



LUND UNIVERSITY

Negotiating Conventions

cleanliness, sustainability and everyday life

Jack, Tullia

2018

Document Version:

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Jack, T. (2018). *Negotiating Conventions: cleanliness, sustainability and everyday life*. [Doctoral Thesis (compilation), Department of Sociology]. Lund University.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Negotiating Conventions

cleanliness, sustainability and everyday life

TULLIA JACK

DEPARTMENT OF SOCIOLOGY | FACULTY OF SOCIAL SCIENCE | LUND UNIVERSITY



Negotiating Conventions *cleanliness, sustainability and everyday life*

Tullia Jack



LUND
UNIVERSITY

Cover photo by Samara Doole
Portrait by Dan McCabe


Copyright Tullia Jack

Faculty of Social Science
Department of Sociology

ISBN 978-91-7267-400-4 (print)
ISBN 978-91-7267-401-1 (pdf)
ISSN 1102-4712

Printed in Sweden by Media-Tryck, Lund University, Lund 2018



MADE IN SWEDEN 

Media-Tryck is an environmental-
ly certified and ISO 14001 certified
provider of printed material.
Read more about our environmental
work at www.mediatryck.lu.se

Dedicated to everyone who has worked towards a better future.

Table of Contents

Acknowledgements	ix
Popular summary	xii
Populärvetenskaplig sammanfattning	xiii
List of figures and tables.....	xiv
List of papers	xv
Introduction.....	1
Aim and research questions	1
Structure of the dissertation	3
Cleanliness and sustainability	5
Cleanliness as material.....	5
Cleanliness as biological	7
Cleanliness as social	8
Theory.....	13
Inconspicuous consumption	13
Social practices	15
Conventions and bundles	16
Methodology.....	21
Data collection strategy.....	22
Gathering data.....	23
Surveying the field	23
Interviews.....	24
Magazines.....	25
Focus groups.....	26
Limitations.....	27
Transferability	28
Analysing the data.....	31
Findings.....	33
Paper 1 summary.....	33
Paper 2 summary.....	36

Paper 3 summary..... 38

Concluding discussion 41

 Summary of main findings 41

 Conventions, interventions and sovereign dupes 43

 Sociology for sustainability 47

 Future research 48

 Original contribution..... 49

References 51

Acknowledgements

This dissertation is about the sustainability implications of everyday life. What we do day in, day out has huge environmental implications, and so living sustainably on planet earth requires everyday actions to use only as many resources as can be regenerated. This is a subject near to my heart, having worked and studied in sustainable design in Australia. Working in the discipline of design, while exciting and necessary in addressing sustainability challenges, had led me to believe that no matter how sustainably a system is designed, its environmental impact is determined by its users. So, I packed my bags and moved to Lund Sociology, hoping to answer my questions around making everyday life more sustainable.

My first acknowledgements then go to the department of sociology, who accepted with open arms the Australian who couldn't pronounce Bourdieu, Foucault or Wacquant. In the same vein I also want to acknowledge my four PhD advisors Lisa Eklund, Christofer Edling, Mikael Klintman and Åsa Lundqvist. They say a friend is someone who knows you really well... and likes you anyway. These four sociologists know my flaws more intimately than anyone else... and still engage with me anyway: inviting me to seminars, lending me books, sending me relevant articles, helping me formulate questions and showing interest in my work.

Likewise, to the researchers sitting in this faculty, doing my PhD amongst you has been both challenging and rewarding. I want to especially thank Anna-Lisa Lindén and Boel Berner for your guidance. Thank you also Agneta Mallén, Diana Mullinari, Sara Eldén, Charalambos Demetriou, Mimmi Maria Barmark, Christopher Swader, David Wästerfors, Hanna Wittrock, Axel Fredholm, Alison Gerber, Carl-Göran Heidegren, Bo Isenberg, Britt-Marie Johansson, Magnus Karlsson, Abdulhadi Khalaf, Vesa Leppänen, Olle Frödin, Fariborz Zelli, Vasna Ramasar, Christopher Mathieu, Shai Mulinari, Magnus Ring, Ann-Mari Sellerberg, and Malin Åkerström. Our interactions have helped me appreciate how sociology can help not only to inform sustainability transitions but address many social and environmental challenges.

To the PhD-lings at Sociology – past and present – I am grateful to have shared this experience with you all. Thank you Lisa Flower (for making me run a marathon, both literally and figuratively), Uzma Kazi (for problem solving and jalebi jamun), Liv Sunnercrantz (for making me believe truth is relative), Mona Hemmaty (for your positivity), Oriana Quaglietta (for saying what's on your mind and stashing my chocolate), Susanne Boethius (for being a badass and good role model at the same time), Laura Kollmann (for your kind encouragement), Simon Cedar (for introducing me to Karen Barad and sandwich cake), Anders Hylmö (for discussing theory), Anna

Kovasna (for your sense of adventure), Mattias Nilsson Sjöberg (for being there), Jaleh Taheri (for raw balls), Priscilla Solano (for showing how elegant a phd process can be), Rasmus Ahlstrand (for being good to talk to), Colm Flaherty (for your have-a-good-time-while-pitching-in approach), Hanna Sahlin (for being so self-confident), Anna Berglund (for speaking Swedish to me), Sophia Yakhlef (for being so calm), Johan Sandberg (for your enthusiasm), Lars Crusefalk (finally someone to talk about consumption with!), Imad Rasan (for being across the hall), Eda Farsakoglu (for some good chats), Henriette Frees Esholdt (for being a glamorous co-filmstar), Alexandra Franzén (for teaching me Lundensiska), Erik Hannerz (for caring), Samantha Hyler (for your sense of humour), Gokhan Kaya (for being so damned dedicated), Henrik Möller (for doing things differently), Max Jerneck (for sharing sustainability interests), Sasa Wang (for sharing your supervisor), Bettina Rother (for sharing an office), Daniel Görtz (for your weird and wonderful thoughts), Isabelle Johansson (for living the good life), Katrine Tinning (for always having everything under control), Lotta Granbom (for your sense of fun), Ruixia Song (for some nice beer and conversations), Maryne Shabeliuk (for getting involved) and Wei Wang (for sharing the journey). To the new PhDs: Elton Chan, Freja Morris, Marie Larsson and Staffan Edling, I had a dream the night before I met you, that you were all superheroes. After getting to know you, my dream actually seems quite accurate – the future is in good hands.

The social science and ClimBEco PhD-lings have also played a big role in getting me to the finish line. It was at one of our writing days that I finally started writing my kappa. Thank you for the team spirit Devrim Umut Aslan, Carin Rehnrona, Chad Boda, David Härseck, Ebba Brink, Elias Isaksson, Ellinor Isgren, Elsa Hedling, Emma Johansson, Emma Samsioe, Erik Nilsson, Erin Kennedy, Fabio Christiano, Hakim Abdi, Helena Gonz Lindberg, Henner Busch, Ida Wingren, Ina Möller, Josefin Landberg, Kadri Kuust, Katherine Burlingham, Kurt Boyer, Lina Herbertsson, Per Anderssen, Rickard Andersson, Rui Liu, Sarah Kolling, Stephen Worenecki and Yeonjin Kim.

I also want to thank colleagues across the bridge, for organising some great seminars and equally good Danish beer over the years. Charlotte Jensen, mange tak for being there from the beginning, you are a piping source of inspiration. Kirsten Gram-Hanssen, Bente Halkier and Inge Røpke, thank you for being living proof that one can be academically brilliant and nice at the same time. Thank you, Anders Buch, Anders Rhigar, Freja Friis, Lars Kjeff Pedersen, Martina Ferrucci, Simon Larsen and Toke Christiansen for some stimulating discussions.

To my Australian colleagues Cecily Maller, Yolande Strengers, Larissa Nicholls, Chris Ryan and Janet McGaw, thank you for sending me off on this interesting track.

Collaboration during my PhD process, has helped me see how my project has relevance in other fields, and how these can contribute to my project. Thank you Alison Browne for being so damn good at what you do and generous with your excellence, Catherine Paul for talking about microbes, Linda Paxling for feminist futuring, Marius Korsnes for hiking, Noel Cass for couchsurfing, Manisha Anantharaman for critique, Marlyene Sharhakian for your contagious enthusiasm, Tomas Skjolsvold for interventions and Russell Hitchings – I wish every research project involved attending music festivals.

My gratitude also to the excellent human beings in *familjen* – my refuge. Firstly Matthias Lehner, you inspire me on so many levels. Elin Andersson and Nick Rosenstock, I love spending time with you Asker and Rowen. Jasmine Livingston, we shared so much and I am so happy that we are finishing our PhDs together (I finally get to say “Dr Livingston I presume”). Towe Gustavsson, I love to watch you keep blossoming. Erik Hogström, you are the most eccentric person I know. Julia Nussholz, I remember when you rounded up all the blankets in the house and took them to the refugees: you are the angel that rushed in. Nura Akhilali you make me think, keep being you. Ingeborg Andersskog and Sebastian Acosta thanks for being part of the process. Nina Vogel, you never lived here but it feels like you did, thank you for your friendship. Sarah Bolmsten, you never lived here either but you and Holly are part of familjen. Isabella Thöger and Cyrille Gaubert, I learnt a lot from you both in a short time, and am happy that you are still nearby. Helena Hede, for morning chats over coffee. Linn Hollanti, your can-do attitude is motivating. Markus Pålsson for standing up for underdogs, and beautiful travel pics. And Ronnie Gurwicz, thanks for jumping in and proof reading my manuscript. Because of all of you I have found a home in this sometimes cold, dark country.

To my yoga friends, thanks for helping me to escape when I got stuck in my head. Anne Svärdefält, Annette Holmström, Caroline Åkvist, Emelie Schultz, Erik and Hanna Persson, Erika Hjelm, Irene Toreheim, Isabella Nitchke, Johanna Larsson, Johannes Lundgren, Kimiko Gustafsson, Miranda Gunnarson, Monika and Bengt Lundqvist, Sara Björs, Sussie and Lars Nicklasson, Sussie Kjellin and Åsa Hermansson, you have made this journey much more grounded and peaceful.

Most of all I want to thank my family for caring about the world that we live in and instilling in me the sense that we can make it better. Mum and Dad for always encouraging me to follow my dreams. Christian and Rosie for your unconditional love, and love of having fun together. Annie, Anthony, Chloe, Dan, Geordie and Sammy – you guys have all been there for me. And Nico, thank you for your love and unwavering belief. This PhD became a reality through all of your contributions along the way.

Popular summary

This dissertation explores cleanliness conventions as a way of understanding changing water and energy consumption. Cleaning practices have seen a rapid increase in both developed and developing countries, along with a parallel rise in consumption of water, energy and also cleaning products. These resources are environmentally critical and thus upward trajectories of cleanliness are not sustainable. Understanding cleanliness conventions can help shift unsustainable trajectories. To understand conventions this dissertation uses three main data sets. Firstly, existing data such as time-use as well as domestic water and energy consumption statistics; secondly media representations of cleanliness in magazines; and finally focus-group discussions about how media representations of cleanliness relate to everyday life.

Cleanliness is a mundane issue, yet still plays a defining role in everyday life; quietly consuming water, energy and people's time. This dissertation argues that the media is part of cleanliness practices, not a causal factor, but rather as a reflector and amplifier of various cleanliness discourses. Commercial representations of cleanliness are, however, not naïvely accepted in everyday life, but rather calibrated, resisted and critiqued. People are both sovereign and dupe in negotiating conventions. Cleanliness is context driven and relational, so the increases in cleanliness that have led to intensifying water and energy consumption could be reversed by changing cleanliness conventions. People involved in conventions are those with the best capability to deconstruct problems, devise solutions and enact alternative modes of existence. Like a drop in the ocean, we cannot change conventions alone: the sum of human ideas and activities is key in addressing the social and environmental challenges of our time.

Populärvetenskaplig sammanfattning

Denna avhandling utforskar renlighetskonventioner för att förstå växande vatten och energiförbrukning. Renlighetspraktiker har ökat snabbt i omfattning i såväl utvecklade som utvecklingsländer, parallellt med ökande vatten och energiförbrukning och användande av rengöringsmedel. Den ökande renligheten är inte hållbar eftersom den belastar miljön och förbrukar kritiska resurser. Att förstå renlighetskonventioner är ett led i att förändra en ohållbar utveckling. För att förstå konventioner används i denna avhandling tre datakällor: för det första statistik om tidsanvändning samt hushållens vatten- och energiförbrukning; för det andra representationer av renlighet i tidskrifter; och för det tredje fokusgruppsdiskussioner om hur medierepresentationer av renlighet relaterar till vardagspraktiker.

Renlighet är en fråga om vardagsrutiner som omärkt konsumerar vatten, energi och människors tid. I avhandlingen hävdas att media är en del av denna process: inte som orsaksfaktor, utan snarare som en spegel och förstärkare av renlighetsdiskurser. Kommersiella representationer av renlighet accepteras emellertid inte passivt av konsumenter utan utsätts för kalibrering, motstånd och kritik. Renlighet är kontextdriven och relationell, och renlighetspraktiker som har lett till ökad vatten- och energiförbrukning kan förändras genom förändrade renlighetskonventioner. Människor som själva omfattas av konventioner är de som har bäst förmåga att dekonstruera problem, utforma lösningar och hitta alternativa former att leva. En ensam människa är en droppe i havet: summan av mänskliga idéer och aktiviteter är nyckeln till att ta itu med de sociala och miljömässiga utmaningarna i vår tid.

List of figures and tables

Figures

Figure 1 practices bundling around a future oriented convention.....17
Figure 2 conventions taking bundles toward different futures19

Tables

Table 1 data overview.....23

List of papers

This dissertation is based on the following papers:

- Paper 1: Jack, Tullia (2017) "Cleanliness, and consumption: exploring material, and social structuring of domestic cleaning practices" *International Journal of Consumer Studies* 41.1 p 70-78.
- Paper 2: Jack, Tullia (2018) "Representations – A critical look at media's role in cleanliness conventions and inconspicuous consumption" *Journal of Consumer Culture*, published on-line October 29th 2018.
- Paper 3: Jack, Tullia "Sovereign Dupes? negotiating cleanliness conventions in everyday life", unsubmitted manuscript.

Paper 1 and 2 are printed in this compilation dissertation with thanks to the International Journal of Consumer Studies and Journal of Consumer Culture.

Introduction

In developed societies, we generally live in bigger, and more comfortable houses, eat a greater variety, and volume of food, move easily within, and between countries, and enjoy a whole host of modern conveniences. In the 21st century standards of living have increased (Gronow and Warde, 2001; Shove and Warde, 2002). Expectations have also increased: we want convenience, we want to be comfortable, and we want to be clean wherever we are in the world (Shove, 2003a). While it can be argued how much new standards of comfort, convenience, and cleanliness increase quality of life, one thing is certain: we are using resources much faster than at any previous point in history. Combining accelerating resource use with population growth poses serious environmental consequences, especially resource depletion, and excessive CO₂ pollution (IPCC Fifth Assessment Synthesis Report, 2014; Rockström et al., 2009). The bulk of resource use is not in the Veblenian¹ sense, as status symbols, but rather in the everyday pursuit of conventional, and mundane activities (Shove, 2003a; Gronow and Warde, 2001). To reduce resource intensity of everyday life, understanding ways that conventions inform practice is essential in intervening for an environmentally sustainable future.

Aim and research questions

This study aims to contribute to the growing body of knowledge around living (un)sustainably on planet earth. Two essential ingredients for everyday life on earth are water and energy, and my dissertation explores cleanliness conventions as a way to understand changing water and energy consumption. Cleanliness is a

¹ Conspicuous consumption is a concept formulated by Norwegian-American sociologist Thorstein Veblen in his book "The Theory of the Leisure Class" (1899), in which he describes the phenomenon of consumers buying expensive items to display wealth, and status.

particularly pertinent example of conventions² shaping resource use as it has seen a rapid increase in both developed and developing countries, along with a parallel rise in consumption of water, energy and also cleaning products. There is a strong body of literature establishing the links between increasing cleanliness and associated resource consumption. In this dissertation I try to understand more deeply how cleanliness conventions are linked to these changes. To get at cleanliness conventions I use three main data sets – firstly existing data such as time use, domestic water and energy consumption, secondly media representations of cleanliness, and finally how groups of people negotiate cleanliness discourse in everyday life. This data provides a multi-level exploration of cleanliness developments from the aggregated to the specific. I focus on material from the last three decades, 1990s, 2000s and 2010s in Sweden. By plotting how cleanliness conventions have developed over the past thirty years, I aim to gain a clearer understanding of how conventions operate in a social context, and how to intervene and shift conventions in more sustainable directions.

Investigating cleanliness conventions is important in understanding how resource consuming practices are shared and reproduced. To guide the research process towards my goal of contributing to increasing sustainability in everyday life, I use three research questions:

1. How have material and social infrastructures of cleanliness evolved and how does this reflect cleanliness conventions?
2. How is cleanliness represented in media, and what are the potential social and environmental implications?
3. How are cleanliness conventions negotiated in everyday life?

These questions address conventions from a descriptive through to analytical level. In each of my papers I provide data related to each question and discuss various aspects of conventions relevant for understanding water and energy consumption in everyday life. Knowing more about conventions will be useful in designing interventions that them towards sustainability. In exploring this line of enquiry, my dissertation aims to contribute to the growing body of knowledge around living (un)sustainably on planet earth.

² Conventions in the sense of generally accepted meanings in paradigmatic social practices. In *The Free Dictionary* a convention is the 'general agreement on or acceptance of certain practices or attitudes' or 'a way in which something is usually done' in the *Oxford Dictionary*.

Structure of the dissertation

This dissertation begins by presenting the environmental imperative to consider inconspicuous consumption inherent in everyday cleaning practices. In my first chapter, I consider cleanliness as a case of inconspicuous consumption, outlining important developments around cleanliness including infrastructures, biological understandings and social meanings. I look at cleanliness conventions and some of the implications for water and energy consumption, and conclude that more knowledge is needed on how conventions operate. This knowledge will be useful in understanding changes in inconspicuous consumption, and more importantly will provide insights useful in intervening to reduce resource intensity.

In the following theory chapter, I examine three concepts that hold promise in grasping (un)sustainable everyday practices: inconspicuous consumption, social practices and conventions. I explore recent discussions about these three concepts and ways that they influence research, as well as their implications for making observations. I discuss the usefulness of social practice theories in researching resource consumption and argue that a stronger focus on the conventions that underlie bundles of practice would be useful in understanding stability and change.

In the methodology chapter I use insights from the theory chapter to motivate my suggested approach to get at cleanliness conventions. I discuss four datasets I chose to illuminate cleanliness conventions from different levels. I start with existing statistics on domestic cleanliness activities such as time use, water and energy consumption and compliment this with in-depth interviews. I then read Swedish magazines to see how cleanliness is represented in popular media. My final dataset is discussing these representations of cleanliness in focus groups. In my methods chapter I consider the practicalities of each method, as well as what they emphasise or miss in illuminating conventions.

These three chapters provide the context for my three papers, summaries of which I present in my findings chapter, chapter four. Paper 1 describes how cleanliness practices have changed in Sweden since the 1980s and discusses how this reflects cleanliness conventions. Paper 2 shows how magazines represent cleanliness, including idealisation, shame and medicalisation, and then discusses the social and environmental implications of these representations. Paper 3 argues that people in groups resist media representations and renegotiate conventions in everyday life, especially when conflicting with broader social and environmental goals.

I take the insights offered by my three papers and discuss how they contribute to understandings of sustainable everyday life in my fifth and final chapter. Using the findings summarised in chapter four, I consider how the material and social infrastructures of cleanliness evolve, how they reflect cleanliness conventions, how media represents conventions, and how conventions are negotiated in daily life. This leads into a discussion of current and potential interventions into unsustainable practices and how meaning is navigated back and forth between practice entities and practice performances. I emphasise that people are sovereign dupes, reflexive and active participants in reconstructing collective conventions and that the dynamic negotiation is where the shift in meaning can happen. I conclude by suggesting directions for future research into intervening in conventions to shift entire bundles of practices in pro-environmental directions.

Cleanliness and sustainability

Cleanliness is not easy to pin down, being subjective, relative, culturally determined and varying greatly over time: the one constant is that cleanliness requires resources. Cleanliness as an environmentally intensive phenomenon has been accelerating across the globe over the last century (Vigarello, 1988; Ashenburg, 2007; Shove, 2003a). Picking apart the cleanliness phenomenon reveals that many elements play a role. Cleaning requires water for washing, energy to heat, purify and transport water, and chemicals like those used in anti-bacterial wipes, bleaches, soaps and materials. Cleaning often also uses machines such as dishwashers and tumble driers, and infrastructure such as plumbing: cleanliness is a material phenomenon. Medical knowledge of hygiene has also increased understanding of when washing is important: cleanliness is a biological phenomenon. Conventions are also active in washing practice, people do what is normal in a given social context: cleanliness is a social phenomenon. In this section I explore how cleanliness as a material-biological-social phenomenon develops and is experienced. I highlight seminal literature on cleanliness from these angles – infrastructural, biological and social – and conclude by illuminating the need for better understandings around processes of convention negotiation in everyday cleanliness practices.

Cleanliness as material

In tandem with the industrial revolution, cleanliness infrastructures – plumbing, drainage systems, bathrooms and washing machines – proliferated. From the twentieth century onwards, the means to achieve cleanliness made hygiene ever more accessible (Ashenburg, 2007; Bushman and Bushman, 1988). Access to plumbing, washing machines and other cleanliness paraphernalia has increased greatly in developing as well as developed countries. In Sweden, it has traditionally been common to share laundry facilities in apartment blocks' basements, including semi-industrial washing machines, driers, drying cupboards and ironing facilities

(Mont and Plepys, 2007). However there are new demands for apartments to have their own machines: 74% of the Swedish population have access to their own washing machines, while 66% have access to a dishwasher (SCB, 2015). While infrastructures are growing, they are at the same time becoming more water and energy efficient since the implementation of the European Energy Label. Since the 1990s average water consumption for a standard size dishwasher has more than halved to around 13 litres per cycle (Richter, 2010), while electricity consumption decreased from 2.3 kWh/kg in 1950 to 0.3 kWh/kg in 2000 (Zattin, 2015). Annual per capita consumption of energy through washing machines in 2008 was between 60-70 kWh in Sweden (Zimmermann, 2009: 138). Consumption of energy through driers per person had a greater variability, between 40-70 kWh/person/year (Zimmermann, 2009: 151). Swedish accommodation rental companies have also started installing detergent free, deionized cold washing machines in apartments, with the potential to reduce chemical and energy use associated with laundry (AB, 2016). The efficiency trend is positive: there has been a “tremendous” decrease of electricity used for washing/drying laundry in Swedish households since the 1990s (Lindén, 2009: 4). Infrastructure is thus changing in two ways, plumbing and cleaning devices are becoming more common, while at the same time these are becoming more efficient.

The efficiency of technology, however, matters less than the conventions that they allow. Environmental tensions arise when conventions converge on higher standards of cleanliness, locking-in demand for resources needed to uphold new normalities (Shove, 2003b). The overall net increases in cleanliness practices are taxing for the natural environment, consuming water, energy and chemicals, and then regurgitating these pollutants, back into broader ecosystems. Nearly one third of all water and energy in Sweden and many other developed countries, is consumed domestically, with two thirds of this through activities relating to cleanliness (Jack, 2017: 72). Trends towards higher cleanliness standards will “inevitably lead to still greater water and energy consumption” (Gram-Hanssen, 2007: 15). In the garment manufacturing industry, laundering is responsible for the majority of environmental impacts over the life cycle of a garment (Fletcher, 2008; Allwood et al., 2006). “Maintenance is often the most energy-demanding stage during clothing’s’ lifecycle” (Laitala et al., 2012: 228), with up to “82% of energy use and 66% of solid waste and over half of the emissions to air (83% carbon dioxide) amassed during washing and drying” (Fletcher, 2008: 78). Similarly in the US, domestic laundry accounts for 21% of water use (Shove, 2003a: 117). Resource intensity of garment care comes from water used in washing, energy needed to power machines and chemicals used to remove soils and stains (Martens and Scott, 2005: 380). Household cleaning and personal hygiene are everyday practices that

consume water, energy and chemicals. How these cleanliness conventions develop has clear sustainability implications.

Cleanliness as biological

Dirt became accepted as dangerous around the start of the nineteenth Century, instigated by English nurse and writer, Florence Nightingale, who spent time serving in the Crimean war. Nightingale witnessed more deaths from disease and infection than on the battlefield and concluded that keeping hospitals clean decreases mortality. She recommended that all hospital surfaces including walls and floors should be cleaned, all textiles should be laundered and that patients should be bathed (Nightingale, 1863). Dr Blackwell, an American physician and writer, stated "sanitation is the supreme goal of medicine" after observing Nightingale in the 1860's (Ashenburg, 2007: 208). Nightingale's ideas around cleaning, germs and hygiene spread widely; the discovery of the "household germ" and proliferation of germ theory embedded the link between dirt and disease (Diller, 1999: 41). In the early 1900s in Sweden, dust was seen as containing bacteria which could penetrate the body, cause discomfort and disease, and cleaning thus became more important (Berner, 1998: 342). In tangent with increasing knowledge around dirtiness, disease and germs, cleanliness had become a biological phenomenon centred around hygiene and health. The health imperative to clean hospitals, workplaces and homes spread out to wider society: now relatively high standards of hygiene are common and cleaning practices are escalating (Shove, 2003a: 76).

A question arising from escalating cleanliness is whether humans have become too hygienic. Not being exposed to bacteria and other pathogens is argued to be dangerous for the human immune system. Extreme sanitation and reduced childhood infections have been linked to increases in allergic disease, an effect referred to as the "Hygiene Hypothesis" (Romagnani, 2004; Yazdanbakhsh et al., 2002; Schaub, 2006; Strachan, 1989). The hygiene hypothesis was first developed in the 1980s after observing British families, where an inverse relationship between family size, and incidence of hay fever and eczema was found (Strachan, 1989). Many factors impact the hygiene hypothesis: family size, birth order and exposure to other children and animals all play a role in the development of children's immune systems (Yazdanbakhsh et al., 2002). Highly sanitized hospitals contribute to infants' (non)exposure to germs, now "traditional" faecal bacteria are acquired later, "probably due to limited environmental circulation. In their absence, skin

bacteria like staphylococci have become the first gut colonizers" (Adlerberth et al., 2006: 96). Delayed development of healthy gut bacteria "may have global effects on the developing infantile immune system" (Adlerberth et al., 2006: 100). Worldwide allergies such as asthma and atopy are increasing, these allergies have been "attributed to lifestyle changes that reduce exposure to bacteria" (Hansel et al., 2013: 861). However, there is little concrete evidence of high standards of home or personal cleanliness contributing to allergies (Weber et al., 2015: 522). The scientific consensus suggests that human bodies, especially new ones, benefit from exposure to bacteria, but has not yet described how immune systems, dirt and hygiene interact in everyday life.

Human genome mapping has emerged as one way to understand more deeply the relationship between humans, hygiene and bacteria. Recent research suggests that over 10,000 species of microbes live in and on people, and that each person carries three times more bacterial genes than human genes (Huttenhower et al., 2012). Although they make up only a small proportion of human body mass, some researchers are already calling for health care to consider the entire human "ecosystem": "these organisms, these bacteria are not passengers. They're metabolically active. As a community, we have to reckon with them much like we have to reckon with the ecosystem in a forest or a body of water" (Tarr in Sweet, 2013). Further research demonstrates the correlation between healthy bacteria populations and a host human's well-being, digestion, immunity and susceptibility to various diseases (Clemente et al., 2012). This evolving literature shows that there is a biological health imperative for being clean but also the imperative of exposure to the right kinds of bacteria at the right time.

Cleanliness as social

Biological imperatives aside, cleanliness is a social phenomenon, with cultural pressures. What is seen as dirt is rather matter out of place: "[t]here is no such thing as absolute dirt: it exists in the eye of the beholder" (Douglas, 1966: 2). Likewise, clean is "a complicated cultural creation and a constant work in progress" (Ashenburg, 2007: 4). A historical review shows that many societies did not wash on a daily basis, without adverse effects (Jack, 2012: 15). Yet cleanliness conventions are heading in an upward trajectory and have increased significantly over the twentieth century (Cowan, 1983: 89). Cleanliness has become a symbol of "modernity, civilization, respectability and a distance from poverty" (Ger and Yenicoglu, 2004: 3). Cleanliness has been used historically as a device to distinguish

those within the civilised elite and distance them from those without (Elias, 2000 (1939): 387). Cleanliness now signifies respectability, rather than any explicit association between washing, health and hygiene (Shove, 2003a: 99; Bushman and Bushman, 1988). Accelerated cleaning practices are perpetuating their own logic, continually meeting, establishing and entrenching increasing standards for smell, hygiene and self-presentation (Strengers, 2009: 8). The cleanliness of homes is becoming an “almost manic preoccupation” (Berner, 1998: 316). Social developments linking cleanliness to progress and respectability have played a big role in increasing cleanliness standards.

Cleanliness was, and is a female domain (Cowan, 1983). Women are and have nearly always been the group tasked with eliminating dirt from, and organising homes (Berner, 1998: 330). Increasing efficiency, instead of liberating women, predestines housewives to an increasing workload as the expectations and standards of cleanliness rise to “compulsive levels” (Diller, 1999: 41). Respectability also plays a role in the extra pressure on women, especially those from the working class who use respectability (and cleanliness) to protect and distance themselves from the judgement of others (Skeggs, 1997). Historically, women spend more time on cleanliness activities and even as late as 2010 Swedish women, amongst the most egalitarian sharers of household work worldwide, were still spending more than three times as much time on laundering, twice as long washing up and a hour and a half more per week on personal hygiene compared to Swedish men (Jack, 2017). Cleanliness is gendered, with the main pressure falling on women, however imperatives to be clean are also becoming stronger for men (Schroeder and Zwick, 2004).

Cleanliness also has clear class connotations. Cleanliness is a sign of high class, while lower classes could use cleanliness as step toward respectability (Bushman and Bushman, 1988: 1230). Cleanliness and dirt are important in establishing, sustaining or shifting frontiers between the savage and the civilized, and the lower and the upper classes (Ger & Yenicioğlu, 2004). Colonial sensibilities towards cleanliness bound the distinction between social classes even extending to ethnicity (Ashenburg, 2007: Ch 6; McClintock, 2013). This may be a historical product from a time when cleanliness infrastructures were limited and those with greater capital had greater access to cleanliness luxuries. Class was thus evident from the clean appearance as proof of access to expensive plumbing and bathing facilities, and distance from manual work, as noted by Veblen:

It goes without saying that no apparel can be considered elegant, or even decent, if it shows the effect of manual labour on the part of the wearer, in the way of soil or wear. The pleasing effect of neat and spotless garments

is chiefly, if not altogether, due to their carrying the suggestion of leisure-exemption from personal contact with industrial processes of any kind (Veblen, 1899: 104)

Elaborate displays of cleanliness became an opportunity to display moral respectability (Shove, 2003a). Acceptance into the middle class demanded cleanliness (Bushman and Bushman, 1988: 1228). The class emphasis on excessive cleanliness across cultures resulted in an escalation of standards, further ingraining connotations between cleanliness and high social class.

Advertising and marketing play a role in shaping everyday cleaning practice. In the USA, for example, advertising and marketing were employed by the government to promote washing amongst the population, while soap manufacturers formed The Cleanliness Institute with the explicit aim of convincing consumers to wash more, and buy more products (Ashenburg, 2007). These stakeholders emphasised associations between cleanliness and status to increase profits arising from selling products that address cleanliness requirements. Cleanliness has “powerful commercial interests” (Shove, 2003a: 94). These powerful interests have actively tried to institutionalise concepts such as BO (body odour), to generate feelings of disgust in relation to bodily fluids and smells (Strengers, 2009: 98). Swedish households were inspired by many of the modern American standards and innovations in domestic technologies (Berner, 2011). Heightened cleaning did not come about without resistance: feminist writers have shown how pressure stemming from new technologies and standards have fallen unequally on women (Cowan, 1983) and argued against the fetishisation of hygiene (Diller, 1999: 387). Despite resistance, advertising and popular culture have become an important element in circulating and catalysing cleanliness conventions.

Cleanliness developments are complicated, and the many variations show that personal cleaning does not merely follow infrastructures, nor contemporary ideas of sanitation and hygiene (Shove, 2003b: 407). One constant is that escalating cleanliness practices consume increasing amounts of water and energy (Gram-Hanssen, 2007). Changing washing habits and thus water and energy consumption for sustainability, requires an understanding of the availability of cleanliness infrastructures, as well as social influences and biological considerations of sanitation and hygiene. The fact that cleanliness conventions have changed through history provide optimism for a shift away from increasing washing, with associated potential for resource savings. Conventions can remain unchanged for long periods of time, but they can also change rapidly (Schatzki, 2016) with far-

reaching social and environmental consequences. Social normality³ is not set in stone; ideas of what is dirty and clean come from knowledge of both cleanliness as a biological and social phenomena, and when knowledge about these change, so do the “rules of hygiene” (Douglas, 1966: 8). To contribute to a sustainable future, social sciences need proficiency in analysing and explaining the origins of change in mundane habits and routines (Shove and Warde, 2002: 246; Warde, 2014: 292). Cleanliness as a socially contingent consumption phenomenon is open to change with pro-environmental promise.

Changing cleanliness conventions is implicated in social processes: shame is one such process. Shame is powerful due to it being socially enacted and reflexively experienced (Skeggs, 1997: 88) and hard to resist as it is part of establishing superiority of others and social hierarchies (Elias, 2000 (1939): 415). Social anxiety stemming from fear of being constructed as inferior can lead to unnecessary performances of cleanliness to demonstrate respectability. Some performances (e.g. daily showering) are seen by performers themselves as unnecessary “structural inconveniences”, yet are unavoidable for fear of (real or imagined) social consequences (Skeggs, 1997: 164-165). Not caring can be emancipating, but for many, knowing codes for conventions can make or break a self-secure mental state (Bourdieu, 1984: 485). Resistance and renegotiation are ways that groups can shift conventions, usually furthering the specific cultural capital of that group. At the same time, conventions can be used to maintain power structures and decrease social mobility for those who lack the time or cultural resources for critique and thus these practitioners get sucked into perpetuating conventions that are not in their own best interests. Those who do have the capacity (time, space, cultural capital) to critique and renegotiate conventions often do it in their own interests – for example marketers – making it even harder for marginalised groups to resist and produce counter conventions. Perpetuating conventions that are socially or environmentally unsustainable then takes precedence in trying to avoid shame or inferiority. Being clean and respectable is more real and urgent than abstract concerns for solidarity with nature and others. Consequently, practitioners are caught up in reproducing cleanliness conventions that increase pressures on already stressed resources. Shame is a strong, if subtle, social mechanism implicated in cleanliness.

Despite more than a decade of research into everyday consumption, limited understandings of how conventions shape resource consuming practices constrain our ability to develop strategies to reduce resource intensity of mundane routines.

³ Social normality- the most common course of action for a given context, continuously reproduced.

What is needed is a research agenda that contributes new knowledge around how conventions play into resource intensive phenomena. This knowledge will prove useful in understanding changes in inconspicuous consumption and more importantly provide insights into intervening to reduce resource intensity of everyday life. To achieve this, a set of concepts is needed to understand the creation, acceptance, circulation and cessation of resource-consuming social phenomena.

Theory

Exploring resource-consuming social phenomena requires a nuanced set of concepts with which to understand the social world and different ways of investigating it. Theory, as generalisable explanations, is useful for framing the problem and understanding how change occurs, but also for informing potential interventions into unsustainable consumption. I want to observe conventions. Three ideas hold promise here: inconspicuous consumption, social practices and conventions. *Inconspicuous consumption*, the resources consumed in carrying out social practices. *Practices*, accepted ways of doing that make up human activity. *Conventions*, generally accepted meanings and standards that draw practices into *bundles*. Theory is useful beyond framing research problems, as it also offers insights into how interventions (especially policy) can best be designed in order to shift practices (e.g. Darnton et al., 2011; Kennedy et al., 2015). The three ideas explored below, suggest potential for intervening into conventions to change wide bundles of social practices and thus reduce inconspicuous consumption.

Inconspicuous consumption

Resources consumed in the course of performing routine social practices are often less visible than their status driven counterparts: Veblen's "conspicuous consumption" (2010 [1925]). Consumption of environmentally significant resources – in particular water and energy – is often rendered invisible through the mundane sequences of everyday life (Shove, 2003b: 395; Gronow and Warde, 2001). People do not consume water and energy in and of themselves, rather these resources are consumed in conventional doings. It is more common to think "I want to have clean clothes" and less common to think "I want to use 150 litres of water, 300 watts of energy and 10 decilitres of chemicals". Yet it is these every day, apparently innocent routines – making a cup of tea, turning on the lights or doing a load of laundry – that form a major share of resource consumption (Strengers and Maller, 2012; Gram-Hanssen, 2008: 1182; Jackson, 2004: 13, 65; Pink, 2011:

117). Routines and habitual action arise to automate decisions and ease arduous deliberation, helping to avoid “the overwhelming task of reflecting on every single act” (Gram-Hanssen, 2008: 1182). Many of these everyday activities arise from embodied experience as “mental and manual procedures” drawn on as needed (Warde, 2014: 292). Routinisation hides many aspects of practice which, in becoming more automated, at the same time becomes less conscious and reflective, although individuals are far from passive “slaves” of routine (Røpke, 2009a: 2491). The familiarity of routines hides resource consumption, “the ordinary, unspectacular dimensions of daily life... have become, to a great extent, routine, habitual, and, therefore, inconspicuous practices of consumption” (Allon and Sofoulis, 2006: 47). The lack of reflexivity in habits and routines poses a barrier for the inclusion of environmental considerations in carrying out daily life (Røpke, 2009a: 2496). Routines, while easing the navigation of everyday practices, conceal consumption inherent in practices.

Cleanliness is a clear example of habitual inconspicuous consumption: “[p]eople wash clothes because they are accustomed to doing so. Routine and a sense of appropriate performance constitutes a further motivation ... such periodicity has a momentum of its own: they simply have to wash” (Shove, 2003a, p. 126). Cleaning is performed as a matter of course, differently by everyone, yet all more or less unthinkingly, rendering the consumption of resources, like water and energy invisible. This is a challenge for sustainability; people do not necessarily have the emotional capacity to constantly and consciously reconsider and recreate sustainable choices at every moment in everyday habits (Darnton et al., 2011). Focussing on the conscious level thus, has limits when trying to change unsustainable consumption as people are not necessarily aware that they are consuming resources (Warde, 2017: 185; Keller et al., 2016). Inconspicuousness is confounding for economists who would incentivise the market using pricing or information to motivate individuals in more sustainable directions. If consumption is inconspicuous, incentivising strategies will require huge investments in firstly making people aware of the consumption involved in various activities, and then appealing to their values in order to alter resource intensive activities. There is perhaps, greater potential in turning conventions away from resource intensity, making less resource intensive practices more normal.

Social practices

In social practice theories, focus is neither on the habits nor their creatures (Shove, 2012), but rather directed to practices, asking why certain forms of habitual behaviour emerge, reproduce and recede. Regularity and order arising from repetition, habit, routine and convention are emphasised (Warde, 2014: 293). Focusing on practices, instead of the individuals who perform them, circumvents impenetrable structure agency debates. Rather than looking for either structure or agency, social practice theories follow practices. Practices are seen as entry points in revealing the possibilities and limitations drawn upon in reproducing structural features of wider social systems, systems which create, and are created by the actors within them (Giddens, 1991: 204). Actors are seen as active participants in creating structures, always reproducing structures in new directions and instigating change (Bourdieu, 1990: 52). In theories of social practice, the majority of everyday life occurs outside discursive consciousness, the capability to carry out everyday life rests on practical know-how shaped by structures – rules and resources – of the social systems determining daily life. This is why social practices are suited to understanding inconspicuous consumption: standards of appropriate conduct and what is seen as necessary are essentially social agreements, but their reproduction consumes resources. People, *qua* social agents, are socialised into acting as if certain possibilities and limitations exist, thus maintaining the existence of these structures (e.g. daily showering, having indoor temperature set at 22°C). In some cases of intervention, implicit rules can be pulled into reflective deliberation, subjected to debate and interpretation, before becoming re-established and finally sediment back into sub-conscious habits (Wilk, 2002: 10). Practices occur as a result of access to material infrastructure (e.g. access to a bathroom) as well as culturally shared understandings (e.g. cleanliness). By the logic of practice, it is cogent to look at what constitutes practices and underlying meanings, rather than actors or structures in seeking to understand stability and change in everyday life.

Social practices arise through bodies, minds, things, knowledge, discourses as well as structure and agency (Reckwitz, 2002: 250). In theories of social practice, a practice depends on all of its elements, and cannot be reduced to any single one. The various elements interact through performance, reproduction and routine to form a practice entity. In observing practice, a common empirical deconstruction is materials (physical context, nature and objects); skills (competence, know-how and technique); and meaning (symbols and images) (Shove et al., 2012). Showering, for example, involves *materials* such as water, plumbing and soaps; *skills* like turning

on the hot water, having a towel ready, knowing to use shampoo first, and then conditioner; and *meanings* such as presentation for work, or refreshment after exercise. By focusing on these three elements (materials, skills and meanings) researchers can empirically access practices and start to understand why practices form, and what they achieve for their practitioners.

Theoretically practices can be understood on two different levels: practice-as-entity and practice-as-performance. Practice (*praxis*, singular, entity) describes the whole of human action, whereas practices (*praktik*, plural, performance) are routinized actions consisting of several elements (Reckwitz, 2002: 249). This follows from structuration where *performances* – everyday activities of social actors – draw upon, and reproduce *entities* – structural features of wider social systems (Giddens, 1991). A practice entity is then the durable, embodied, materially mediated, shared meaning, while a practice performance happens when people *qua* carriers of practice, populate the entity with performances (Schatzki, 1996: 89-90). An entity is observable through the performances that reproduce and maintain the entity (Shove et al., 2012). Showering, for example, is a recognizable phenomenon, but only through performances – by people taking showers – does the entity stay in place (Jensen, 2014: 24). While one performance may not have much power over a practice entity's trajectory, these snowflakes cause avalanches. One person having a shower is not responsible for vast water consumption, yet the entity of showering challenges sustainable water provision. A practice theoretical approach is useful for understanding how individual taken-for-granted actions in everyday life are organised by, and representative of, the recursive, co-constitution of resource intensive conventions.

Conventions and bundles

One problem with theories of practice is identifying a practice and defining its boundaries with regard to other human activities. Looking at practice performances (e.g. showering, bathing, doing laundry), can be done quite narrowly and exclude other competing or complementing practices from analyses. Looking explicitly at bundles of practice entities (e.g. showering, laundry and tidying), may reveal broader patterns and common meanings binding practices together. Generic shared understandings or conventions (e.g. cleanliness and potential co-meanings e.g. respectability, freshness) may give insights into why specific practice entities bundle together and change together (see figure 1 for an illustration of practice entities bundling around a future oriented convention). I

highlight meanings here as I see them interacting with conventions, both in informing their specific practice entity, but also in the reproduction of conventions leading to change.

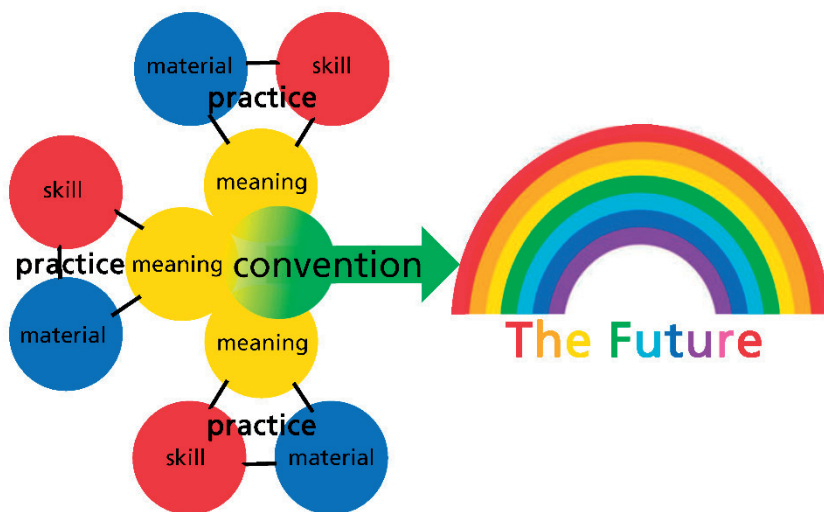


Figure 1 practices bundling around a future oriented convention

Many discussions of social practice theories point to the existence of conventions. Reckwitz (2002: 250) appeals to conventionalised activities of understanding, knowing how, and desiring as being socially shared through practices. Giddens (1984: 26) also appeals to “knowledge of social conventions” as a necessary presumption in the perpetuation of social life. While Schatzki (2002: 4) reasons that conventions help coordinate practice performances, contributing to a more harmonious entity. The idea that intangible accepted ways of doing play a significant role in practices is generally recognised, but the literature lacks satisfying descriptions or discussions on conventions and their role in bundling practice entities together.

What is the difference, then, between conventions and norms? They overlap, but I see them operating on different levels. Norms are tied to individual performances telling “us what we ought to do” (Therborn, 2002: 863), while conventions interact with practice entities; as “paradigmatic social practices” (Southwood and Eriksson,

2011: 212). In this dissertation I treat norms as accepted ways of doing for individual performances and conventions as accepted ways of doing for practice entities, both sharing the same meaning. Both norms and conventions can co-exist with different parallel norms and conventions in differing relationships: reinforcing each other, competing with each other for dominance, or other relationships (see figure 2 for an illustration of conventions competing to take a bundle toward different futures). Conventions are negotiated within practice; through the performance of practice, meanings feed back into the convention and can take the convention in new directions. It is the dynamic negotiation of convention and meaning in the practice performance that reproduces meaning and shifts conventions and practice entities. The implication here is that conventions and paradigms are reproduced and potentially overturned by resistance, in conversations and in the practical activities of daily life. Meanings, as negotiated in practice, have potential in shifting paradigms and drawing bundles of practice entities towards (hopefully) sustainable futures.

My hunch is that by looking at how meaning is negotiated in everyday life, one can see what is perceived as conventional, which conventions are reproduced, and which are not. The reproduction of meaning with reference to convention is, I suggest, an optimal observation point also providing insights into how conventions gain traction. When one thinks about the meanings behind what one does (ideas of freshness, etc), vague ideas compete with each other in deciding what to do; these ideas become clearer through the performance and potential justification (the green, orange and purple blobs in figure 2). For example, when having a shower (on a particularly lucid day) conventions of cleanliness, self-presentation, health (bracing cold water), saving water and also laziness (washing hair takes effort) all compete in my mind and also my body. These vague conventions become clearer depending on how I shower, how much time I use, if the water is hot or cold, whether or not I reach for the shampoo. Which convention I act out will strengthen the meaning (the green, orange and/or purple blob in figure 2 will get bigger or smaller). Some meanings may complement each other, e.g. saving water and healthy cold showers, others may compete e.g. laziness and self-presentation. To interrogate this hunch that the negotiation of conventions in everyday life sets out their course and that thinking about conventions is useful in sustainability transitions, I look at the meaning of cleanliness. I ask how cleanliness becomes tangible, what are its co-meanings, where it can be observed in the social world, how ideas are shared, what produces the sharedness, and how it might bundle together practices of showering, laundering and other activities entailing inconspicuous consumption. I am especially interested in the future orientation of conventions and ways that bundles of practices change with their convention. This

dissertation is an experiment to see the kind of discussion that arises when meaning and convention are taken as the central unit of investigation.



Figure 2 conventions taking bundles toward different futures

There are many areas parallel to cleanliness where conventions are problematic for sustainability. Trying to see conventions and shift them in more sustainable directions could shift a whole bundle of unsustainable practices. To this end, observing reproductions is necessary for empirical analyses of practice entities. Bundles, “loose-knit patterns based on the co-location and co-existence of practices” (Shove et al., 2012: 81) are a developing area of research. Previously sustainable transitions research has focussed on individual unsustainable practices and tendencies for practices to bundle together have been underexplored. Bundles are important as practices not only bundle together but also change together. Conventions may be a key element in changing bundles.

Conventions help to see beyond the boundaries of single practices, tracing overlaps, extensions and shared meanings. I argue that meanings have significant influence in how everyday life plays out and can override other elements of practice such as skills of materiality. If a specific material is no longer available, artists start using another material or fabricate something similar. Artists do not stop practicing due to lack of material elements, they continue making art (Becker, 2008 [1982]: xiii). If a convention governs a practice in a certain direction, technical-material limits can be overcome. However, even as they anchor practice, meanings also rely on practices for their reproduction, and thus change in surprising and spontaneous ways. In constituting the social context, meaning also lays the foundation for reproduction of contextual social patterns, for example “the division of labour, gender relations and unequal access to resources, as well as political, economic, legal and cultural institutions” (Røpke, 2009b: 2493). If meanings are established they are likely to reproduce themselves; it takes an intervention from e.g. a sustainability perspective to renegotiate environmental relations and shift conventions in new directions. Meaning coordinates social practices, both making change possible but also limiting the forms change can take (Becker, 2008 [1982]: 371). Changing conventions is a process of constant contestation, navigation and integration, and thus outcomes of any intervention are contingent on their reception and impossible to predict:

Small changes always occur within bundles, what components change shifts around, whether big changes arise from and include smaller ones and whether big changes occur depends on how the world reacts to small ones and, as a result, bundles and constellations exhibit uneven, shifting development of a highly contingent and unpredictable sort. (Schatzki, 2014: 31)

Meaning can then emerge through reproductions of existing conventions, reliant on moments of deliberation from niche ideas and interventions that interact with accepted ways of doing: questioning, critiquing and suggesting new social patterns. Renegotiating meaning and thus changing conventions has the potential to shift entire bundles of practice in new, sustainable directions.

Methodology

So what sort of questions do we need to ask and what sort of data do we need to collect in order to see conventions? A methodological problem is that social phenomena's very visibility makes them invisible; "we will not ordinarily ask another person why he or she engages in an activity which is conventional for the group or culture of which that individual is a member" (Giddens, 1984: 6). In this research I want to know just that, why do we do these conventional activities. To this end I engage with three research questions, namely: How have cleanliness material and social infrastructures evolved and how does this reflect cleanliness conventions?; How is cleanliness represented in media and what are the potential social and environmental implications? and; How are cleanliness conventions negotiated in everyday life? As a first step to answering them I map cleanliness conventions in Sweden. Secondly, to interrogate one of the potential processes through which cleanliness conventions circulate, I look at how cleanliness is represented in the media. Finally, I talk to people in focus groups about media representations to gain insights into how the sharedness of conventions comes about and how people make sense of conventions in everyday life. This data, anchored around the phenomena of cleanliness conventions promises to provide fertile material from which to discuss how and why conventions operate with the intention to better inform interventions into (un)sustainable consumption.

Gathering data at the entity level is important in understanding the systems that structure practice performances – performances that entail inconspicuous consumption. The fullness of conventions may be more easily observed from a distance, but this could come at the cost of qualitative understanding and may miss propulsive meanings behind aggregated social practices. The challenge then, is to gather data on structuring entities: "arguing that such a structure is there is one thing, representing it as part of empirical research is another" (Nicolini, 2012: 181). To borrow an analogy from physics; the convention is the wave that changes over time and space, and the individual is the particle being able to relatively account for their own practices. Looking at the person, the performance is observable, but less can be known about the ways that the performances converge and the entity reproduces. Even if we do ask someone to account for their practices, it is nearly

impossible to access the social structures behind ways of doing as “people can discursively account for their actions, often framing them in terms of conscious purposes and intentions” (Shove et al., 2012: 3). Yes, people *can* talk about their practices in surprisingly reflexive ways (Hitchings, 2012), especially in groups (Browne, 2016), but these accounts are so deeply embedded in their conventions that a researcher cannot help but to over-attribute agency to individuals. This comes with the risk of missing structures that shape individual courses of action. Data at the entity-level is also needed to triangulate performance observations to get closer to understanding conventions. To get beyond individualistic accounts, I use multiple data sets to consider physical and social infrastructures that form conventions and how they are negotiated in everyday life.

Data collection strategy

I chose case method in this dissertation to acknowledge the above methodological tensions, to try and collect data at different levels and also for its potential in understanding complex issues (Flyvbjerg, 2006). I chose Sweden as I was located here for the duration of the study and for its promise as a novel case in researching everyday resource consumption. Sweden is one of the few countries in the world with an abundance of potable water, as well as a relatively secure energy supply. Sweden is a large country so I focused my attention on the south, especially the cities of Malmö and Lund. To get at both performance and entity I used both statistical and interpretive data to examine different impacts that material and social structures have on practices. The four different data sets were: first, time use surveys and national figures on water and energy consumption; second, individual interviews; third, cleanliness related content from popular magazines; and fourth, focus groups. Using a variety of data sources to explore the cases can bring out a more complete understanding and reduce potential research design flaws (Creswell, 2009; Flyvbjerg, 2006). I lived and worked in Sweden and studied the Swedish language and culture for the duration of the study. This ethnographic element is used in the understanding, interpretation and critical analysis of local practices.

Secondary data	Magazines	Interviews	Focus groups
Statistiska centralbyrån, Energimyndigheten, VattenSyd, Statistiska centralbyrån	Allers, Femina, Hemmets Journalen, Må Bra, Sköna hem	15	14 (57 participants)

Table 1 data overview

Gathering data

Gathering the data was mostly straightforward. Statistics on many relevant aspects of everyday life are collected by various government agencies, compiled and made available on the Swedish central bureau of statistics (*Statistiska centralbyrån*). Printed material is collected and stored by Lund University library and once I identified my sample of magazines I requested and was granted access to the relevant magazines and a scanner. Interviews and focus group participants were recruited through various networks – work, exercise and social circles were all utilised. This data collecting strategy resulted in high volumes of data that I kept track of in an excel spreadsheet I called “assembly” and I also used NVivo qualitative analysis software to store, transcribe and code the interviews and magazines.

Surveying the field

I gathered statistical information from surveys and reports published by government agencies and supplemented with scientific articles published on household consumption patterns. The Swedish central bureau of statistics, has released three time-use reports⁴, once a decade since 1990. These three time-use reports have a measurement of personal hygiene and dressing (*personlig hygien, av- & påklädning*), washing, ironing (*tvätt, strykning*) and washing up, clearing the table (*diskning, avdukning*). The time-use data is in published form (not the micro data), but one can access time spent on various activities. Energy and water use,

⁴ I tid och otid, En undersökning om kvinnors och mäns tidsanvändning 1990/91 (In time and untime, research on women, and men’s time use 1990/91); Tid för vardagsliv, Kvinnors och mäns tidsanvändning 2000/01 (Time for everyday life, women’s and men’s time use 2000/01); and Nu för tiden: En undersökning om svenska folkets tidsanvändning år 2010/11 (Nowadays: research on Swedish people’s time use 2010/11)

along with device ownership and efficiency data was collected from The Swedish Energy Agency, *Energimyndigheten*, a Swedish water agency Southern Water, *Vatten Syd*, as well as scientific reports and publications. Devices in homes was published in a scientific article, efficiency of devices and for the import volumes of cleaning chemicals I corresponded with the relevant agencies. I combined the data using spread-sheeting software to provide an aggregated picture of how these different cleaning indicators change over time.

Interviews

I also conducted interviews as part of my initial scoping, to get at the meaning element of cleanliness practices. This broad topic was explored using in-depth interviews (Minichiello et al., 2008) with fifteen Swedes from Malmö and Lund during 2015 and 2016. Interviewees were 9:6 female: male, aged from 23 to 65 (median 38) and grew up in Sweden. Interviewees are referred to using pseudonyms to protect their privacy. The purpose of the open-ended interviews was to flesh out some of the more general patterns from the time-use data with narratives and to obtain more nuanced accounts of the way social structures are experienced in everyday life as: “[g]ood narratives typically approach the complexities and contradictions of real life” (Flyvbjerg, 2006: 237). While cleanliness practices are embodied activities, insights into practical activity can be gleaned verbally (Martens, 2012; Hitchings, 2012). I found the interviews to be useful in not only finding out about the doings, but also participants’ subjective understandings of their doings. Participants were recruited with a snowballing technique and I tried to gain a variety of opinions that represented everyday people at different life stages. Amongst my sample were a primary school teacher, new parents, a recent retiree, university students, a store manager, a yoga teacher and a nurse. More interviews than fifteen may have added greater weight to my emerging findings, however there are diminishing returns so any line between enriching the data set and squandering time might be considered “inevitably arbitrary” (Mason, 2010). My aim with the interviews was to fill out the broader quantitative data with richer narratives. I listened to interview recordings several times and produced summarised transcripts in NVivo so that I could go back to specific places and re-listen as required. I then identified emerging themes both through the transcription process and also *in vivo*. I did this firstly by creating codes for areas of interest and then created further codes for comments that reoccurred during the coding process. Through both predefined and *in vivo* coding, I actively

sought out conventions, while also making space for them to surface spontaneously in the data.

To reveal conventions, I was interested in how closely harmonised idealised practices are. This of course is relative, cleanliness practices look similar or different depending on one's own background, however I was interested in what was similar or different between respondents. During the interviewing process, I was trying to gauge how respondents thought about different ways of doing, both listening and challenging interviewee's notions of what they perceive as normal using simple questions like "Is it always?" or "Do you really think so?" In my sample, I did observe some convergence, but there was also quite some variety in what was seen as acceptable. This points to simultaneity of narratives, performers can choose from various socially appropriate storylines in giving accounts of their cleanliness. A further interest was ways that respondents saw infrastructures, ways that they accede to or subverted physical things and if they could be self-reflexive and critical of both material and social cleanliness structures. As sustainability is a normative concept eliciting politically correct answers and potentially influencing other answers, I saved my only question on water, energy and chemical use until last. I tried to frame this question in a way that would not prompt respondents to give "correct" answers in an attempt to delve below the politically correct attitudes and professed courses of action that may have slim realisation in reality (Lindén, 2009: 3; Klepp, 2003). I was also interested in moments of change, either through asking participants to reflect on their experience of intergenerational differences, or describing points in their life where cleanliness norms had been renegotiated. The interviews provide interesting insight into how people experience cleanliness conventions in their lives.

Magazines

Once I understood a little more about how cleanliness had developed in Sweden, I became curious about the aggregated phenomenon of cleanliness so I turned to popular magazines. Magazines provide interesting insights into cultural trends (Warde, 1993: 150), making an aggregated macro-representation of an idealised individual practice performance tangible. Situated inside the social world, magazine makers are entangled within culture and even as they try and "steer" consumer behaviour, they cannot help but reflect modes of appropriate conduct back into culture, thus leaving evidence of what practices (albeit idealised ones) look like. In theories of social practice, people do things in the same sorts of ways. If media circulates accepted ways of doing, it may also be one intermediary that

expresses, and thereby produces wider perceptions of criteria and competence that most people know. Media contains further promise as performers absorb cultural conventions as the basis for individual reproduction in everyday life; part of the absorption must occur through exposure to accepted ways of doing. Thus this data set promises a still-frame of the entanglement of entity and performance.

Five magazines were selected for their availability since the 1980s, wide circulation and general readership. I read: *Allers* (Allers), *Femina* (Femina), *Hemmets Journal* (The Home Journal), *Må bra* (Feel Good) and *Sköna hem* (Beautiful Homes). These magazines are read by mostly women, Allers and Hemmets Journal perhaps by older women and have a lower cover price, *Må Bra* and *Femina* have a slightly higher cover price and are read by younger women and *Sköna hem* is read by a mix of those interested in decorating (see paper 2 for a full discussion). I took four issues from each publication (January, April, July, October) from 1985, 1990, 1995, 2000, 2005 and 2015. In the end, I read 140 magazines cover to cover and scanned around 1800 pages of cleanliness content and advertising. The line between cleanliness and beauty was sometimes hard to draw, especially as the two came closer together in the more recent issues. Shampoo and conditioner were included as part of cleanliness, hair dye was not. Every time a decision of this sort was made, it was noted and used for future categorisation, consistency was my key concern. While it was interesting to count the pages and compare quantities of different products featured, my main focus was qualitative analysis. Using NVivo also allowed me to track the volume of cleanliness representations, and also how cleanliness is represented over the study period.

Focus groups

After mapping representations of cleanliness, I became curious about how everyday people read media. I thus conducted focus group discussion as a final step in investigating cleanliness conventions. The aim with these was to draw forth everyday people's view of how magazines shape cleanliness ideals and practices, how they read magazines and how much they see media as influencing their practices. Focus groups were chosen for their potential in revealing processes of meaning making and consensus formation, as well as giving insight into commonly agreed upon conventions (Barbour, 2007). Focus groups also provide insights into social acceptability; participants perform for each other, showing that they understand the implicit (cleanliness) rules, which helps an attentive observer see how conventions are negotiated.

People participating in the focus groups varied considerably. A total of 57 people discussed together in 12 groups and two pilots (14 discussions). Participants were 31:26 female: male, aged from 21 to 71 (median 34) and came from all over the world. Just under half of participants identified as Swedish with the others from many different countries including Britain, China, Colombia, Germany, Greece, Japan, North America, Turkey and more. I aimed for stratified participation from different life stages, although participants were all very well educated (many had a master degree or higher) and for the most had white collar jobs such as lawyers, journalist or teachers. This mix provided both a Swedish perspective on cleanliness representations in the media, but also an outsider questioning which revealed and opened many implicit norms up for debate.

In the focus groups participants discussed five images I had chosen to reflect themes I found in the magazines (see paper 3 for the images). Topics included decoding what the creators intended, how they compared to everyday life and if there was potential influence stemming from this type of message. The focus groups resulted in more than 20 hours of reflexive discussion on cleanliness representations in media, influence and everyday life. Even if focus groups are not an accurate proxy for wider everyday life, they do compare favourably to opinion polls, surveys or one-on-one interviews in providing a glimpse into meaning making (Macnaghten et al., 2015: 14). Using focus groups was an explicit attempt to understand implicit cleanliness rules, how representations of cleanliness are perceived and how people talk about representations shaping their everyday mundane practices (or not). Furthermore, focus groups were an experiment in collecting supra-individual data and thus coming at conventions further away from performances.

Limitations

Focusing on conventions is a novel approach to gathering data on (un)sustainable consumption, where interviews and surveys tend to dominate. My methods all aimed to get at aggregated meanings and how people make sense of conventions in everyday life. My combination of empirical material (published data, interviews, magazines and focus groups) approaches my research question on how cleanliness conventions operate from different angles. The methodological pluralism was anchored by my empirical focus on cleanliness conventions. Disadvantages of this approach stem from the data sets not speaking directly to each other and the general quantities: I ended up with nearly 2000 pages of magazine scans, 20 hours

of group discussions, as well as long reports on domestic water and energy consumption and time use surveys. These methods, explicitly focussing on aggregated meanings perhaps miss the practices that are actually responsible for inconspicuous consumption. Observations may have been a final method to get at how conventions shape what people do, to understand conventions' role in practices. Advantages of my methodological approach arise from illuminating cleanliness conventions from different angles, with sometimes surprising insights, ultimately leading to greater creativity and deeper understandings.

The data used in this dissertation has three limitations: the time frame, the background of participants and the lack of a comparison case. Firstly, the data set may have been improved by increasing the time frame to also include changes before the entire population had access to bathrooms. Time use data has, however, only been collected since the 1980s, and energy and water consumption statistics are similarly limited. Time use and domestic water and energy consumption paint a rather stable picture of cleanliness conventions. That there were no major changes in cleanliness is also reflected in the magazines during this period, suggesting that cleanliness conventions have been fairly stable in Sweden for the past thirty years. A second limitation, the fact that participants in my focus group study had higher than average education, also means that results may be less comparable with other studies, even if this group was international and can be argued to reveal international perceptions. The middle class arguably has an increased capacity to critique and resist, and perhaps even grumble (Warde, 2017: 166). More studies with a diverse group of participants would be one way to know more definitely if there is a dimension of social stratification in sustainable practices. A final limitation is the lack of a well analysed comparison case, in the early stages of data collection I blithely also collected data from Australia, as a culturally similar society with the distinct difference of water shortage. Doing a full comparison would have revealed more cases of intervention and I would have had more information to draw on in investigating how different interventions (such as materiality, media and public discourse) can influence conventions. My findings should be considered in light of these limitations.

Transferability

Observations about a particular phenomenon in one socio-historical context may (and often do) not have explanatory power in another. Rather than deliver universally valid social facts, my dissertation seeks to inspire thinking and deepen

explorations about the potential of conventions in sustainability transitions. Thinking about conventions may be useful in understanding current realities of parallel resource-consuming practices and considering contextually relevant interventions toward sustainable social and natural environments. Contexts provide orientation to action, so understanding the Swedish context in some detail will help readers take away insights significant for other contexts. In this section I describe relevant social and material nuances in Sweden, so that readers can transfer relevant insights to other contexts and situations which may also benefit from considering conventions.

Sweden as a standalone case has peculiarities in housing and energy policies and infrastructures, that may limit findings to this specific context. Swedish capital cities started building sewerage systems already in the 1870s and 100 years later nearly 100% of urban and 80% of rural population had bathrooms (Östberg, 2017). This change was accelerated by the *miljonprogrammet* (the one million program) which aimed to address a severe housing shortage by building one million homes between 1965 and 1975. This program called for high housing standards contributing to the modernisation of bathrooms and toilets (Östberg, 2017). The one million project also contributed to Sweden's district heating systems increase in the 60s and 70s (Di Lucia and Ericsson, 2014: 13). In 2014 district heating provided 57% of residential heating and hot tap water, shifting the dominance of oil in the 1970s to dominance of biomass (Di Lucia and Ericsson, 2014: 10). Energy security was a purposeful state objective after the oil shock of 1973, Sweden adopted its first energy policy in 1975 to conserve energy and develop secure alternatives to unreliable sources (Di Lucia and Ericsson, 2014: 13). Energy policy emphasised domestic conservation and insulation in synergy with the one million program's high housing standards. Materially, most Swedish households have had access to plumbing, warm water and sewerage as well as having been subjected to energy conservation policies since the 1970s.

Access to cleanliness infrastructures means that Swedish households have the ability to consume water, energy and cleaning chemicals. About 38% of the total national energy consumption comes from households and services, separate from industry and transport (Energimyndigheten, 2014), while energy for washing and drying laundry currently comprises about 20% of this (Lindén, 2009). Nearly 70% of domestic water consumption is through washing-up, laundry and personal hygiene (Svenskt Vatten, 2009), while over 100,000 tons of cleaning agents are used in Sweden annually (Diurlin, 2015). It is common to share a communal laundry where residents in an apartment block book a time to do their laundry. These are usually in the basement and consist of semi-industrial washing machines, driers,

drying cupboards, presses and other facilities provided by the building owner (Mont and Plepys, 2007). Since the 1950s access to devices has increased from one device (e.g. a washing machine) in 1950 to nearly three in 2000 (e.g. a washing machine, a dishwasher and a tumble dryer) (Lindén, 2009). Shared laundromats are slowly moving into individual dwellings: in 2005, 63% of households had their own washing machine (Carlsson-Kanyama et al., 2005: 244) while 57% of households had a dishwasher (ibid: 254). Access to domestic cleanliness infrastructures is nearly universal and becoming more individualised.

Sweden also has cultural peculiarities contributing to its cleanliness conventions. Hygiene had been a priority since the turn of the century where medical doctors “advocated improved building standards and increased personal and domestic cleanliness” to address Stockholm’s high mortality rate (Berner, 1998: 325). Swedish women were tasked with keeping homes and bodies clean: “hygiene and comfort, rational housekeeping and technical competence” were key housekeeping concerns (ibid: 346). The thrust towards greater cleanliness was backed not only by politics, but also by women’s organisations, as part of the creation of the Swedish welfare state (Berner, 1998). The new housing standards afforded by the one million project, combined with new mass-made technologies and products meant higher standards of cleanliness became available to everyone after the 1970s – a sign of equalising social conditions (Berner, 2002: 175). Emphasis on cleanliness changed somewhat when women entered the workforce in greater numbers after the 1960s, leading to an increased emphasis on not only efficiency but also gender equality in sharing household tasks. Swedish children are also socialised into showering through compulsory (at some schools) after sports showers (Näsman, 2017). Cleanliness habits and housekeeping is furthermore informed by the Swedish concepts of *Jantelagen* (tall poppy syndrome) and *Lagom* (just right) which form a part of the collective consciousness where appropriate, moderate and non-excessive behaviour is favoured. Cleanliness conventions in Sweden are embedded in the high standard of living and class equality project of the Swedish welfare state and not necessarily comparable with significantly different cultures. Understanding these Swedish nuances may help to contextualise my findings for readers to transfer relevant findings to other contexts.

Narrow and contextual as my data may be, I tried to arrange my data collection in a way that can be replicated to achieve similar results, especially if the context idiosyncrasies are accounted for. In analysing I have been interested in what the data reveals about conventions and if it illuminates how they are negotiated and appealed to in justifying everyday cleaning practices. I looked for answers that the

different data sets offered up to see how answers corroborate or contradict each other. The aim of the following sections is to present and refract these different data sets through each other and start to unpick conventions underlying cleanliness practices, possibly overlapping with other practices and other conventions. By illuminating cleanliness conventions from different angles – statistics, magazines and focus groups – I hope to understand conventions and offer transferrable insights on their role in mundane consumption practices.

Analysing the data

Consulting literature, data gathering, analysis and writing up results happened continuously, my research process was not by any means linear. The ideas and data had a cyclical relationship, moving from descriptive to more deeply analytical. During this circular process I wrote papers to help explore my new data and to test my ideas and hypotheses. That my dissertation was written as a compilation, means that I was constantly interrogating the data and gathering more data to speak to the continuously emerging questions that this project elicited. This also means that my questions changed along with the study. I set out to find out about cleanliness conventions and the data helped to ask more niche questions such as: how does media represent conventions; how is media read; how are discourses negotiated in constructing everyday life; and what implications does this have for society and nature? My analysis is always completing, and the conclusions I come to in this dissertation are processual rather than final.

To store and organise my data I used NVivo (data analysis software). NVivo was useful for keeping my data in one place, providing a system for coding and exploring emerging themes and made it easy to go back and find answers to more specific questions like “how many times did focus group participants talk about the environment?” or “were more women featured in the magazine content I tagged as shameful?”. NVivo for Mac cannot currently tag images, so I coded the magazines images on a PC and then transferred the information back to the Mac. This process was a little awkward, but the coding was saved and I could run analyses on NVivo for Mac. I am dogged by the feeling that NVivo is more powerful and could perform deep analyses of the data, but am satisfied with the storage and organisation functions it afforded me.

Findings

The data provided unique insights into my research questions, from a progressively analytical perspective. During the research process, I wrote papers based on my data's emerging insights. In my first paper, I mapped cleanliness conventions in Sweden using existing secondary data and interviews. In my second paper, I discussed how cleanliness is represented in Swedish magazines as well as possible social and environmental implications. In the third paper, I explored the role representations play in conventions, using focus groups to provide an in-depth view of how people negotiate discourses in everyday life. In this findings-section I summarise these three papers and their potential contributions for my research questions. The findings then set the field for my discussion where I consider how far these findings go in showing how the material and social infrastructures of cleanliness have evolved, how this reflects cleanliness conventions, how media represents cleanliness, and ways that conventions are made sense of in everyday life.

Paper 1 summary

Cleanliness and consumption: exploring material and social structuring of domestic cleaning practices

Paper 1 takes up my first research question: How have the material and social infrastructures of cleanliness evolved, and how does this reflect cleanliness conventions? To shed light on changing cleanliness, I map changes in domestic water and energy use, washing device ownership and time spent on cleanliness to describe how cleanliness patterns are changing in Sweden. The paper builds on two types of data in mapping the field. First, I charted material infrastructures in Sweden, including device ownership, as well as water, energy and time consumed related to cleanliness. Second, to get at social structuring, I analysed 15 qualitative interviews (9 female, 6 male, aged from 23 to 65) in order to find out how people talk about cleanliness and what meaning cleanliness has in everyday life.

The analysis shows that in Sweden, domestic water consumption decreased slightly and energy consumption increased slightly since the 1980s. Ownership of cleaning devices, such as washing machines, has tripled while devices themselves have become more efficient. Time spent washing up and doing laundry decreased since the 1980s, mostly due to women spending 30% less time on these activities (from 48 to 34 minutes/day) and men maintaining around 15 minutes a day on these activities combined. Personal hygiene, while still weighted towards women, was a little more equal – men spent 47 (no change since 1980) and women 59 (+5 min compared to 1980) minutes per day showering, brushing teeth, getting dressed etc.

Accelerated cleaning was expected from the cleanliness literature, but paper 1 suggests that over the last 30 years similar amounts of water and energy are used domestically, and that people spend less time on cleanliness. This may be due to increasing mechanisation of cleanliness providing higher cleanliness standards with less resource and time input. The slightness of changes could also be explained by the study period – the last 30 years – as trends toward increasing cleanliness may have already happened over a period of more than 200 years in tandem with industrialisation and thus may have already stabilised by the 1980s, the starting point of this paper.

From the interviews, it became apparent that people perceive that we are washing more as a society but also that people want to do what is seen as conventional and feel uncomfortable breaking norms. Inertia and change can be quite dependant on perceived cleanliness conventions. Even if people can be reflexive and even critical of increasing cleanliness, there is deference to these abstract cleanliness conventions.

My analysis suggests that people, while appealing to abstract cleanliness conventions, aren't stuck to their habits. Social trends, rather, shape everyday cleaning practice, habits change with life stage. Older participants who did not wash so much earlier in life and think that we wash "rather too much" nowadays, wash more anyway, up to twice a day. Even if habits are low washing and opinions are against washing so much, participants in this study felt that washing routines have increased. This may have to do with increasing convenience.

Cleanliness has become much more convenient according to the interviews. Interviewees maintain it is easy to fit laundry and other cleaning activities, in-between and around other activities. Increasing efficiencies of time, energy and water make it easier to wash more. *"It's so easy... Is this clean or not? Well I just*

wash it anyway and then I'm sure" (Sam⁵, Lecturer, 32). Many of the interviewees, who were critical of over-washing, also reported cleaning quite frequently anyway.

A significant finding here is that while even if you have particular values, people try to do what they perceive as normal to avoid judgement and shame. It is better to do too much and be respectable, than to do too little and be judged as inadequate. I suggest that there may be a link here to class; people with high cultural capital have the liberty to be more reflexive and often feel less persecuted and therefore more free to break social norms and not wash. The majority of the people I interviewed, however, felt that they went along with what they saw as conventional.

Paper 1 is summed up succinctly in these words from interviewee Karin, 67, retired:

I shower every day, brush my teeth two times a day. If I go to the gym I could even shower twice a day. Laundry I do perhaps twice a week. When the basket gets full... With our new machines, it doesn't take much time. You don't have to bother with it, you just put it in and put on the machine and you can go out and when you get back it's time to hang it up... I think we have a norm, especially in Sweden we want to be normal and do as everyone else. It would be a shame if your friends or family thought you didn't take care of yourself or home. It's hard for us to tell, even a close friend, that they're smelling of sweat. We don't say it.

Paper 1 closes by arguing that while both material and social structures of cleanliness are important, what is perceived as normal has a significant say in what people do and the resources consumed in the course of everyday life, more so than professed values. Convenience and access to material infrastructures provide the foundation for cleanliness practices. Implications are that conventions, and understanding where conventions come from, will be a determining factor in steering society towards sustainable futures. The congruence of meanings shared in the study shows a cleanliness culture with its own inertia pulling groups of people along in trends towards heightened cleanliness, encapsulating both generation and gender. The ideas about "right" or "expected" ways of doing are more important than rationality or physical limitations⁶. This conclusion points to social structuring of cleanliness practices as critical, and emphasises the importance of understanding how conventions operate.

⁵ All names are pseudonyms

⁶ Although all of my participants had access to washing machines, either in their own homes or shared in the basement of their apartment block

Paper 2 summary

Representations – A critical look at media’s role in cleanliness conventions and inconspicuous consumption

Paper 2 follows the loose ends from paper 1 where some participants wondered where change comes from, asking if media plays a role in cleanliness conventions.

I think because on TV, in commercials in everything you see, just, not even clean but sterile homes. Think of a commercial for washing liquid, it's just completely sterile and on TV everything is really clean all the time and you feel that you need to keep it like that all the time to maintain a successful aura or whatever. (Markus, 23, student)

To follow this question up, and explore my second research question: How is cleanliness represented in media, what are the potential social and environmental implications? I read and analysed five widely distributed Swedish magazines since the 1980s to see how cleanliness is represented over the time frame. Methodologically, paper 2 argues that media reflects aggregated modes of appropriate conduct, so media shows ideas images that are considered normal in their context.

Quantity and theme analysis did not reveal any strong changes over the 30 years. The percentage of space dedicated to cleanliness remained similar and the cleanliness discourses were also similar in the 90s, 00s and 10s. Idealisation, shame and medicalisation of bodily (mis)functions were the main discourses represented in the magazines. These narratives appear to be the cleanliness industry’s strategy for perpetuating higher cleanliness conventions and translating them into consumer goods.

Idealisation, an expected cleanliness representation, included images of running on the beach, products perched in exotic forests, impeccable skin, white interiors, etc. This narrative showed cleanliness in aspirational extremes, imbuing hyper-cleanliness with luxury and the good life.

Shame was one of the strongest most frequent negative narratives emerging from this data. People without perfect teeth should be ashamed to smile, one needs the right deodorising panty-liners to stand near strangers in public, sweaty arm-pits are a social no-no etc. This narrative seemed aimed at coercing volatile bodies and homes into sanitized, idealised versions of themselves, often with the help of offered products. One should strive for hyper cleanliness and be ashamed if falling short.

Medicalisation, while less prominent than idealisation or shame, was also present during the three decades. This representation frames bodies deviating from the social cultural norms (with e.g. dandruff, bad-breath etc.) as a health problem causing health risks or physical or emotional suffering. Words like Hyperhidros (sweating), Eczema or Acne (skin conditions) or hypertrikos (facial hair) and images including experts in lab coats and packaging reminiscent of prescription medicine are used in this narrative. By representing cleanliness deviations as medical or psychological problems, marketers frame their products as necessary, thereby attempting to legitimise them.

That shame is a frequently used communication strategy suggests that content-makers perceive shame as a strong social mechanism useful in pushing their agenda of increasing cleanliness. Paper 2 uses critical theory to discuss the role of shame in social relations, arguing that media representations of shame can play into civilising processes, formation of habitus and social groups, and are experienced unevenly. Those with the least recourse to resistance are most struck by the representations, a development that I argue may amplify social stratification. The threat of shame could be a motivation for doing cleaning, and for socially vulnerable groups, elevated cleanliness can be a strategy to avoid imagined or real further exclusion. Implications are that even if it is not in the best interest of everyday people to spend precious time, water, energy and chemicals on cleaning, we do it anyway, reminiscent of interviewee Karin's comments in paper 1. Doing laundry, showering and washing further entrenches cleanliness conventions, wasting precious natural resources, taking time away from critical reflection, and potentially heightening social stratification.

Paper 2 identifies the remaining question of how critically or naïvely we read media representations and negotiate offered discourses. I argue that knowing how discourses are negotiated in everyday life may help to further understand conventions.

Paper 3 summary

Sovereign dupes: cleanliness representations in media, persuasion, resistance and everyday practices

Paper 3 sets out to answer my third research question: How are cleanliness conventions negotiated in everyday life? To this end, focus group participants (57 people over 14 discussions, 31 females and 26 males, aged from 21 to 71) read cleanliness related content in popular magazines and discussed how this relates to their everyday lives. When discussing images on the themes found in Paper 2 – aspiration, shame and medicalisation – focus group participants were critical, suggesting that images were photo-shopped, doubting sources and questioning if the people in lab coats were “real” doctors. Participants see a clear difference between media and reality.

This study found that cleanliness is interlinked with a myriad of conventions around freshness, health, gender, class identity, sustainability etc. The interrelatedness of conventions suggests that constructing everyday life can be complicated if conventions conflict and can lead to disengagement and return to default ideas and ways of doing. This came out in the discussions where people discussed conflicting pressures to e.g. work out a lot, be clean and eat healthy food, conventions that all suggest particular, not necessarily conflicting but definitely overlapping bundles of practices. Thus, I argue, one convention changing has implications for a host of co-conventions and the practices that they underpin.

A further finding is that people re-calibrate media representations. People expect magazines and media to represent a higher standard than everyday life, so the fact that media images are fantastical is taken for granted. Expecting higher standards in the magazine genre makes people resistant to hyper-perfectionism of bodies and homes normal in magazines.

A key finding is that people do not only passively, but also actively resist discourses. Discussions often questioned the premise for a representation and criticised blatant attempts at pushing a heightened cleanliness agenda, or any tactic aimed to increase consumerism. Participants also discussed that they do not want to be influenced by media messages, but rather can be inspired by the fantasy and make up their own mind about how to go about cleaning bodies and homes in everyday life. This would suggest that while reading media messages, people are already judging and often consciously resisting representations. Shame was the narrative that elicited the most vehement resistance, participants were especially indignant

about messages suggesting that readers weren't good enough. Idealisation and medicalisation were also resisted and according to the discussions, everyday life does not need to include a perfect home, or body and mindlessly pursuing these goals are detrimental to well-being.

According to the discussions, even if people re-calibrate representations and resist cleanliness discourses, media is still seen as influential on a broader social scale, influencing other people, and groups of people. Very few participants conceded that magazines influence the way they conduct their own particular cleaning practices. However, they did agree that media influences wider society, a sovereign dupe complex.

Paper 3 argues that while following conventions, individuals are reflexively re-constructing their own practices and shifting wider conventions in (ideally) socially and environmentally sustainable directions. Participants expressed satisfaction in structuring everyday life in sovereign, environmentally and socially positive ways. In the group discussions they reflected over proffered discourses, considered potential implications and then debated with each other to gain social validation and confidence to first talk about and then do things differently, shifting conventions.

A limitation of paper 3 is that participants were chiefly from the middle class, which paper 2 discusses as having more liberty to be reflexive and critical of social conventions. The resistance towards media discourse found in paper 3 may be an inherent attribute of a higher class, rather than representing broader society's ability to be critical and reflexive in negotiating conventions in everyday life.

Paper 3 concludes by arguing that people negotiate a myriad of meanings in everyday life practices, both calibrating and resisting varying discourses. Thinking about individuals as sovereign dupes can help design interventions; if policy makers know that people are liable to be critical of messages, want trustworthy information and enjoy re-considering practices with respect to the environment, then they can address these needs when targeting unsustainable consumption. Interventions aimed to make everyday life more sustainable need to be well reasoned and authentic, and consider existing conventions.

Concluding discussion

Findings from these three papers have potential in identifying sociological forces that effect resource consuming social phenomena and making everyday life more sustainable. Across my three papers, ideas and meanings emerged as important in changing what we see as normal and what we do in daily life. Changing conventions about what is clean, then suggests the potential to save water, energy and other resources, creating more sustainable alternative futures. Interventions into ideas, are therefore promising in creating a more sustainable everyday life on planet earth. My caveat is that interventions should come from inside environmentally problematic phenomena. Cleanliness is context driven and relational, so this dissertation argues that unsustainable increases in cleanliness that have led to intensifying water and energy consumption could be reversed by changing cleanliness conventions. This dissertation provides some examples of media intervening into cleanliness conventions, and ways that people relate to – and resist – representations in everyday life. In my discussion, I summarise my findings and consider how far they go in explaining how both material and social infrastructures of cleanliness have evolved and how this reflects cleanliness conventions, what role media plays and ways that conventions are negotiated. These considerations lead to my concluding discussion on how sociology can support living more sustainably on planet earth.

Summary of main findings

My departure point was that collective conventions play a leading role in cleanliness practices, and thus the consumption of water, energy and other finite resources in everyday life. My dissertation then asked how the material and social infrastructures of cleanliness evolved and how this reflects cleanliness conventions. To start exploring, I mapped the social and material infrastructures of cleanliness in Sweden. While I did not find significant changes over the last 30 years, the people I spoke to thought they were cleaner than before, and Swedes in general

own more cleanliness devices, use similar amounts of water and energy domestically and spend slightly less time on cleanliness activities. I then turned to magazines to explore their role in constructing normality. Paper 2 mapped media representations of cleanliness over the last 30 years and found that narratives around cleanliness were similar throughout the study period, i.e. that cleanliness is ideal, while not being clean is shameful or even a medical problem. In paper 2, I argue that pressure from representations falls most heavily on those with the least resources to resist, potentially increasing social stratifications and taking away time and cognitive energy from considering environmental implications of everyday life. My final empirical investigation into how people negotiate cleanliness conventions in everyday life, shows that while they viewed representations and conventions as broadly influential, people were critical and reflexive when talking about these in relation to their own lives. In paper 3, I found that people are sceptical towards media, but that media representations help draw assumptions out into conscious consideration. People discussed amongst themselves various implications of their choices and shifted conventions in the group discussion context. Paper 3 concluded that through re-consideration, conventions can be re-negotiated, redefined and reproduced in everyday life. Representations do not dictate new conventions, but rather present an image of normality and thereby instigate deliberation, and critical reflection. The three papers highlight collective conventions' role in cleanliness practices from different angles, providing understandings in how people negotiate conventions in everyday life.

Understanding stability is just as important as understanding change in living sustainably on earth. So why did cleanliness practices (as reflected by time use and domestic water and energy consumption) not change dramatically in Sweden since the 1980s? This stability is possibly due to the fact that saturation of access to cleanliness infrastructures – running water, bathrooms etc – were widely available in Sweden by the 1970s; ownership of devices, on the other hand, did increase. Material stability may underlie stable conventions. During the study period, commercial messages encouraging heightened cleaning were present in the media as interventions from industries with a commercial agenda to promote cleanliness in order to sell more products. At the same time, the Swedish state continuously intervened into domestic consumption (especially energy consumption), through pricing, information and investment in infrastructure. Intervention from the state presents sustainability concerns and alternatives to elicit social engagement with highlighted issues, like energy saving. These conflicting messages were perhaps also part of the stability. Stability can be the result of continuous contestation.

Consumption is neither wholly inconspicuous nor conspicuous and even routinised barely-cognitive practices, like cleaning, do have an element of self-presentation. I found that there are a host of meanings that overlap with cleanliness and that people draw on many context-specific conventions in carrying out everyday life. Making the consequences of consumption more conspicuous will help inform everyday practices. I argue that interventions should come from within problematic practices, informed by those who are aware of the unsustainable outcomes and can create interventions in the best interest of those affected (people, sentient beings, nature). Interventions are always designed by people, received by people and resisted or integrated by people, so considering the swarm of sovereign dupes who will encounter an intervention will help in navigating the best course of intervention. My final argument informed by my findings, is that conventions can underlie many practices and thus changing one convention has the potential to shift bundles of practice in more sustainable directions.

Conventions, interventions and sovereign dupes

In intervening into unsustainable conventions, the concept of sovereign dupes is useful in thinking about how individuals integrate sustainability into everyday life. Sovereign dupes want to do what is normal, but also want normal to be sustainable. My findings show that inconspicuous consumption is not completely inconspicuous. There is slight but constant dis-ease about using more than one's fair share, flying, eating imported foods and throwing away trash. Participants in the focus groups did not highlight their unsustainable practices, but rather emphasised that they were concerned about sustainability issues more generally. There was some consensus that that the impacts of practice were unclear and that not being able to compare the impact of e.g. recycling and flying is frustrating. The environmental consequences of one's actions are opaque. When talking about the environmental initiatives – like using environmentally certified cleaning products, saving water and buying organic products in paper 3 – participants expressed that they weren't confident about the positive impacts of these actions, and felt like their efforts were a drop in the ocean compared to the required changes. Interview participants were equally hesitant to laud themselves as environmental heroes, rather emphasising that they were trying to be sustainable and acknowledging that these were only small efforts.

Everything I use is environmentally friendly or organic. Even though it may be organic some products affect the environment anyway using a lot of water or whatever. When I think about it, I'm not doing it in a perfect way... maybe I do more harm than I would like to realise. (m, 23, Swedish, student)

Unclear targets and confusion over best courses of action result from a plethora of messages from television, sustainability newsletters and this participant's girlfriend. Making the environmental consequences of consumption conspicuous could be one way of addressing this perceived lack of clarity. Flushing the toilet is essentially the same experience whether a country is in drought, flood or water sufficiency. Having some sort of feedback available in real time and exposing the consequences of actions may change what people tend to do. Indeed, there are positive signs that people who monitor their in-home energy and water use reduce consumption involved in their practices (Strengers, 2011). However, just making normality more efficient is not enough; we also need to fundamentally question what is considered normal (ibid, 334). Unsustainable conventions can be intervened into, by making context-specific transparent information more apparent, so that sovereign dupes can consider and prioritise carrying out everyday life in the best interests of social and environmental sustainability, and in doing so redefine conventions.

While the prospect of shifting conventions is exciting, meeting the challenges of climate change requires more than individuals washing less. The plethora of doings (and restraint from doings) required in daily life are overwhelming and would not make enough difference to feel worthwhile. Such efforts could furthermore compound the environmental problems as people may become caught up in greening their own lives and distracted from pressuring institutions to implement broader systematic changes required to meet sustainability goals. This was a thought I had when finishing paper 2 in which I concluded that pressures fall most heavily on those with the least recourse to resist, whose critical abilities are swallowed up by struggling to meet (unrealistic) social normality, with no time or energy left over to engage in sustainability initiatives. A conclusion I may have drawn at the time is that the best course of action for dealing with climate change would be to not bother resisting in everyday life, but to write letters, vote and form organised groups. For resistance to pressure the macro so that the micro could find more space for reflection. This was a disheartening conclusion: focussing on changing the structures may alienate those who wish to improve their everyday life, as they risk losing their expertise in everyday resistance. Furthermore, if people focus their energy on changing the structures and don't resist in everyday life, this then sends a message to others that they don't have to change either – a collective

action dilemma. I concluded at that time, that tackling inconspicuous consumption could not be achieved by individuals.

In writing my third paper I found more optimism. Talking to people in groups, made evident that we humans have ways of recognising and signalling important events to one another: that it is amongst individuals, that tackling environmental problems does in-fact happen. As people see others resisting and they themselves have access to more information, they question actors promoting unsustainable behaviours and can “undo” their own consumption practices (Scott et al., 2012). People are more likely to galvanise around initiatives if they see others doing so. To address sustainability challenges the small-scale, context-specific research and its application has great potential (Fam et al., 2015). When some people in the focus groups discussed how alarming impending climate change is, they elicited similar responses from each other. When they talked about ways they were acting to help the environment, this also elicited further discussion of things that people were already doing or intending to do. While reflection alone does not lead to sustainability, it is a necessary element in individuals influencing wider structures (Boström and Klintman, 2017). Together, in the group discussion context, we strengthened our shared sustainability conventions.

That people in group situations can critique social normality and discuss alternatives may be one way of producing sharedness requisite for conventions to shift. The focus group participants were critical toward representations that they perceived as oppressive. Discussing unrealistic expectations, negative environmental consequences and how they were resisting was a way to test boundaries and come to consensus around accepted ways of doing, different to those suggested by the representations. Critique and resistance are one way that conventions can be understood differently, everyday life carried out differently and conventions reproduced in ways that are in the best interest of those involved. Promoting sustainable consumption depends, primarily, on collective efforts (Røpke, 2009b). Group discussions were a way to elicit sharedness for shifting conventions. I argue that processes of intersubjective verification – thinkings, sayings and doings in groups – is what leads to accumulative improvements in sustainability conventions.

Reflecting over challenges and coming to stronger sustainability conventions can aggregate up to the structural level. Doings (and not doings) – such as reducing flying and driving, eating more plant-based food, using less energy in homes, washing less and so forth – clearly signals to broader society that climate change is real, important and that change is both necessary and possible. This reverberates outwards and sustainable conventions can attract more practices into sustainability

bundles. Conventions provide the backdrop for policy makers (who follow what their electorate wants), industry (which follows forecasted trends) and even universities that offer courses into which many students enrol, effectively changing the structures around the role sustainability plays in public discourse. The more conventional sustainability becomes the stronger the foundation for further change. As more people reproduce everyday practices in environmentally conscious ways, they contribute to pro-environmental conventions and sustainability transformations become increasingly inevitable.

An important element in reproducing conventions in more sustainable directions is optimism. Research can be complicit in reproducing phenomena it seeks to critique (Hall, 2003: 49), e.g. critiquing capitalism focusses attention on capitalism and thus capitalism becomes the public discourse with the largest share of attention. Research becomes so mesmerised by the latest, sexiest critiques that we forget to imagine alternatives. Criticism of a behemoth can feel like banging your head against a brick wall and going nowhere ultimately kills hope, pessimism begets apathy. Alternative stories are the only way to move out of a paradigm that no longer serves its occupants. The way forward is to tell new stories that include not only humans but all sentient species (Haraway, 2015b). It is through observing, discussing, envisioning and enacting positive futures that paradigms shift. We have the power to do this, in the words of Karen Barad: "our intra-actions contribute to the differential mattering of the world" (2007: 178). Our common future happens when we come together and become together, being positive is key in ensuring optimal social and environmental outcomes. As the Dalai Lama tweeted on 2/11/18:

We need to be determined to achieve positive change and also be able to take a long view of what needs to be done. What is important is not to become demoralized. Optimism leads to success; pessimism leads to defeat.

An important task in living more sustainably on planet earth is questioning the necessity of resource intensive conventions. I argue that change will have to come from within the problematic phenomena; interventions are more likely to succeed by including those people who will *be* the change needed in sustainability transitions. Stumbling blocks surely arise when public transport planners drive to work, education policy makers send their kids to private schools and water resource researchers shower three times a day. People who reproduce conventions have many influences, taking inspiration from many encounters in daily life: friends, the media, online networks etc. Through these influences, assumptions can be challenged and we can enjoy reconsidering accepted ways of doing to prioritise environmentally responsible alternatives – optimism and inclusivity are key. Making space for reflection in everyday life, as well as for participation in decision

making should form a core part of intervening: public consultations, municipality meetings and plebiscites are all good tools to this end. To intervene and encourage sustainable everyday life, inclusive strategies that privilege our common future are required. This has potential wider than unsustainable consumption.

Sociology for sustainability

For someone who came to sociology from design with questions about making everyday life more sustainable, sociology does seem to provide fertile grounds for tackling (un)sustainable consumption. However, as a messy discipline operating in a messy world, sociology also faces challenges in reaching its potential. One of the greatest challenges I see facing sociology is its own response to the state of society. In this age of institutionalised inequalities and ominous power concentrations (Piketty, 2014) that are even more acute now than a decade ago when Burawoy (2005) lamented the universality of mendacity, oppression, inequity, disenfranchisement and violence (p 4-5), sociology's go-to response is critique and counter-critique. The siloing of different groups, marginalisation, collaboration collapse and the ultimate expulsion of vulnerable groups from global processes (Sassen, 2014) infers that critique has not helped to halt oppressions. I do not see critique building bridges between silos, but listening and opening a space for reflexivity may. Sociology should abandon measuring society against a set of arbitrary ideals; who are we to decide which ideals society should be measured against? I argue that it is time for sociology to accede that critique must come from within problematic phenomena. In my investigations, critique was clearly there, waiting for the chance to be expressed. Many of my participants had their own ideas and grumbled about their frustrations with consumerism, mounted their own critiques and were involved with initiatives that they saw as improving the quality of their lives, the lives of those around them and the natural environment. People have specific expertise in their own lives, and including this first-hand experience in public discourses will ultimately lead to better understandings of social phenomena. From my interactions with sociology over the past (very) few years, I suggest that the most productive course of action is to make space for reflexivity in society, space for people within phenomena to imagine and to tell stories about what is possible (Haraway, 2015a). Every time empirical researchers interact with broader society, a space opens for reflexivity (Barad, 2007) and we should embrace this, action research if you will. The natural sciences are making progress in understanding the consequences of consumption, the most fruitful

avenue for social science is to make this conspicuous and engaging for society. Creating space for society to generate their own solutions to sustainability problems is one way of achieving this. To support sustainability efforts, and progress the discipline, sociology should progress from measuring and critiquing, to describing, opening-up questions, asking society what it sees as important and making space for reflection. Sociology can be most useful to sustainability efforts by striving to instigate reflexivity in the phenomena under observation.

Future research

My conclusions, while context specific, provide some transferrable insights for conventions. However, it is important to keep asking questions and researching cleanliness conventions also in other contexts. The reproduction of conventions needs to be observed in contexts with different infrastructures for water and energy, as well as contexts with different resource availability e.g. droughts. Societies are different, with different material and social structures; by comparing different societies we can arrive at more nuanced and transferrable understandings of conventions, promising for future sustainability efforts.

Another question thrown up by this research is how changing conventions take practice bundles with them. I have argued that conventions are realised in practice, however empirical investigation is also needed to see how conventions interact with practice. Observations may be a suitable strategy to get at the relationship between conventions and what people do. By explicitly observing conventions' role in practices, we will gain new knowledge on bundles, and how they shift and draw practices in new directions, useful in addressing unsustainable consumption.

A final question provoked by this research is how different interventions play out. My general philosophy of making space for reflection and participation in civic life to nurture a culture where members of a problematic phenomenon devise the intervention, requires testing in the real world. Interventions stemming from physical infrastructures are important, as well as economic incentives and have received some academic attention. Further empirical investigation is also required into how interventions stemming from communication and dialogue around specific social and environmental goals play out. Examples could be ensuring physical infrastructures are sustainable (i.e. technological fixes) coupled with the added layer of communicating their environmental impact (e.g. transparent taps where users know how much water they use, washing machines that report how

much energy and water they consume, travel agencies that tell you how much ice your trip will melt, CO₂ reporting for municipalities or even individuals). Making the consequences of consumption more conspicuous, I argue, will give greater insights into transparency's implications for consumption practices. Interventions will come from, be encountered, resisted and incorporated by a wide range of practice bundles, so understanding how various approaches are made sense of, will be a fruitful future research avenue. These and many other communication-based potential interventions are promising in shifting conventions and taking everyday routines with them, and thus deserve rigorous scientific investigation.

Original contribution

You are not a drop in the ocean. You are the entire ocean in a drop. (Rumi)

This dissertation offers an empirical exploration of how conventions are negotiated in everyday life to the body of literature on (un)sustainable consumption. In explicitly looking at conventions through social and material infrastructures, media representations and group negotiation, I conclude that conventions are continually contested. Methodologically, using the broad range of data to look at conventions suggests that the negotiation in everyday life is the hinge around which change revolves. Conventions are multiple and can conflict or complement, and therefore compete with or reinforce one another when being integrated into everyday life. If contesting I argue that arising tensions can create reflexivity. I also argue that reflexivity can come from having conventions brought into the conscious realm via e.g. media and also talking in groups. This study especially highlights the reflexive power of group discussion. I conclude that conventions, when reflected over, are critically negotiated in everyday life, and hence argue that interventions should come from within: from those who have first-hand experience of problematic phenomena. Sociology can be most useful, I follow, not by describing, explaining causality nor critiquing, but rather creating space for reflexivity.

References

- (2014) IPCC Fifth Assessment Synthesis Report. In: Pachauri RK (ed). Intergovernmental Panel on Climate Change.
- AB MKB. (2016) Hyresgäster i Nydala är först i världen med teknik som tvättar rent i kallt avjoniserat vatten utan tvättmedel
- Adlerberth I, Lindberg E, Åberg N, et al. (2006) Reduced enterobacterial and increased staphylococcal colonization of the infantile bowel: an effect of hygienic lifestyle? *Pediatric research* 59: 96-101.
- Allon F and Sofoulis Z. (2006) Everyday Water: cultures in transition. *Australian Geographer* 37: 45-55.
- Allwood JM, Larson SE, Malvido de Rodrigues C, et al. (2006) Well Dressed? *Cambridge: University of Cambridge Institute of Manufacturing*: 84.
- Ashenburg K. (2007) *The Dirt on Clean : an Unsanitized History*, New York: North Point Press.
- Barad K. (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, New York: Duke University Press.
- Barbour R. (2007) *Doing Focus Groups*, London: Sage.
- Becker HS. (2008 [1982]) *Art worlds*: University of California Press.
- Berner B. (1998) The meaning of cleaning: The creation of harmony and hygiene in the home. *History and Technology, an International Journal* 14: 313-352.
- Berner B. (2002) Housewives' films" and the modern housewife. Experts, users and household modernization: Sweden in the 1950s and 1960s. *History and technology* 18: 55-179.
- Berner B. (2011) Det amerikanska hemmet möter "folkhemmet". Teknik och politik i det svenska hushållsarbetets modernisering. In: Vyff IC and Gert Simonsen D (eds) *Amerika og det gode liv: material kultur i Skandinavien i 1950'erne og 1960'erne*. Syddansk Universitetsforlag, 101-118.
- Boström M and Klintman M. (2017) Can we rely on 'climate-friendly'consumption? *Journal of Consumer Culture* on-line.
- Bourdieu P. (1984) *Distinction: A Social Critique of the Judgement of Taste*. Harvard University Press,.
- Bourdieu P. (1990) *The logic of practice*: Stanford University Press.
- Browne AL. (2016) Can people talk together about their practices? Focus groups, humour and the sensitive dynamics of everyday life. *Area* 48: 198-205.
- Burawoy M. (2005) For public sociology. *American sociological review* 70: 4-28.
- Bushman RL and Bushman CL. (1988) The early history of cleanliness in America. *The Journal of American History* 74: 1213-1238.

- Carlsson-Kanyama A, Lindén AL and Eriksson B. (2005) Residential energy behaviour: does generation matter? *International Journal of Consumer Studies* 29: 239-253.
- Clemente JC, Ursell LK, Parfrey LW, et al. (2012) The impact of the gut microbiota on human health: an integrative view. *Cell* 148: 1258-1270.
- Cowan RS. (1983) *More work for mother : the ironies of household technology from the open hearth to the microwave*, New York: Basic Books.
- Creswell JW. (2009) *Research design : qualitative, quantitative, and mixed methods approaches* California: Sage Publications.
- Darnton A, Verplanken B, White P, et al. (2011) Habits, routines and sustainable lifestyles: A summary report to the Department for Environment, Food and Rural Affairs. London: Research & Analysis for Defra.
- Di Lucia L and Ericsson K. (2014) Low-carbon district heating in Sweden—Examining a successful energy transition. *Energy Research & Social Science* 4: 10-20.
- Diller E. (1999) Bad Press: Instructions for a Dissident Ironing. In: Borden I, Rendell J and Penner B (eds) *Gender Space Architecture : an interdisciplinary introduction*. New York: E & FN Spon.
- Diurlin E. (2015) Tvättmedel och detergent. Chemical Statistics and Registries, Swedish Chemicals Agency.
- Douglas M. (1966) *Purity and danger: An analysis of concepts of pollution and taboo*, London: Routledge.
- Elias N. (2000 (1939)) *The civilizing process* Malden: Blackwell.
- Energimyndigheten. (2014) Energy in Sweden – Facts and Figures 2014. In: Swedish Energy Agency (ed). Eskilstuna.
- Fam D, Lahiri-Dutt K and Sofoulis Z. (2015) Scaling down: researching household water practices. *ACME: An International E-Journal for Critical Geographies* 14: 639-651.
- Fletcher K. (2008) *Sustainable Fashion and Textiles : Design Journeys*, London Sterling, VA : Earthscan.
- Flyvbjerg B. (2006) Five misunderstandings about case-study research. *Qualitative inquiry* 12: 219-245.
- Ger G and Yenicoglu B. (2004) Clean and Dirty: Playing with Boundaries of Consumer's Safe Havens. *Advances in Consumer Research* 31.
- Giddens A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*: University of California Press.
- Giddens A. (1991) Structuration theory: past, present and future. In: Bryant CGA (ed) *Giddens' theory of structuration: a critical appreciation*. London: Routledge.
- Gram-Hanssen K. (2007) Teenage consumption of cleanliness: how to make it sustainable? *Sustainability: Science, Practice, & Policy* 3: 15-23.
- Gram-Hanssen K. (2008) Consuming technologies - developing routines. *Journal of Cleaner Production* 16: 1181-1189.
- Gronow J and Warde A. (2001) *Ordinary consumption*, New York: Routledge.
- Hall S. (2003) *Representation: Cultural Representations and Signifying Practices*: SAGE.
- Hansel T, Johnston SL and Openshaw PJ. (2013) Microbes and mucosal immune responses in asthma. *The Lancet* 381: 861-873.

- Haraway D. (2015a) Anthropocene, capitalocene, plantationocene, chthulucene: Making kin. *Environmental humanities* 6: 159-165.
- Haraway D. (2015b) *Staying with the trouble: Making kin in the Chthulucene*: Duke University Press.
- Hitchings R. (2012) People can talk about their practices. *Area* 44: 61-67.
- Huttenhower C, Gevers D, Knight R, et al. (2012) Structure, function and diversity of the healthy human microbiome. *Nature* 486: 207-214.
- Jack T. (2012) Nobody was Dirty: Disrupting Inconspicuous Consumption in Laundry Routines. *Faculty of Architecture Building & Planning*. Melbourne: University of Melbourne.
- Jack T. (2017) Cleanliness and consumption: exploring material and social structuring of domestic cleaning practices. *International Journal of Consumer Studies* 41: 70–78.
- Jackson T. (2004) *Motivating Sustainable Consumption*. Surrey: Centre for Environmental Strategy.
- Jensen CL. (2014) What is energy efficient light? A socio-technical analysis of lighting in transition. *Institut for Planlægning*. Copenhagen: Aalborg Universitet.
- Keller M, Halkier B and Wilska TA. (2016) Policy and governance for sustainable consumption at the crossroads of theories and concepts. *Environmental Policy and Governance* 26: 75-88.
- Kennedy EH, Cohen MJ and Krogman N. (2015) *Putting sustainability into practice: applications and advances in research on sustainable consumption*: Edward Elgar Publishing.
- Klepp IG. (2003) Fra rent til nyvasket. Skittent og rent tøy (Clean to new-washed: dirty clothes - clean habits). Oslo: National Institute for Consumer Research.
- Laitala K, Klepp IG and Boks C. (2012) Changing Laundry Habits in Norway. *International Journal of Consumer Studies* 36: 228–237.
- Lindén A-L. (2009) Energy efficiency in every-day household life: Three scenarios. *First European Conference Energy Efficiency and Behaviour*. Maastricht.
- Macnaghten P, Davies SR and Kearnes M. (2015) Understanding Public Responses to Emerging Technologies: A Narrative Approach. *Journal of Environmental Policy & Planning*: 1-19.
- Martens L. (2012) Practice 'in Talk' and Talk 'as Practice': Dish Washing and the Reach of Language. *Sociological Research Online* 17.
- Martens L and Scott S. (2005) The unbearable lightness of cleaning: Representations of domestic practice and products in Good Housekeeping Magazine (UK): 1951–2001. *Consumption, Markets and Culture* 8: 379-401.
- Mason M. (2010) Sample size and saturation in PhD studies using qualitative interviews. *Qualitative Social Research* 11.
- McClintock A. (2013) *Imperial leather: Race, gender, and sexuality in the colonial contest*: Routledge.
- Minichiello V, Aroni R and Hays TN. (2008) *In-depth interviewing : principles, techniques, analysis*, Sydney: Pearson Education Australia.

- Mont O and Plepys A. (2007) System Perspective on Service Provision: A case of Community-based washing centers for households. *International Journal of Public Affairs* 3: 130-151.
- Näsman P. (2017) *Idrott och hälsa på Krusboda In: skola K* (ed).
- Nicolini D. (2012) *Practice Theory, Work, and Organization*, Oxford: Oxford University Press.
- Nightingale F. (1863) *Notes on hospitals*, London: Saville and Edwards.
- Östberg T. (2017) *Badrummets historia – från praktiskt till påkostat*. Available at: <http://www.bostadsrattarna.se/allt-om-bostadsratt/artiklar/badrummets-historia-fran-praktiskt-till-pakostat>.
- Piketty T. (2014) *Capital in the Twenty-First Century*, Cambridge: Harvard University Press.
- Pink S. (2011) Ethnography of the Invisible: Energy in the Multisensory Home. *Ethnologia Europaea* 41: 117-128.
- Reckwitz A. (2002) Toward a Theory of Social Practices : A Development in Culturalist Theorizing. *European Journal of Social Theory* 5: 243-263.
- Richter CP. (2010) Automatic dishwashers: efficient machines or less efficient consumer habits? *International Journal of Consumer Studies* 34: 228-234.
- Rockström J, Steffen W, Noone K, et al. (2009) A safe operating space for humanity. *Nature* 461: 472-475.
- Romagnani S. (2004) The increased prevalence of allergy and the hygiene hypothesis: missing immune deviation, reduced immune suppression, or both? *Immunology* 112: 352.
- Røpke I. (2009a) Theories of practice — New inspiration for ecological economic studies on consumption. *Ecological Economics* 68: 2490–2497.
- Røpke I. (2009b) Theories of practice—New inspiration for ecological economic studies on consumption. *Ecological Economics* 68: 2490-2497.
- Sassen S. (2014) *Expulsions: Brutality and complexity in the global economy*: Harvard University Press.
- SCB. (2015) *Sammanfattning*. Available at: http://www.scb.se/Statistik/LE/LE0101/ dokument/ Sammanfattning_kommande_rapport.pdf.
- Schatzki T. (2002) *The Site of the Social: a philosophical account of the construction of social life and change*: Pennsylvania State University Press.
- Schatzki T. (2014) Art Bundles. In: Zembylas T (ed) *Artistic Practices: Social Interactions and Cultural Dynamics*. Routledge.
- Schatzki T. (2016) Practice Theory as Flat Ontology. In: Spaargaren G, Weenink D and Lamers M (eds) *Practice Theory and Research: Exploring the dynamics of social life*. Routledge.
- Schatzki TR. (1996) *Social practices: A Wittgensteinian approach to human activity and the social*: Cambridge University Press.
- Schaub B. (2006) The many faces of the hygiene hypothesis. *Journal of allergy and clinical immunology* 117: 969.
- Schroeder JE and Zwick D. (2004) Mirrors of masculinity: Representation and identity in advertising images. *Consumption Markets & Culture* 7: 21-52.
- Scott K, Bakker C and Quist J. (2012) Designing change by living change. *Design Studies* 33: 279-297.

- Shove E. (2003a) *Comfort, Cleanliness and Convenience* London: Berg.
- Shove E. (2003b) Converging Conventions of Comfort, Cleanliness and Convenience. *Journal of Consumer Policy* 26: 395–418.
- Shove E. (2012) Habits and their creatures. In: Warde A and Southerton D (eds) *The Habits of Consumption*. Helsinki: COLLEGIUM: Studies across Disciplines in the Humanities and Social Sciences
- Shove E, Pantzar M and Watson M. (2012) *The dynamics of social practice: everyday life and how it changes*, Los Angeles: SAGE.
- Shove E and Warde A. (2002) Inconspicuous Consumption: The Sociology of Consumption, Lifestyles and the Environment. In: Dunlap RE (ed) *Sociological theory and the environment*. Plymouth, United Kingdom: Rowman & Littlefield.
- Skeggs B. (1997) *Formations of class & gender: Becoming respectable*, London: Sage.
- Southwood N and Eriksson L. (2011) Norms and conventions. *Philosophical Explorations* 14: 195-217.
- Strachan DP. (1989) Hayfever, hygiene and household size. *BMJ. British medical journal* 299: 1259.
- Strengers Y. (2009) Bridging the divide between resource management and everyday life : smart metering, comfort and cleanliness. *School of Global Studies, Social Science and Planning*. Melbourne: RMIT University.
- Strengers Y. (2011) Negotiating everyday life: The role of energy and water consumption feedback. *Journal of Consumer Culture* 11: 319-338.
- Strengers Y and Maller C. (2012) Materialising energy and water resources in everyday practices: Insights for securing supply systems. *Global Environmental Change* in press.
- Svenskt Vatten. (2009) Vårt att veta om vatten: frågor och svar om vårt dricksvatten.
- Sweet M. (2013) Germ warfare opens a new front. *Inside Story: Current affairs and culture from Australia and beyond*. Swinburne Institute.
- Therborn G. (2002) Back to norms! On the scope and dynamics of norms and normative action. *Current Sociology* 50: 863-880.
- Veblen T. (1899) *The theory of the leisure class : an economic study in the evolution of institutions*, New York: Macmillan.
- Veblen T. (2010 [1925]) Conspicuous Consumption. In: Warde A (ed) *Consumption*. London: Sage.
- Vigarello G. (1988) *Concepts of cleanliness : changing attitudes in France since the Middle Ages*, Cambridge ; New York : Paris :: Cambridge University Press ; Maison des Sciences de l'Homme.
- Warde A. (1993) Producers, profits and pictures: An analysis of advertisements for manufactured food. In: Kjaernes U, Holm L, Ekstrom M, et al. (eds) *Regulating Markets, Regulating People: on food and nutrition policies*. Oslo: Novus Forlag, 137-152.
- Warde A. (2014) After taste: Culture, consumption and theories of practice. *Journal of Consumer Culture* 14: 279–303.
- Warde A. (2017) *Consumption: A Sociological Analysis*, London: Palgrave Macmillan.

- Weber J, Illi S, Nowak D, et al. (2015) Asthma and the hygiene hypothesis. Does cleanliness matter? *American journal of respiratory and critical care medicine* 191: 522-529.
- Wilk R. (2002) Consumption, human needs, and global environmental change. *Global Environmental Change* 12: 5-13.
- Yazdanbakhsh M, Kremsner PG and van Ree R. (2002) Allergy, Parasites, and the Hygiene Hypothesis. *Science* 296: 490-494.
- Zattin A. (2015) Electrolux Group. In: Jack T (ed) Email enquiry about efficiency of domestic washing devices ed.
- Zimmermann JP. (2009) End-use metering campaign in 400 households in Sweden. *Improved energy statistics in building and industry*. Eskilstuna: Swedish Energy Agency.

Negotiating Conventions

cleanliness, sustainability and everyday life

Cleanliness is a mundane issue: most people shower, wash dishes and do laundry without a second thought. These conventional practices are, however, responsible for a large portion of domestic water, energy and chemical consumption. Increasing cleanliness conventions thus place tensions on the natural systems that are necessary for humans to survive and thrive.

Negotiating Conventions is a study of how we calibrate, criticise and resist what is conventional. Readers will discover the subtle and insistent undercurrents of conventions, the multitude of conventions that we can draw on, and how we are both dupe and sovereign in negotiating them in our everyday practices. Conventions are continually renegotiated and redefined, and so strengthening sustainability conventions could shift whole bundles of practice in pro-environmental directions.

