Investigating Genres and Perspectives in HCI Research on the Home

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HCI research on domestic technologies

Understand the complex and evolving ways technology is situated in the home
HCI research on domestic technologies

Understand the complex and evolving ways technology is situated in the home

Necessary to critically revisit assumptions, methods and underlying values
HCI research on domestic technologies

Understand the complex and evolving ways technology is situated in the home

Necessary to critically revisit assumptions, methods and underlying values

New methods to understand and remain sensitive to the intimate nature of the home
2 dominant perspectives

Anthropocentric perspective
&
Observer/interpreter perspective
Method

Keywords

Home
House
Everyday
Domestic
Cooking
Watching TV
Cleaning
Health at home
Sustainable living
Home network
Smart home
etc.
Method

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121 works
Method

Keywords

- Home
- House
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- Domestic
- Cooking
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Analysis of research questions and objects of study

121 works
Keywords

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7 genres of HCI research on the home
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121 works

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2 dominant perspectives

2 complementary perspectives
7 genres of research on the home
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1- Social routines in the home
7 genres of research on the home

1- Social routines in the home
2- Ongoing domestic practices
7 genres of research on the home

1- Social routines in the home
2- Ongoing domestic practices
3- The home as testing grounds
7 genres of research on the home

1- Social routines in the home
2- Ongoing domestic practices
3- The home as testing grounds
4- Smart homes and home automation
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1- Social routines in the home
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6- The home as a site for interpretation
7 genres of research on the home

1- Social routines in the home

2- Ongoing domestic practices

3- The home as testing grounds

4- Smart homes and home automation

5- Contested values of a home

6- The home as a site for interpretation

7- Speculative visions of the home
Examples
Genre 2: Ongoing domestic practices

Wide variety of activities in the home

Goodman & Rosner, 2011
Ames et al. 2010
Taylor & Swan, 2005
Genre 2: Ongoing domestic practices

Wide variety of activities in the home

*How do practices configure the home experience?*
Genre 2: Ongoing domestic practices

Wide variety of activities in the home

*How do practices configure the home experience?*

Observational contextual studies, home tours, artifact inventories

Goodman & Rosner, 2011

Ames et al. 2010

Taylor & Swan, 2005
Genre 6: The home as a site for interpretation

Beyond tasks and efficiency >> playfulness, discovery, speculation, provocation, etc.
Genre 6: The home as a site for interpretation

Beyond tasks and efficiency >> playfulness, discovery, speculation, provocation, etc.

How can we encourage reflection and interpretation about technology in the home?
Genre 6: The home as a site for interpretation

Beyond tasks and efficiency >> playfulness, discovery, speculation, provocation, etc.

*How can we encourage reflection and interpretation about technology in the home?*

Design towards highly finished design artifacts

Gaver et al., 2013

Lim et al., 2013
5 epistemological commitments
5 epistemological commitments

Objective observer
5 epistemological commitments

Objective observer

Third person observer
5 epistemological commitments

Objective observer

Third person observer

Relayed informant
5 epistemological commitments

Objective observer

Third person observer

Relayed informant

Author interpreter
5 epistemological commitments

Objective observer

Third person observer

Relayed informant

Author interpreter

Experimenter
Examples
Genre 2: Ongoing domestic practices

How do practices configure the home experience?

Observational contextual studies, home tours, artifact inventories

Epistemological commitment: Third person observer
Genre 6: The home as a site for interpretation

How can we encourage reflection and interpretation about technology in the home?

Design towards highly finished design artifacts

Epistemological commitment: Experimenter
2 dominant perspectives:

Anthropocentric perspective

&

Observer/interpreter perspective
The anthropocentric perspective

Uniquely human

In all 5 epistemological commitments

People and activities OR artifacts from point of view of the users (e.g. usability)
Dominant perspective

The observer/interpreter perspective

Third person outside the domestic situation (e.g. O.O., 3rd person, R.I.)

Accountable for how information is relayed

Mediating role between lived experience and construction of knowledge
2 complementary perspectives:

Material perspective

&

1st person view
Complementary perspective

A material perspective of the home

Growing scholarship in object-oriented ontology and speculative realism
(Harman, 2002; Bogost, 2012; DiSalvo & Lukens, 2011)
A material perspective of the home

Growing scholarship in object-oriented ontology and speculative realism (Harman, 2002; Bogost, 2012; DiSalvo & Lukens, 2011)

Egalitarian view of all ‘things’ in the world
Complementary perspective

A material perspective of the home

Growing scholarship in object-oriented ontology and speculative realism (Harman, 2002; Bogost, 2012; DiSalvo & Lukens, 2011)

Egalitarian view of all ‘things’ in the world

Non-neutral ways artifacts mediate between humans and reality
A material perspective of the home

Growing scholarship in object-oriented ontology and speculative realism (Harman, 2002; Bogost, 2012; DiSalvo & Lukens, 2011)

Egalitarian view of all ‘things’ in the world

Non-neutral ways artifacts mediate between humans and reality

>> more critically considering the complexity bound to the objects we produce

>> and the substantive role they play in shaping domestic reality
A material perspective of the home

New ways of inquiring
Complementary perspective

A first person view of the home

Most direct way to investigate the experience of the home
Complementary perspective

A first person view of the home

Most direct way to investigate the experience of the home

Autobiographical design and autoethnography
(Neustaedter & Sengers, 2012; Ellis, 2004)
A first person view of the home

Most direct way to investigate the experience of the home

Autobiographical design and autoethnography
(Neustaedter & Sengers, 2012; Ellis, 2004)

>> researcher’s personal experience, needs, desires

>> uniquely rich and textured understanding of the effect a technology and experiences
A first person view of the home

Complementary perspective

Complementary perspective

A first person view of the home

New ways of inquiring
Summary

7 genres of HCI research on the home

5 epistemological commitments

2 dominant perspectives

Anthropocentric perspective
Observer/interpreter perspective

Material perspective
1st person view

2 complementary perspectives
Thank you! Questions?

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5 epistemological commitments

Objective observer

Third person observer

Relayed informant

Author interpreter

Experimenter
Table 1. Epistemological commitments and respective genres

<table>
<thead>
<tr>
<th>Commitments</th>
<th>Genres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective observer</td>
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</tr>
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</table>
Genre 1: Social routines in the home

Collection of interrelated social routines

*How is the home socially organized?*

Rich and detailed descriptions

Swan, Taylor, and Harper, 2008

Crabtree & Rodden, 2004
Genre 3: The home as testing grounds

What is --- what could be

*How is this new designed technology used, appreciated, and adopted in domestic setting?*

Design artifact oriented
Genre 4: Smart homes and home automation

What is a smart home? How do people live in, maintain, and install a smart home?

Living labs

Simulation of everyday life - tech oriented
Genre 5: Contested values of a home

Beyond HCI assumptions

*What have we overlooked when we talked about the home?*

Alternative views on how - why - when to design domestic technologies
Genre 7: Speculative visions of the home

Potential domestic futures

*What is the home of the future?*

Broaden the field

Aipperspach, Hooker, and Woodruff, 2008

Gaver & Martin, 2000

Blythe & Monk, 2002

Taylor, Wyche and Kaye, 2008