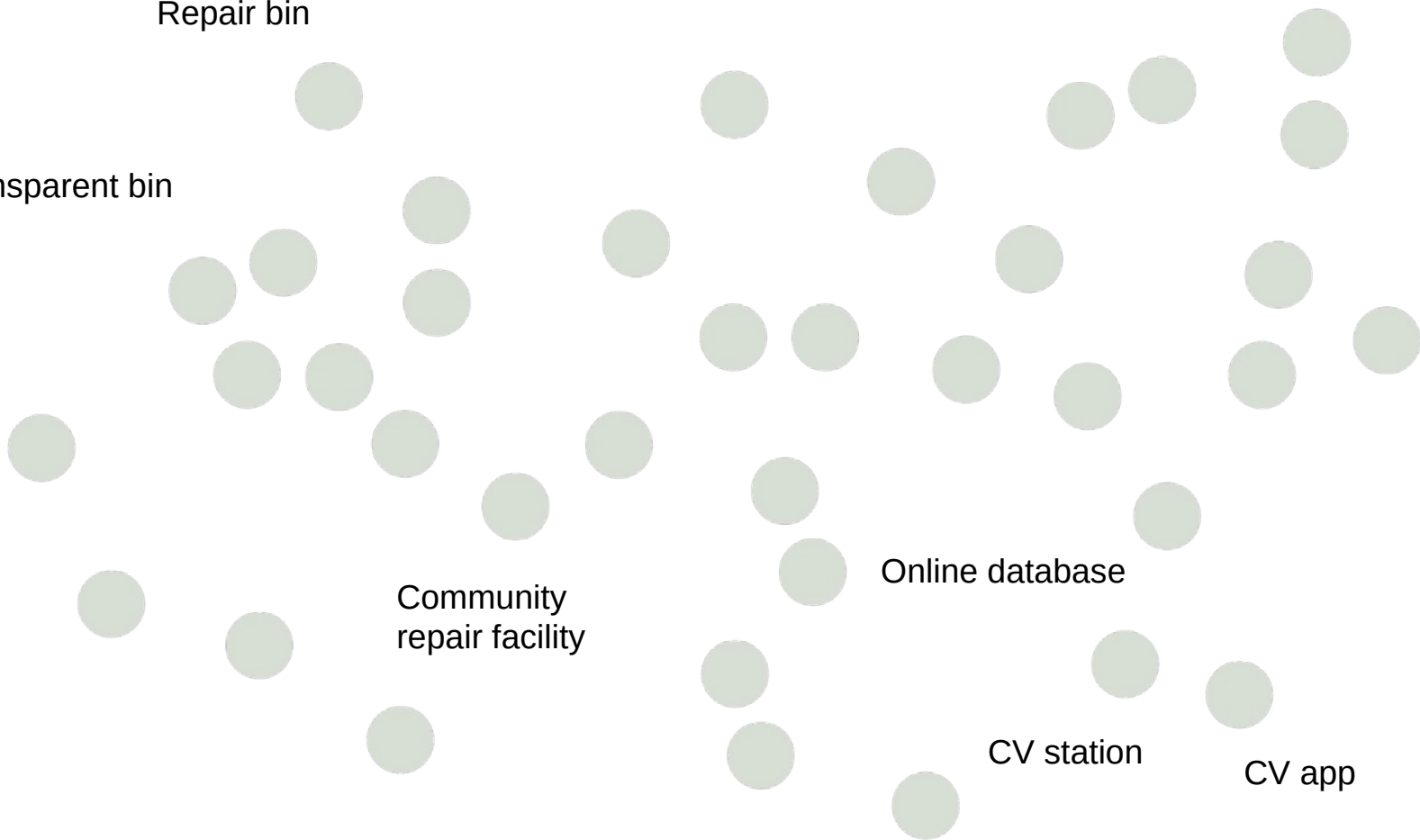
Transparent bin

Community
repair facility

Online database

CV station

CV app





Si vous me trouvez
tel au N° vert
0 800 833 798

22 cm



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Thanks!

Learn more about my research:

<https://is.eefe.me/opensdott>