

Living In A Prototype: A Reconfigured Space

Audrey Desjardins¹ and Ron Wakkary^{1,2}

¹ Simon Fraser University, Canada

² Eindhoven University of Technology, Netherlands

May 12th, 2016



Goal

Investigating complexities and nuances of a case where people imagine, design, and build an environment they live in.



In the context of HCI and IxD

Ubiquitous computing + Smart home +
Internet of Things



In the context of HCI and IxD

Ubiquitous computing + Smart home +
Internet of Things

Promise of reconfiguring everyday
settings through computation



In the context of HCI and IxD

Ubiquitous computing + Smart home +
Internet of Things

Promise of reconfiguring everyday
settings through computation

***“ in order for the IoT to really
take off, end-users need to
participate in the creation
process. They need to have
the power and control over the
creation and use of applications
for smart environments ”***

(De Roeck et al., 2012)



Related works

Everyday reconfigurations of the home
(Crabtree et al., 2004; Tolmie et al., 2002; Taylor and Swan, 2005; Wakkary and Maestri, 2007)

*Creative, tacit, unremarkable, dynamic,
heterogeneous*



Related works

Everyday reconfigurations of the home
(Crabtree et al., 2004; Tolmie et al., 2002; Taylor and Swan, 2005; Wakkary and Maestri, 2007)

*Creative, tacit, unremarkable, dynamic,
heterogeneous*

Do-it-yourself reconfigurations of the
home

(De Roeck et al., 2012; Tanenbaum et al., 2013; Woo and Lim, 2015)

*Active, identity, empowerment,
resourcefulness*



The van conversion

DIY approach



The van conversion

DIY approach

Complete environment



The van conversion

DIY approach

Complete environment

Over 2 years



The van conversion

DIY approach

Complete environment

Over 2 years

Opens a critical and reflective space to examine further the design of technology in the home



Research questions

RQ1:

What can we learn from the evolving relationship between the maker/user and the designed lived in environment?



Research questions

RQ1:

What can we learn from the evolving relationship between the maker/user and the designed lived in environment?

RQ2:

What critical perspective does the van conversion project offer on the current trajectory of the integration of technology in the home?



Method: Autobiographical Design

“design research drawing on extensive,
genuine usage by those creating or building
the system”

(Neustaedter & Sengers, 2012)



Method: Autobiographical Design

“design research drawing on extensive, genuine usage by those creating or building the system”

(Neustaedter & Sengers, 2012)

Complex, long-term, personal situations



Data collection





How to sew cushions for a camper van



597

33K



Bed, Table, and Benches for camper van - All in one!



703

64K



Cedar paneling for van interior



435

50K



Storage platform for the back of your camper van



273

67K



How to insulate a camper van



479

178K

















Qualities of Living in a Prototype

1. Reciprocal Shaping
2. Intimate Knowledge and Intimate Frustration
3. Renewed Novelty
4. Ownership and Change
5. Care and Trust
6. Growing Uniqueness



Qualities of Living in a Prototype

1. Reciprocal Shaping
2. Intimate Knowledge and Intimate Frustration
3. Renewed Novelty
4. Ownership and Change
5. Care and Trust
6. Growing Uniqueness



Renewed Novelty

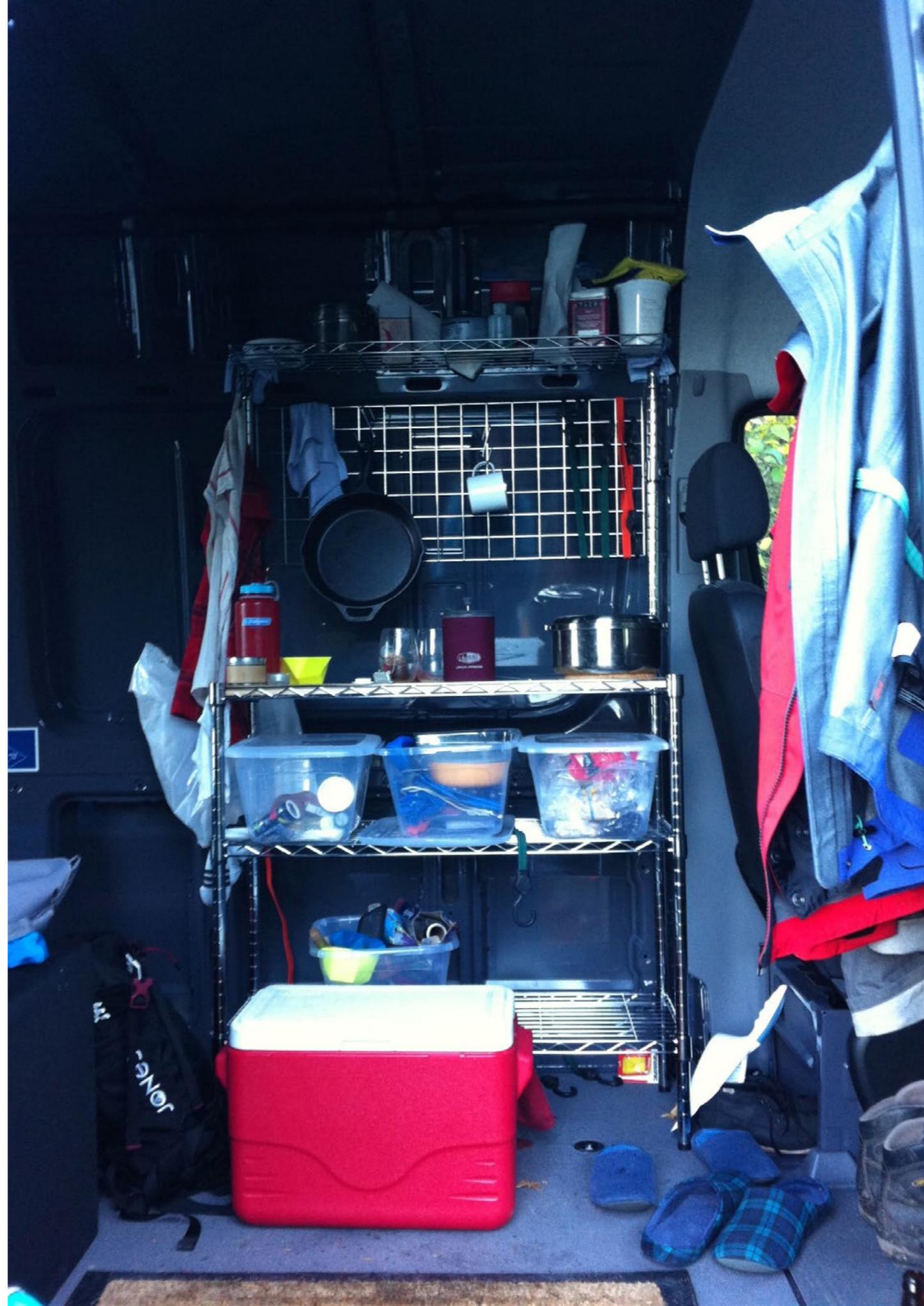






Ownership and Change







Critical perspective



Living in

Living in a reconfigured home:



Living in

Living in a reconfigured home:

Physical immersion

“Everything can be changed”



Living in

Living in a reconfigured home:

Physical immersion
“Everything can be changed”

Temporality
Luxury of time



Prototype qualities

Manifestations of design ideas



Prototype qualities

Manifestations of design ideas

Sketched + polished things



The invariably unfinished home

New picture of IoT and smart homes

Slow, ongoing, piecemeal, creative, personal





Thank you! Questions?

Audrey Desjardins
adesjard@sfu.ca
www.audreydesjardins.com

Reciprocal shaping



Intimate knowledge and intimate frustration





“...if things are too close together but not attached together, there is so much creaking and rubbing noises when we drive that it can drive us crazy!”



Care and trust

DISCLAIMER: This is the first van conversion we are doing, so this is certainly a process of **trial and error!** We tried to describe at every step the reasons why we made the choice materials we made, so hopefully you can see that we used common sense to design this process. I am an industrial designer and design researcher and my boyfriend is a landscape architect with some knowledge in wood working. We see this project as an experiment and as a wonderful place to try out some ideas about design, materials and fabrication.

Growing uniqueness



