



Changing practices: the potential of alternative forms of practice to reduce the environmental impact of clothing consumption in the Netherlands

Industrial Ecology Master thesis by Wybren Brouwer

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Foreword

This report presents my master thesis for the completion of the Industrial Ecology program at the Technical University Delft and the Leiden University. Although the research presented in this report was performed in a few months time it is the result of a longer, and at times tedious process. A process that started of with a big idea that proved unfeasible, followed by exploring a few academic side roads, before finally arriving at the more focused thesis as it is presented here today. Even though it felt like a lonely process at times there have been a significant amount of people that helped and inspired me along the way. Below I will mention a number of people I want to thank in particular for their support.

First off I want to thank the Industrial Ecology program and all those involved with it for providing a stimulating and inspirational learning environment. In as much as a study is meant to redefine how you perceive the world, the Industrial Ecology program has been very successful for me. My fellow students also played a big role in my experience of the IE program and I want to thank them for their contribution in my personal development and a number of them for becoming friends as well.

With regard to the process of developing my thesis I really have to thank my 1st supervisor Eefje Cuppen. She has been there for the whole process and her sharp comments and feedback helped me throughout the process. On the one hand with defining a feasible topic with an interesting approach. But also by helping me understand the value of narrowing my scope and challenging me to do so. Furthermore, I would like to thank my 2nd supervisor Jaco Quist for getting involved when my research topic was better defined. His feedback and enthusiasm on the research approach has been really helpful, and were duly appreciated.

I would like to thank my father for providing me with books on structuration, practice, and sociology in more general. Being a conversation partner, and reading and commenting on an earlier draft version of this report. I would like to thank my girlfriend Denise for sticking with me through it all, and supporting and motivating me at the right moments. Lastly I would like to thank my mom for saying the legendary words “nu al?” when I told her I was going to submit my thesis.

With regard to the execution of my research I have to thank a few persons in particular. First of I would like to thank Wendy Spier from the Bij Priester clothing library for doing an interview and for helping me recruit respondents from the clothing library. I would like to thank Zoé Baart for putting me in contact with clothing swap organizers, and Anja Mostertman and Ariane Lelieveld for doing an interview on their clothing swaps and helping me recruit respondents. Lastly I would like to thank all practitioners for answering all these questions about your clothing use that normally no one would ever ask.

Executive Summary

Global consumption levels are unsustainable. Dutch consumers are responsible for a disproportionate share of the environmental impact caused by global consumption. The impact of Dutch consumption is mainly embedded in products that are consumed in the Netherlands, but produced elsewhere on the world. To address the impact of consumption two general approaches exist, targeting production or targeting consumption. This research focuses on consumption as consumption can be more effectively targeted than the global supply chains through which the products we consume in the Netherlands are produced. Specifically this research focuses on clothing, as clothing takes up a disproportionate share of impact caused by Dutch consumption. In this study an effort was made to develop a better understanding of Dutch clothing consumption and to study a possible sustainable transition in Dutch clothing consumption.

Rather than focussing on individual consumer behaviour this research focused on consumption as a socially shared practice. To this end, this research applied practice theory as a model of consumer behaviour. With regard to change this research specifically looked into the role alternative forms of practice could have in changing behaviour. These alternative forms of practice can be seen as niche developments in which clothing consumption is organized in a significantly different way. In this research two alternative forms of practice were studied in more detail; a clothing library in The Hague, and clothing swaps in Rotterdam.

In order to say anything about the contribution these alternative forms may have in reducing the environmental impact of clothing consumption practice, a better understanding of the environmental impact resulting from clothing consumption is needed. Seen from a consumer perspective the lifecycle impacts of clothing can be divided into three phases. These are cradle-to-gate impacts that precede consumption, related use impacts that take place during consumption, and end-of-life phase that follow after consumption. Of these three phases the cradle-to-gate phase is responsible for the majority of impact, followed by the related impacts during the use phase, and the end-of-life phase has a negative impact due to resource/energy reclamation. By dividing the environmental impact of clothing consumption into three phases, and developing a better understanding of the impact caused in these respective phases, the environmental impact of clothing consumption could be discussed in the empirical part of the research.

Before getting to this empirical part of the research, first a conceptual framework for the application of practice theory in this research was needed. This conceptual framework was based on the work on practice theory by Shove et al. (2012). They have developed an understanding of practice based on the following concepts. First they make a distinction between a practice-as-entity and practice-as-performances as units of analysis. The practice-as-entity is a socially shared dynamic entity that shapes individual practice-as-performances, while the practice-as-performances constantly recreate and maintain the shared practice-as-entity. The dynamic relation through which both these concepts shape each other is structuration. The practice-as-entity and the practice-as-performances can be studied by looking into the elements of practice; meaning, competence, and material. These elements can be followed through the process of structuration, as they exist in space, time and among practitioners.

These concepts of practice were subsequently appropriated in the conceptual framework that was used in this research. This conceptual framework consisted of a framework for the practice analysis as well as a framework for the analysis of the alternative forms of practice. The practice analysis framework was relatively straightforward, consisting of applying the concepts of practice-as-entity, structuration and practice-as-performances. In the framework for the analysis of the alternative forms of practice a distinction between two types of actors was made. On the one hand facilitators were conceptualized, and the way they influence the elements of practice and the structuration dimensions of space and time. On the other hand practitioners were conceptualized, and specifically the way their practice-performances are shaped by the practice-as-entity, the range of practice performances enacted by them and performances of alternative form of practice were conceptualized. The empirical part of the research consists from a practice analysis and two case studies. The practice analysis was performed on the basis of literature research, as well as analysis of online data sources. The alternative forms of practice were studied by performing case studies. These case studies consisted of selecting appropriate case study candidates, recruiting respondents, a semi-structured interview, and coding and analysis.

In the practice analysis a more in depth understanding of clothing consumption in the Netherlands was developed. This was done on the basis of three main analytic segments; practice-as-entity, structuration, and practice-as-performances. In the practice-as-entity the elements that make up practice were identified and

analysed. In doing so a distinction between a functional and symbolic layer of practice was made. The functional layer consisted of thermal comfort, sensorial comfort, body movement comfort, cleanliness as hygiene, cleanliness as freshness, and convenience. The symbolic layer consisted of looking good, custom, style and fashion. In the structuration segment the influence of space, time and practitioners on the manifestation of these elements was discussed. This was then followed by a segment on practice-as-performances. In this segment the actual observable behaviour of practice, and the variation within it, was discussed. Furthermore a link between practice performances, the elements that manifest within them and environmental impact was made.

The practice analysis is followed by two case studies. The first case study was into the Bij Priester clothing library in The Hague and the second into two organizers of clothing swaps in Rotterdam. First Bij Priester and the clothing swap organizers in their role as facilitator are introduced, and their influence on the collection and structuration is discussed. This is followed by introducing and discussing the practitioners that have become member of the clothing library or participate in clothing swaps. This discussion consists of structuration influences on their clothing consumption, their performances of clothing consumption and their performances of the alternative form of practice. Finally the case study is completed with a short analysis of practice.

After the two case studies a more detailed discussion of the potential of the two alternative forms of practice to reduce environmental impact and to transition practice was performed. In this discussion the potential to reduce environmental impact was discussed by focussing on the three life cycle phases also discussed earlier. The clothing library has the potential to lead to a reduction in all three life cycle phase, mainly in the cradle-to-gate by reducing the volume and changing the content of acquisition, and to a lesser extent also for laundry and end-of-life impacts. The clothing swaps differed in the potential to reduce environmental impact, their potential mainly lies in reducing environmental impact by improving disposal behaviour, while only having a limited reduction potential for acquisition, and not really improving laundry impacts. Relatively, the clothing library has most potential to reduce the environmental impact of practice, as it addresses the most impactful lifecycle phase more effectively. With regard to transition both alternative forms of practice showed some potential. Both worked on a local reconfiguration of elements of practice, which could potentially diffuse to wider practice. The way they did so, however, also limits the diffusion. They aligned with specific manifestations of meanings, which are not generally shared in practice, or that are limited to certain types of clothing. In terms of pursuing further change processes for the diffusion of the alternative form of practice they did not seem to be very active. The potential to improve the diffusion through these other change processes is there however.

The research is finally concluded with the conclusions. The main conclusions of the research are that the alternative forms of practice do influence a local change in practice, this change does contribute to a reduction of environmental impact of clothing consumption practice, but the influence of the alternative practices on overall practice faces important limitations and they cannot inform a transition on their own.

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1. Introduction



Selection of research topic

The research presented in this report takes a sociological approach for the study of environmental impact caused by Dutch clothing consumption. In doing so, this study deviates from the more well-known research tools and methodologies used within the field of Industrial Ecology. Considering the magnitude of the environmental challenges our society faces, and the societal change needed to meet these challenges, it is however very interesting to expand the Industrial Ecology field with sociological perspectives of behaviour and change. With respect to this objective clothing consumption came forward as the most interesting topic to apply the analytical perspective used in this research. I will introduce the wider perspective in which I place this research below.

Globally we have reached consumption levels that surpasses what the Earth can sustainably provide (Tukker et al., 2010). When taking a consumption based accounting approach it becomes clear that Western countries are responsible for a disproportionate large share of the environmental impact generated (Ivanova et al., 2016). This is in large part the result of how global production consumption systems have become organised. In these global systems, the impact of Western countries is not limited to national or regional borders, but also for a large part embedded in the consumption of products and materials manufactured in other countries. The Netherlands is a good example of a Western country causing disproportionate impact. In terms of per capita environmental impact the Netherlands scores way above world average when consumption based accounting is applied (Ivanova et al., 2016). Furthermore the impact of our consumption significantly surpasses our national borders as more than half of the environmental impact caused by Dutch household consumption takes place abroad (Ivanova et al., 2016). Considering these three points, global consumption levels being unsustainable, Dutch consumption causing a disproportionate share of impact, and Dutch consumption also being responsible for impact that is caused abroad, it becomes clear that from an environmental point of view it is very interesting to research a possible change in the environmental impact generated by Dutch consumption.

As the environmental impact of Dutch household consumption is above an already unsustainable world average something should be done to bring down the impact. When addressing the impact of consumption, a distinction can be made between two general approaches. The first approach is to reduce the environmental impact of the production of the materials we consume. The second approach is to reduce environmental impact by reducing the material throughput of consumption (Tukker et al., 2010). Industrial Ecology has traditionally focussed on the former, providing tools and concepts that improved the environmental efficiency of industrial society (Jackson, 2005). The second approach has been considered to be less germane to the field of industrial ecology (Tukker et al., 2010). However, considering the significant fraction of environmental impact embodied in products that are produced elsewhere, the ability to apply technology and efficiency improvements is limited (Ivanova et al., 2016). Therefore, to effectively address environmental challenges, our ways of life and the associated patterns of consumption need to be changed as well (Shove, 2010).

In their everyday life, Dutch households consume a number of different product categories. Not all of these categories are equally relevant in terms of the environmental impact generated by them. Mobility and food are in general the main contributors to environmental impact (Ivanova et al., 2016; Tukker & Jansen, 2006). Clothing however also makes a significant contribution to the environmental impact generated by Dutch private consumption (Nijdam et al., 2005; Tukker & Jansen, 2006). If the environmental impact of clothing is related to the economic value generated, then the need to address the impact of clothing consumption becomes even clearer. All product groups that make up the clothing domain can be termed “Hyenas”, meaning that their environmental load to value ratio is poor and need to be improved in order to achieve sustainability goals (de Vries & te Riele, 2006). Considering the recent emergence of fast fashion, it is unlikely that this ratio has improved. Clothing is furthermore also a prime example of embodied impact, as most production takes place and therefore environmental impact is generated in Asia. Besides being relevant from an environmental perspective, this high level of embodied impact in clothing consumption also justifies a focus on changing consumption patterns rather than focussing on production issues.

Analytical approach

Changing consumption patterns is not an easy feat. Over the years there have been many efforts to encourage and persuade consumers to make better choices. These efforts were mainly focussed on providing motivators and lowering barriers for pro-environmental behaviour. This approach has not been entirely successful, resulting in notions such as the value-action gap. This value-action gap describes how people can adopt green values but do not always act according to these values (Shove, 2010). This makes clear that changing consumer behaviour is not achieved by just raising awareness and changing attitudes of individuals. Where research and policy has focused on the individual as source of behavioural change it seems that behaviour is actually socially

embedded. Shove (2010) argues that individual behaviour results from the socially shared practices one partakes in. This implies that the source of changing behaviour lies in the development of these practices rather than the individual (Warde, 2005).

Taking practices as a unit for change leads to a shift in analytical focus. Instead of taking individuals and their attitudes, you now focus on changing an essentially uncontrollable entity. This also gives another understanding of processes of change and puts efforts to influence consumption practices in a different context. By putting process of, and efforts to, change in a different context practice theory may provide novel insights that aid the transition towards more sustainable consumption practices.

Relevance for Industrial Ecology

Even though this study deviates from the standard analytical approaches followed in Industrial Ecology, it does so in a way that is very relevant for the field of Industrial Ecology. Besides offering the tools to develop insight into the environmental impact of a diversity of systems, Industrial Ecology looks into processes of systemic change. This study very much does the same thing, with the difference being that the system understanding is based on practice theory. That a practice theory understanding can be relevant for perspectives utilized in Industrial Ecology shows in discussions of integrating practice theory with the multi-level perspective (McMeekin & Southerton, 2012; Warde, 2014). An approach also taken by other students that followed the Industrial Ecology program (Putman Cramer, 2012; Vercauteren, 2013). In this study I have made a move in the other direction. Rather than integrating practice theory into perspectives used in Industrial Ecology, I made a move to integrate Industrial Ecology perspectives for studying environmental impact into practice theory (integrating lifecycle thinking, LCA and MFA with practice theory). In terms of systemic change such a move was not needed, as processes of change are also discussed within practice theory (Shove et al., 2012; Spurling et al., 2013).

1.1 Problem statement

To reduce the environmental impact of clothing consumption in the Netherlands a behavioural change in the way clothing is consumed needs to be realised. Realising such a change is however not easy as consumer behaviour is shaped by socially shared practices. To change the way clothing is consumed it is therefore important to research how a possible transition in the practice of clothing consumption can be realised.

Scope

Before discussing a possible transition of the practice of clothing consumption it is useful to get an understanding of what I define the practice of clothing consumption to be. Figure 1.1 shows the system understanding as it is used in this research.

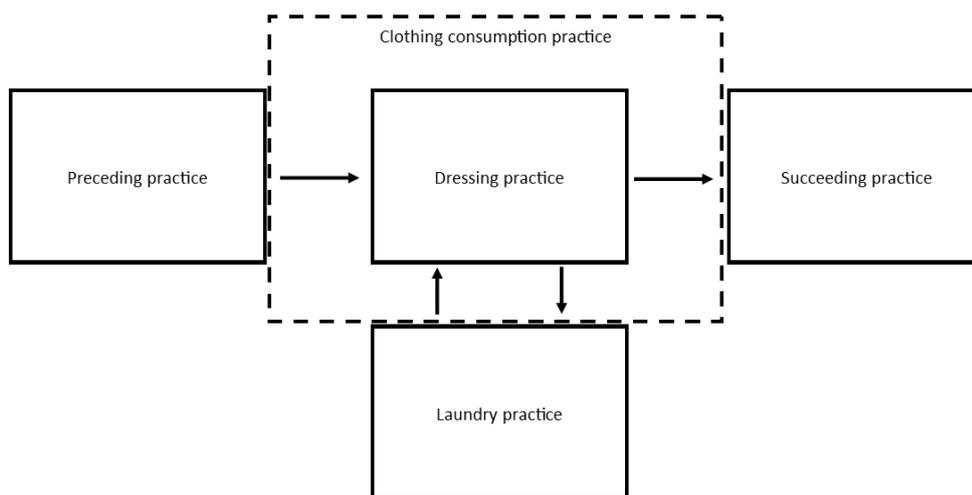


Figure 1.1 system boundaries practice of clothing consumption (own figure)

In the system understanding of Figure 1.1 I placed dressing practice at the centre. This is the practice in which clothing is functionally consumed. In terms of environmental impact, this dressing practice on its own is not very interesting. Therefore in this study of clothing consumption practice, the system boundaries are extended to include the relations (material flows) with preceding practice (cradle-to-gate), succeeding practice (end-of-life), and laundry practice. More on the system boundaries can be found in the conceptual framework.

In order to study a transition within the defined system this research focuses on alternative forms of practice of clothing consumption in the Netherlands. These alternative forms of practice can be seen as niche developments in which the consumption of clothing is organized in a different way. By reorganizing the way clothing is consumed these alternative forms of practice have the potential to transform the practice and in doing so reduce the environmental impact associated with Dutch clothing consumption. Whether they will be successful in transforming the practice, and whether this will lead to a meaningful reduction of environmental impact is at this moment still uncertain. But considering the challenge of changing consumption patterns they are a very promising phenomenon.

This research was therefore aimed at developing more insight into these alternative forms of practice. Specifically, this research aimed to develop a better understanding of how consumer behaviour is shaped by these alternative forms of practice, a better understanding of how the environmental impact of clothing consumption is addressed in these alternative forms of practice, and insight into the potential of these alternative forms of practice to transform the overall practice.

Over time a number of different alternative forms of practice have established themselves within the practice of clothing consumption in the Netherlands. This research will focus on two alternative forms of practice that show particular promise with regard to reducing environmental impact. These are borrowing from clothing libraries and clothes swapping. Both of them have established themselves as active forms of practice in the Netherlands and are therefore interesting to study in more detail. This research will do so by looking into three cases; a clothing library in The Hague, and two different clothes swapping organizers in Rotterdam. By studying these cases this research aims to develop an answer to the following research questions:

Research Questions

How do the alternative forms of practice, clothing library and clothes swapping, relate to the practice of clothing consumption in the Netherlands and what potential do they have for reducing the environmental impact related to Dutch clothing consumption?

Sub questions

To be able to answer the main research question the following sub questions need to be answered.

- ◆ *How does clothing consumption in the Netherlands result in environmental impact?*
- ◆ *How can practice theory be used to understand clothing consumption in the Netherlands?*
- ◆ *How is the practice of clothing consumption constituted in the Netherlands, and how is individual behaviour shaped by a shared practice?*
- ◆ *How is clothing consumption shaped in the alternative forms of practice, and how do they influence the recreation of practice?*
- ◆ *What potential do the alternative forms of practice have to reduce the environmental impact of clothing consumption, and what potential do they have to establish a transition in overall practice?*

Outline of thesis

In this thesis answers to the research questions will be developed. To this end this report is structured as follows. The introduction in chapter 1 is followed by a discussion of the environmental impact of clothing consumption in chapter 2. In chapter 3 a theoretical framework for practice theory is discussed, which is followed by a conceptual framework in chapter 4 in which the specific application of concepts in this thesis is discussed. This is followed by a methodology section in chapter 5 in which the used research methods are introduced and discussed. This is then followed by the Practice Analysis in chapter 6, which presents the system analysis of clothing consumption. The Practice Analysis is followed by the results from both case studies, the clothing library is presented in chapter 7, and the clothing swaps are presented in chapter 8, while the two different case studies are comparatively discussed in a cross case analysis in chapter 9. This is finally followed by conclusions, in which answers to the different research questions are given, and a discussion of the research presented in this report.

2. Environmental impact of clothing consumption



In order to assess the contribution alternative forms of practice can make for reducing environmental impact it is important to know how the practice of clothing consumption leads to environmental impact. When taking a lifecycle perspective this research focusses on the use phase of the product lifecycle. This use phase does however influence the impact of the preceding and subsequent lifecycle phases. Below I will discuss the lifecycle impact of clothing in more detail. I will divide this discussion into the lifecycle phases preceding the clothing consumption practice, cradle-to-gate, impact related to the use phase, laundry practice, and the impact of subsequent lifecycle phases, end-of-life. It is important to note that the practice of clothing consumption as defined in this research does not directly cause environmental impact, but does so in relation to other practices.

2.1 Cradle-to-gate

Clothing enters the practice of clothing consumption in the form of garments. These garments are manufactured through a number of production steps; fibre production, yarn production, pre-treatment, cloth production, after treatment, colouring, finishing, and confection. Of these production steps, a number are significant for determining the environmental impact of garments. These are fibre production, yarn production, and cloth production. I will discuss the environmental impacts of these production steps in a bit more detail below and at the end of this segment I will discuss their influence in terms of overall impact.

2.1.1 Fibre production

There are a great variety of fibres used in the production of clothing available on the Dutch market. These fibres can be divided into three categories; natural fibres, synthetic fibres, and man-made fibres. Natural fibres are fibres that are directly produced from plants or animals. For these fibres, the environmental impact of fibre production is associated with farming the plants or animals. Synthetic fibres are synthesized plastic fibres made from oil. For these fibres, the environmental impact of production is associated with oil extraction and the synthetization process. Man-made fibres are made from cellulosic material (mainly wood) which is then turned into fibre through a chemical process. For these fibres, the environmental impact of production is associated with the production of the cellulosic material, and the chemical process used to transform the material into fibres. Figure 2.1 gives an overview of the environmental impact for different types of fibre production and subsequent production steps for the manufacturing of cloth. The environmental impact is expressed in Pt ReCiPe. This is a methodology through which different environmental impacts are aggregated into a single score. A more detailed discussion of the ReCiPe methodology can be found in Appendix A.

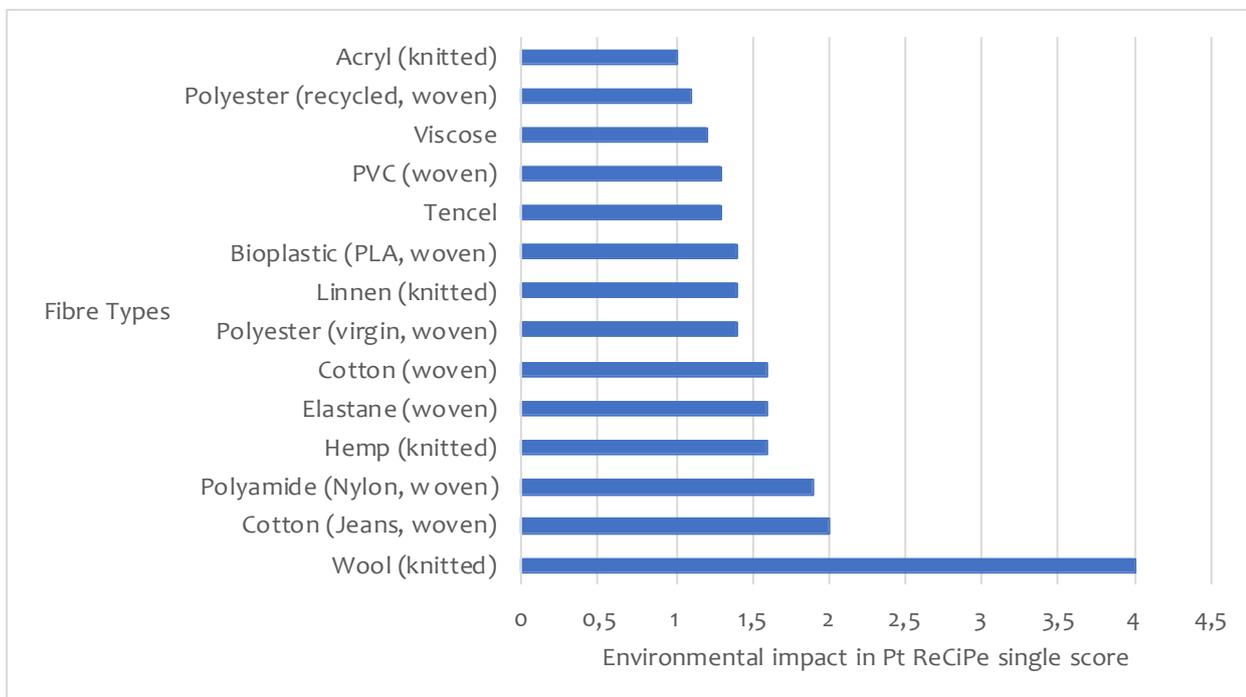


Figure 2.1 Environmental impact in Pt ReCiPe single score per kg cloth for different material types (adapted from Bijlvelde & Bergsma, 2015)

In Figure 2.1 the impact of the production processes that follow after fibre production up to the production of woven and died cloth are denoted as well. The inclusion of these subsequent production steps makes the difference in environmental impact of the fibre types less significant. The impact of subsequent production steps is relatively equal for the different fibre types and thus the relative difference between fibre types becomes smaller. Even though relatively little, fibre type can however still have some effect on the environmental impact in the subsequent production steps.

When it comes to comparing the different fibre types, the ranking in Figure 2.1 may suggest that man-made fibres (viscose, tencel), and most synthetic fibres are preferable to natural fibres. The specific ranking is however partly the result of the methodology used. Within the single score presented in Figure 2.1 land use is given a lot of significance, while other impacts such as water use are not taken into account (Bijleveld & Bergsma, 2015). Furthermore, the scores presented are weighted averages, meaning that a whole possible range of impacts are reduced to one number. In the case of cotton another study shows that the best practice production (organic cotton) performs much better than average cotton (Textile Exchange, 2014). If this is taken into account a shift to best practice production may be more beneficial in terms of environmental impact than a shift to another fibre. The authors of the figure refrain from advising a shift in fibres, and also state that different fibre types have different properties which cannot be disregarded in a shift (Bijleveld & Bergsma, 2015).

2.1.2 Yarn production

After the fibre material has been produced, the next step is to turn fibre into yarn. This happens through one of two processes; spinning or extrusion. Synthetic fibres are extruded, while all other fibres are produced into yarn through spinning. As the choice for the yarn production process used is already decided in the choice for fibre type, I will not discuss the two processes in more detail. What is however interesting to discuss with regard to yarn production, is the thickness of the yarn that is produced. Figure 2.2 shows the effect yarn thickness can have on the overall impact of textile production.

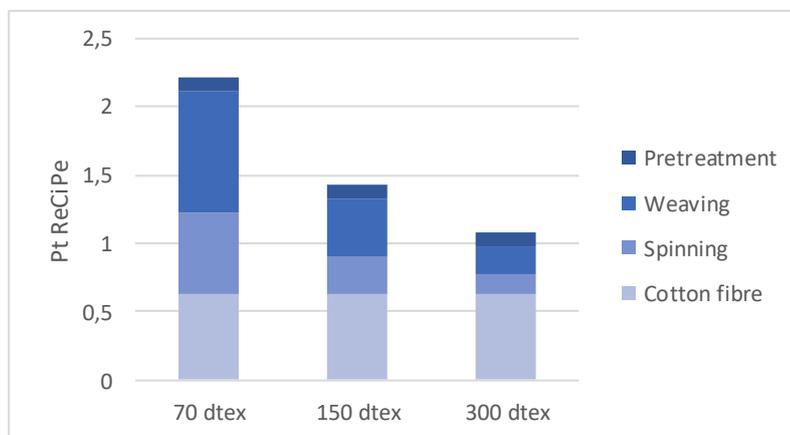


Figure 2.2 Environmental impact in ReCiPe single score per kg of cotton textiles for different yarn thickness (dtex) (adapted from Van Der Velden, et al., 2014)

Textile fibres can be turned into yarn of different thickness. This yarn thickness influences the environmental impact that is generated for the spinning and weaving step. The per kg environmental impact of producing yarns is higher for thinner yarns and lower for thicker yarns. This continues in the subsequent step, in which yarn is either weaved or knitted into fabric. Thinner yarns generate more per kg impact when they are turned into cloth than thicker yarns do. This can have significant influence on the overall impact of textile production. Figure 2.2 might suggest that it would be better to consume textiles that are made from thicker yarns, as the impact of spinning and weaving is less significant for cloth made from thicker yarns. This is however not entirely true, and I will return to this point later.

2.1.3 Cloth production

Apart from yarn thickness influencing impact generated in the cloth production stage, it also matters which production process is followed. For turning yarn into cloth, the yarn is either woven or knitted. The choice between them is very significant in terms of environmental impact, as the environmental impact of knitting can be around a factor 20 lower than weaving (Van Der Velden et al., 2014). This difference is mainly the result of energy used in the two production processes. Just like with fibre production, best practices, in which less energy or a cleaner energy mix is used, could significantly reduce the impact of this production step.

2.1.4 From kilograms to garments

Up to this point I have discussed and referenced sources that express the environmental impact of clothing production in kilograms. But as consumers we do not wear kilograms of clothing, but we wear garments. The translation from kilograms to garments has some significant implications for environmental impact. First of all, for the production of garments cloth is transformed into garments. The cloth requirements for a certain garment are not expressed in kilograms, but rather in surface area. This has implications as depending on the production methods cloth can have different densities, meaning that a kilogram of cloth can have great

variation in surface area depending on the density. Figure 2.3 shows the implications this has on the environmental impact per surface area.

Yarn thickness (dtex)	Eco-costs (€/kg)	Density (kg/m ²)	Eco-costs (€/m ²)
70	4.508	84	0.379
150	3.439	180	0.619
300	2.971	361	1.072

Figure 2.3 Yarn thickness and Eco-costs per kg and Eco-costs per m² (adapted from Van Der Velden et al., 2014)

What the figure shows is that even though thinner yarns may lead to higher impacts per kilogram, the resulting cloth can be so much lighter that overall it is more sustainable. Figure 2.4 shows the significance this may have if also specific fibre properties are taken into account.

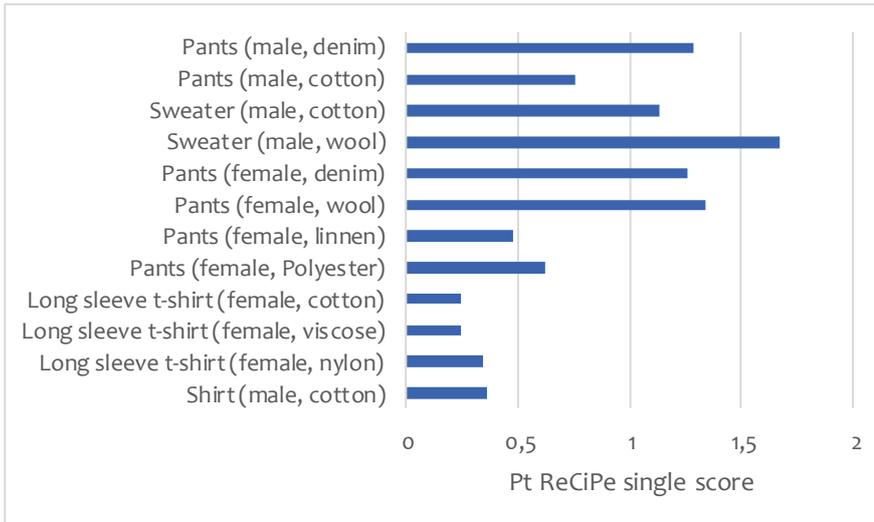


Figure 2.4 environmental impact per garment for different fibre types (adapted from Bijleveld & Bergsma, 2015)

What the figure shows is that, even though the fibre production is much more unsustainable, the difference between a woollen sweater and a cotton sweater is much less significant in terms of sustainability. The warm properties of wool allow for the production of lighter garments, which can thus also make up for the difference in environmental impact during fibre production.

2.2 Laundry practice

During the use phase of clothing environmental impact is the result of the related laundry practice. Within the laundry practice the main contributors are washing and drying, while ironing has limited impact. A breakdown of impact per kg of clothing for laundry processes is presented Figure 2.5.

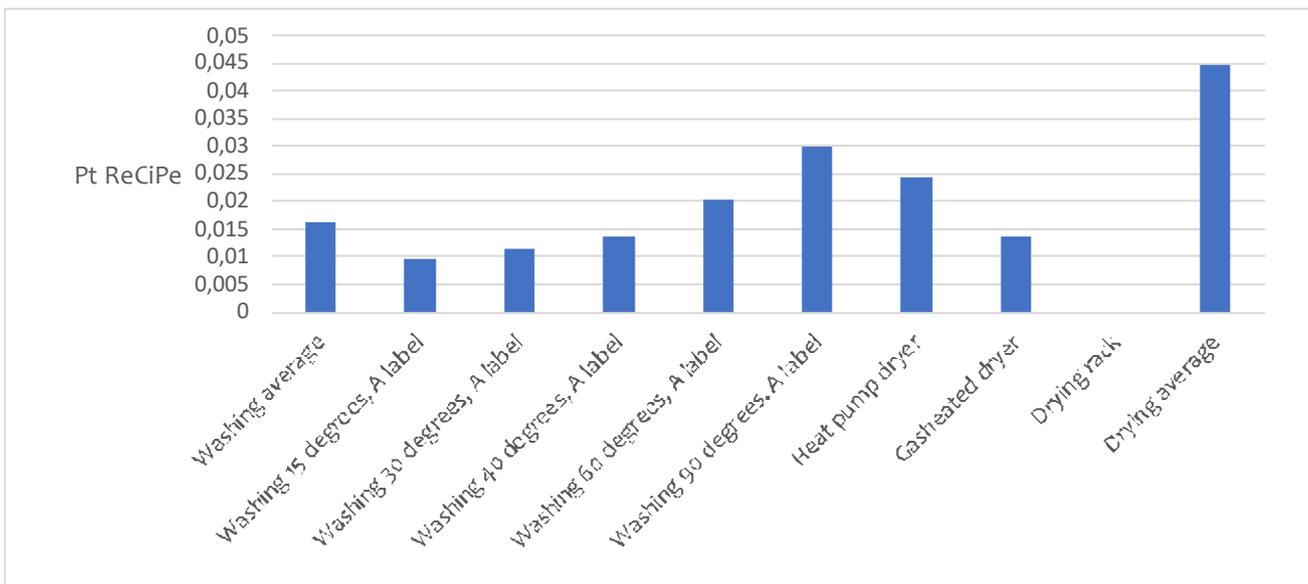


Figure 2.5 per kg environmental impact of different laundry processes on clothing (adapted from van de Vreede & Sevenster, 2010)

The breakdown in Figure 2.5 shows the environmental impact per kilogram of clothing for different washing programs as well as different drying technologies. For the washing programs the environmental impact is the result of energy use and the use of laundry detergent, like before water use is not represented in the ReCiPe method. The results for the different washing programs highlight the significance of consumer behaviour. Washing on 90 degrees generates 3 times the impact of washing on 15 degrees. Furthermore, the results in Figure 2.5 are based on an average washing load of 3,4 kilograms. If consumers would load up more clothing per washing cycle, the impact per kilogram of laundry would go down (van de Vreede & Sevenster, 2010). For the different drying technologies, the impact is completely related to energy use. The choice between programs is less significant for drying and therefore the impact generated by drying is mainly dependent on the type of technology that is used. Line drying does not require any energy input and consequently does not cause environmental impact. Even though technology plays a bigger part in determining environmental impact, consumer behaviour is still most significant for determining impact. If consumer hang their laundry to dry instead of putting it in a dryer than this results in a 100% reduction of environmental impact.

Even though these possible improvements in washing behaviour are interesting and of course also relevant for the environmental impact generated by clothing consumption, they fall outside of the scope of this research as they belong to another practice. What is interesting to consider is how environmental impact of the laundry practice is influenced by the practice of clothing consumption. In this respect, there are two subjects that I will discuss in more detail; the frequency with which clothing is put into laundry, and the fibre type of clothing put into laundry.

2.2.1 Frequency of laundry

Besides how laundry processes are performed, it is also very relevant for the environmental impact of the use phase how often laundry processes are performed. How often clothing is washed depends on when consumers decide to put their clothing in the laundry. Different types of clothing are worn and washed with different frequencies, leading to different use phase impacts for these different types of clothing (Yasin et al., 2016). Clothing that is worn directly on the skin is washed most often, and therefore has the relatively highest environmental impact during the use phase. Outerwear is washed the least and therefore has relatively little impact in the use phase (Steinberger et al., 2009).

2.2.2 Fibre types and laundry

Apart from the impacts specific to the laundry process there is another emission in the laundry process that is dependent on the fibre types of clothing. This issue is the contribution of the washing of synthetic clothing to the problem of the plastic soup. During the washing process clothing made from synthetic material releases synthetic fibres which are then washed away with the washing water. As these fibres are, up to this point, not reclaimed during wastewater treatment, they ultimately end up in natural water systems. As these plastic fibres do not degrade, they accumulate in natural water resources where they also enter the food chain. The washing out of synthetic fibres is a relatively recently discovered environmental problem. As a result the magnitude of the problem is not yet known. That it is a problem is however sufficiently determined. Essentially this means that all synthetic fibres cause an additional environmental impact in the use phase of which the effect is not known. There have been studies into the specific “emissions” of different types of fabric during washing cycles. From these studies two things come forward. First, fibre content in washing machine effluent is highest for acrylic textiles (Napper & Thompson, 2016). Second, effluent content also depends on fabric properties, fleece fabrics wash out more fibres than smooth synthetic textiles (Browne et al., 2011).

2.3 End-of-life

When discussing the total impact of clothing consumption over the lifecycle, the end-of-life phase stands out because it generates a negative environmental impact. This is because of resource and/or energy reclamation during waste management. In the Netherlands scenarios in which no resources or energy is reclaimed do not exist. Figure 2.6 gives an overview of different end-of-life scenarios as presented by van de Vreede & Sevenster (2010).

The three scenarios on the left do not happen in the Netherlands, but may be the result of clothing being reused in other countries and entering the end-of-life phase there. Beside them are two waste-to-energy scenarios, one of cotton and one of polyester. These are the most frequent scenarios in the Netherlands, as most clothing is thrown out with general waste (van de Vreede & Sevenster, 2010). It is important to note that cotton, and other fibres based on natural materials generate less impact than synthetic fibres if they enter waste-to-energy. This is because the carbon content of these fibres is biogenic and therefore does not contribute to climate change. Next to the waste-to-energy scenarios is the reuse scenario, which scores best-

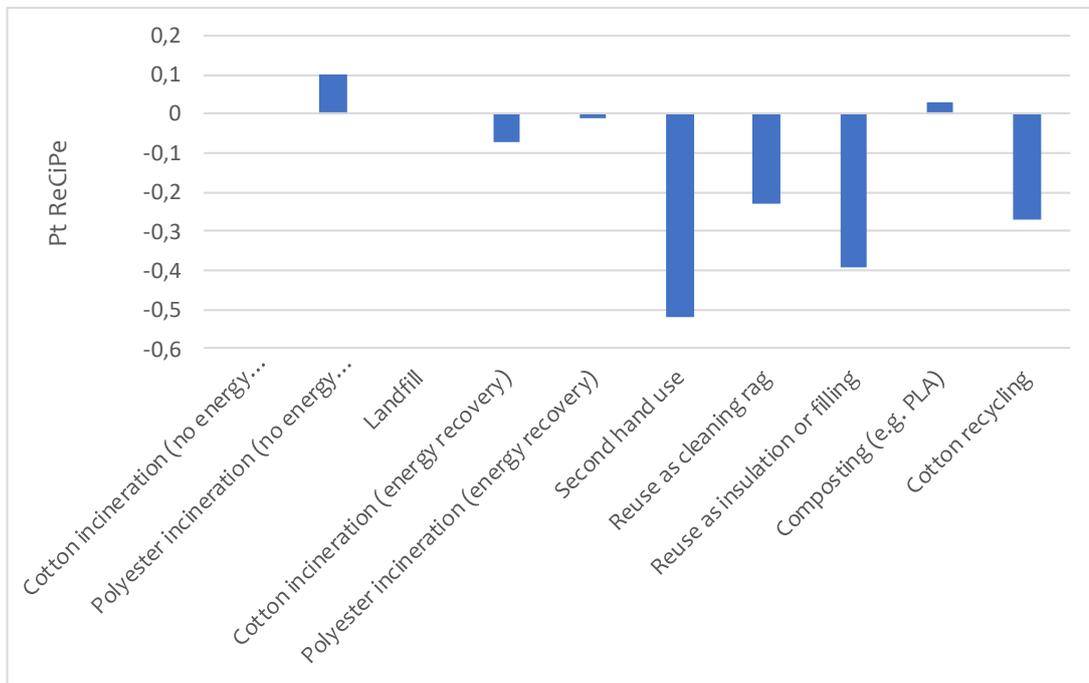


Figure 2.6 end-of-life scenarios of clothing consumption in the Netherlands (adapted from van de Vreede & Sevenster, 2010)

from an environmental perspective. In this scenario clothing is reused, and therefore displaces the manufacturing of new clothing. This is followed by two recycling scenarios, one in which clothing is downcycled to cleaning rags and one in which clothing is recycled into insulation material. That recycling into insulation material scores better, means that clothing recycling replaces a higher impact material than would be used for cleaning rags. All the way on the right is fibre recycling, in which the negative impact is the result of recycled fibres displacing virgin fibre production. With regard to the practice of clothing consumption the following topics are important in determining the environmental impact of the end-of-life.

2.3.1 Route

Consumers play a very important role in determining which end-of-life scenario is followed. Thus far, most consumers throw out clothing with general waste, which means that the waste-to-energy scenarios most frequently apply for the Netherlands. From all the scenarios taking place in the Netherlands, waste-to-energy is the worst in terms of environmental performance. For the other scenarios to occur consumers need to dispose of their clothing through the clothing bins/stores managed by charitable organizations and/or through commercial stores collecting old clothing. Reuse of clothing of course being the exception, as consumers can directly give or sell their clothing to other consumers.

2.3.2 Fibre types

In discussing Figure 2.6 I already mentioned the influence of fibre types on the environmental impact of waste-to-energy scenarios. This means that it is more sustainable if non-synthetic fibres enter the waste-to-energy route. Fibre type, however, also matters for the other scenarios as recycling schemes are designed for specific fibre types. For high recycling rates it is therefore important to have a relatively high share of garments made only from these specific fibre types.

2.3.3 Weight

In essence the size of the material flow into the end-of-life largely determines how much impact is generated or avoided. The more clothing that enters the end-of-life, the more material or energy that can be reclaimed. Displacing as such the impact that would have occurred in the use or production of other resources. This however does not mean that it would be most sustainable if everyone threw out their clothing. Like the reuse scenario it is most sustainable if consumers keep on using the garments rather than throwing them away. At the same time, if there is a surplus stock of clothing just laying around, having them enter end-of-life is more beneficial.

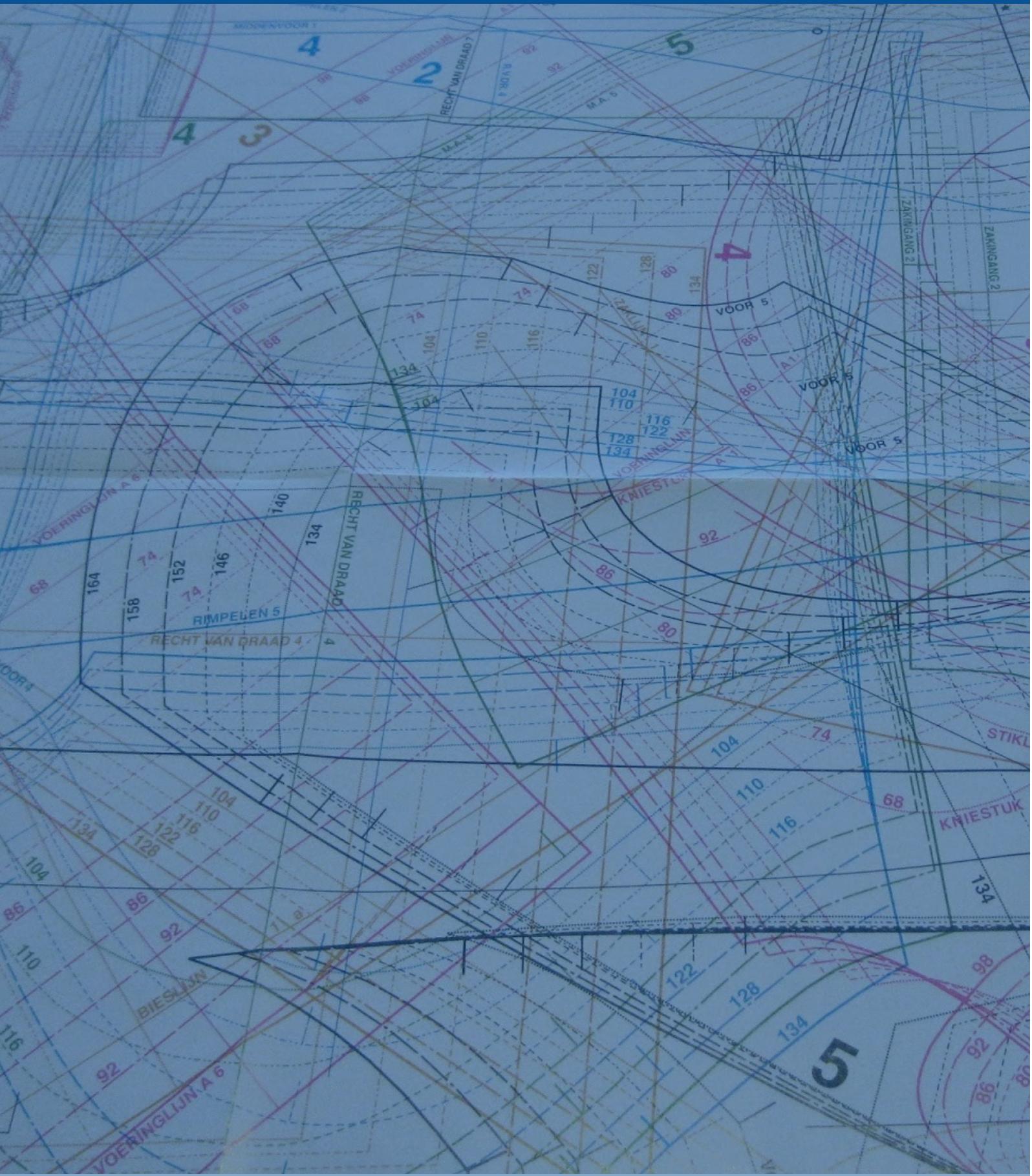
2.4 Conclusion

In this chapter the lifecycle impacts of clothing consumption were discussed. Within the discussion a distinction was made between three lifecycle phases; cradle-to-gate, use, and end-of-life. These three different phases were discussed separately as they distinguish the environmental impacts that occur before, during and after

clothing consumption practice. In discussing them separately the relative importance of the different phases in establishing overall lifecycle impact was not yet discussed. Careful reading of the axis of the figures already gives an idea of the relative importance of different phases in overall environmental impact. The impacts during the cradle-to-gate are in the order of 1 to 2 Pt ReCiPe, while the impacts of laundry are in the order of 0,01 to 0,04 Pt ReCiPe, and the end-of-life displays negative impacts ranging from -0,6 to 0,1 Pt ReCiPe. This suggests that the cradle-to-gate phase is most important in determining impact, and that laundry and end-of-life only play a minor role. Laundry impacts are however much more significant as they are recreated much more than the other impacts (garments are only produced and discarded once, while they are washed multiple times). The result of this is that laundry is actually responsible for about a third of overall impacts, with end-of-life bringing down the total, and cradle-to-gate being responsible for the remaining two-thirds of impact (van de Vreede & Sevenster, 2010).

This short discussion of relative contribution to overall environmental impact already highlights an issue that needs to be considered when incorporating LCA data into this research. The issue being that LCAs follow products, and more specifically functional units, throughout the lifecycle. As such LCA data does not directly translate to the environmental impact generated by Dutch clothing consumption practice. Therefore an understanding of how environmental impact of functional units relates to the impact of practice is needed. For this understanding time and volume are important factors. Impact should therefore be considered in terms of flows, amount of (functional) units over time. More on the incorporation of environmental impact flows in the practice analysis can be found in the conceptual framework. Before getting to this conceptual framework, however, the next chapter will first present a more detailed discussion of Practice Theory.

3. Practice Theory



When it comes to studying systems, different scientific disciplines offer a variety of concepts to do so. In Theories of Practice the analytical focus lies on practices rather than individual agency or overarching structure. Theories of practice have their roots in structuration. By introducing structuration theory Giddens (1984) tried to resolve the dichotomy between agency and structure. Where agency and structure can be placed at the micro- and macro-level of analysis, structuration and practice theories can be located at the meso-level (Warde, 2014). At this meso-level practices consist of both entities and performances at the same time. Practices-as-entities and Practices-as-performances are related through structuration as proposed by Giddens.

“Giddens’ structuration theory revolves around the conclusion that human activity, and the social structures which shape it are recursively related. That is, activities are shaped and enabled by structures of rules and meanings, and these structures are, at the same time, reproduced in the flow of human action.” (Shove et al., 2012)

This means that practices can be seen as dynamic entities that shape individual performances, while individual performances constantly recreate and maintain practices (Southerton, 2012).

Units of analysis

Practice theory as proposed by Shove et al. (2012) makes use of two units of analysis. These two units are Practice-as-entity and Practice-as-performances. These two distinct concepts are related through the process of structuration. Practice-as-entity, Practice-as-performances and structuration together form the basic building blocks of practice theory, as also depicted in Figure 3.1. I will discuss these main concepts of practice theory in more detail below.

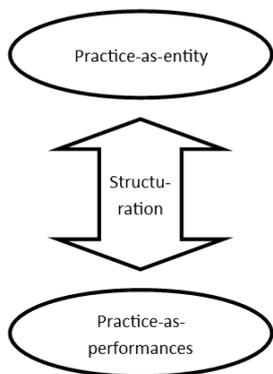


Figure 3.1 Basic building blocks of practice theory (own figure)

Practice-as-entity: every socially shared practice develops a shared practice-as-entity. This practice-as-entity is an intangible entity that is shared within the practice and which shapes how individuals enact practice performances. The practice-as-entity does so because it consists of shared conventions on what the practice is and what proper enactment of practice is. For instance, for the practice of skateboarding a shared convention on the dominant design of the skateboard determines what we recognize as being a skateboard. Furthermore, shared conventions on procedures such as how to propel oneself on the skate-board (kick-push) and how to perform tricks with the skateboard (ollie, kickflip, grinding) shape how individuals recreate the performances of the practice of skateboarding. In the examples I just gave the practice-as-entity remains intangible, and manifests itself by being embedded in the practice performances of individuals. The practice-as-entity can, however, also manifest itself in more tangible ways. For instance, by defining space in the form of practice infrastructure (e.g. skate parks) or as procedures become institutionalized in formal rules and regulations (e.g. assigning scores to the proper execution of tricks in skateboarding competitions). As such the practice-as-entity significantly shapes the practice performances of individual practitioners. In doing so the Practice-as-entity is also dependent on practice performances. Not in the sense that is dependent on any single practice performance, but the practice-as-entity requires the recreation of practice performances to exist. The practice-as-entity therefore does not only shape, but is rather also shaped by practice performances. I will discuss structuration, the process through which this happens, in more detail later. But first, I will elaborate on the practice-as-performances concept.

Practice-as-performances: the practice-as-performances concept describes the observable behaviour through which a practice is recreated. This is because the practice-as-performances concept consists of all the individual practice performances belonging to a certain practice. In the case of skateboarding, the practice-as-performances would consist of the performances of all practitioners ‘doing’ skateboarding. The practice-as-performances concept is therefore much less abstract in comparison to the practice-as-entity, as it describes

the full range or sum of what people actually do in practice. At the same time, all the individual performances are recognisable as belonging to a certain practice because of the embedded practice-as-entity (e.g. dominant design, procedures followed). They draw upon elements of the shared practice-as-entity, and in doing so reinforce this practice-as-entity. To give an example, a skatepark may be a tangible manifestation of the practice-as-entity, but it only maintains its significance if it is actually used for skateboarding. We can recognize skateparks as being skateparks, because we have observed people skateboarding in skateparks. That all practice performances share a practice-as-entity, however, does not mean that all practice performances are uniform and consistent. By distinguishing between practice-as-entity and practice-as-performances an analytical distinction is made between what is shared and what is actually done. This is useful, because there can be quite some variation in the individual performances that make up the practice-as-performances. They may vary in terms of practitioners (e.g. novice skateboarder vs. experienced skateboarder), space (e.g. skate park vs. public road), and time (e.g. during school hours vs. after school hours). The variation in practice performances in the practice-as-performances may be consistent with the shared practice-as-entity. In which case the recreation of practice performances supports a stable practice-as-entity. This is, however, not always the case, and variations in practice performances may lead to a change in the practice-as-entity. Understanding the structuration process through which both these concepts influence each other is therefore very important.

Structuration: in the process of discussing both the practice-as-entity and the practices-as-performances concept I have already touched upon structuration. As already referenced in the introduction of this chapter the work of Anthony Giddens (1984) outlining structuration theory, was instrumental in the development of practice theory. The main thesis of his work is that (social) structure is not external to human action but is actually recreated by it. As such social structure and human activity are recursively related. Social structures shape human activity, while human activity recreates social structures (Giddens, 1984). When it comes to practice theory the same basic principle of structuration theory applies, but instead of structure and agency the recursive relationship is between entity and performance. Understanding the process within this recursive relationship is key to understanding the dynamics of practice. At the same time, it is not a process that is easily conceptualized and Shove et al. (2012) actually more or less devoted an entire book to it. The conceptual framework presented by them does enable the study of the dynamics of practice by introducing a number of concepts. First, both the practice-as-entity and the practice-as-performances are both conceptualized as active integrations of elements of practice (Shove et al., 2012). This conceptualization allows for a better understanding of the mutual influence these concepts have as they are expressed in the same terms. Furthermore, it also guides what is looked at in structuration, which is the life and movement of the elements between and within the practice-as-entity and practice-as-performances. To understand this process the concepts of time, space, practitioners, and connections between practices are introduced. I will discuss these concepts in more detail below, and I will start with a discussion of the elements of practice.

Elements of practice

Practices-as-entities and Practices-as-performances are both still relatively abstract concepts. Because they are abstract concepts it is not possible to directly study them. This problem is overcome by not studying them directly, but instead focusing on the elements of which they are made of. To this end Shove et al. (2012) argue that practices consist of active integration of the elements materials, competences, and meanings:

“materials – including things, technologies, tangible physical entities, and the stuff of which objects are made; competences – which encompasses skill, know-how and technique; and meanings – in which we include symbolic meanings, ideas and aspirations” (Shove et al., 2012)

These elements are integrated when practices are enacted. Practices emerge, persist and disappear as links between these defining elements are made and broken (Shove et al., 2012).

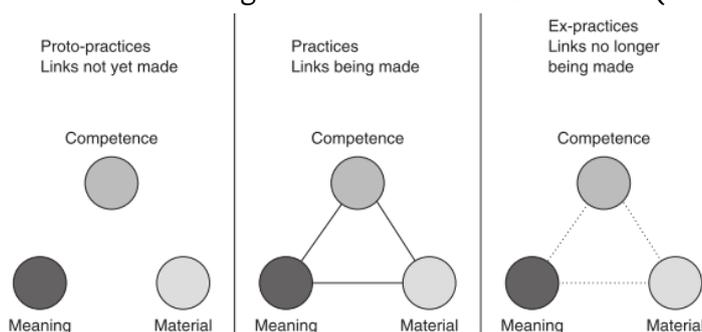


Figure 3.2 Proto-practices, Practices and Ex-practices (Retrieved from Shove et al., 2012)

Shove et al. (2012) emphasize that for a practice to emerge and exist there needs to be a conjunction of all three elements at once. They illustrate this point by looking at the practice of driving. For driving to exist as a practice you don't just need cars and roads (material element), but you also need the know-how and skills to operate the cars (competence element) and there also needs to be a purpose for driving (meaning element). Furthermore, these different elements then also need to come together to form the practice.

Through the use of elements as a concept the dynamics of practices can be identified and followed. These dynamics may be the relation between shared elements of the practice-as-entity versus the variation in practice-as-performances. For example, the practice-as-entity of driving can be identified by the shared elements of the road infrastructure, cars dominant design, traffic rules, and the morning commute, while practice performances may vary according to the make and model of cars that are driven, the specific competences of drivers, and the route they take. Furthermore, the use of elements also allows for identifying and following relations between practices. This can be through elements that are shared by practices, roads are not only used for the practice of driving, but also for public transportation, cycling, and playing. However, it can also be the travel of elements from one practice to another or even towards a newly emerging practice (e.g. elements from skiing and skateboarding coming together to form snowboarding).

The example of snowboarding illustrates how novelty in practices may originate through the elements of practice. Novelty is however not limited to newly emerging practices, but can be found in any practice. As practices develop over time the elements of which they are composed may change. At the same time the elements shape each other, so the introduction of novelty in one element may result in changing the other elements of the practice as well. Novelty in the elements of a practice may be the result of an element travelling from one practice to another, but it can also be the result of developments within the practice.

Structuration

The importance of elements for analysing the dynamics of practice has been made clear. The elements of practice however do not just exist in a vacuum, they exist in space and time, and because they are 'carried' by practitioners (Shove et al., 2012). The concepts of space, time and practitioners are therefore also important for understanding the dynamics of practice. They are helpful for understanding how a variation of practice-as-performances results from a shared practice-as-entity, and furthermore they are crucial for understanding how practices develop. Therefore, how space, time, and practitioners influence practices will be discussed below.

Space

Space as resource

Practices require space for their performance. The spatial requirements of practices, however, are not defined as a physical area. Instead space can meet spatial requirements by providing access to all the necessary elements for the enactment of a practice. This space can be physical, virtual or a combination of both. Spaces are defined by the practices that are enacted in them. Houses are for instance designed to accommodate for the variety of practices performed at home (kitchen, bathroom etc.). As practices develop they redefine the space in which they are enacted. Kitchens used to be designed as separate rooms, but as the practice developed they are now designed as open kitchens to allow for social interaction. It is important to note that space is not consumed by a practice. For instance, streets in neighbourhoods are defined as being sites for the practice of driving, but can also be a site for children to play during the day when there is no traffic. In the same sense, space defined by houses can also be redefined by other practices as living practices no longer take place.

Space as location

Practice-spaces have a certain geographical location. This location in which practices are enacted conditions the way in which practices are performed. Locations may constrain practices through physical limits and through pre-existing practices and the traditions, meanings, material infrastructures and competences associated with them. Therefore, locations constitute uneven landscapes of possibility. As a result, the development of practice performance may vary between different locations.

Travel of elements in space

For practices to persist the elements of which they are made need to be able to travel. In order to travel, elements need a medium through which they are able to travel. Space provides the necessary medium to facilitate the travel of elements. The elements of practice may travel directly from practitioner to practitioner, in which case space just needs to enable practitioners to be in the same space. Elements, however, may also travel less direct, in which case elements need to be 'packed' for travel. This can be literally packing materials for transportation through physical space, but also competences and meaning can be 'packed' through codification and then travel through both physical and virtual space. For successful travel it is important that

there are practitioners on the receiving end that are able to ‘unpack’ the element. Meaning that there should be practitioners with skills and/or tools necessary for unpacking.

Time

Time as resource

All practices need time for their adequate performance. At the same time there is only limited time in a day. Therefore, time can be conceptualized as a finite resource for which practices ‘compete’. Time is however not a homogenous resource; some practices require specific timing (and not just time) for their performance. For instance, having dinner is something that is generally performed at a specific timing; the evening.

Scheduling and synchronization

As practices cannot all be performed at once their performance needs to be divided over time. Therefore, practices are scheduled throughout time (day, week, month, year etc.). A weekday of any practitioner may consist of a number of daily routines; after waking up a morning routine is performed, the morning routine is followed by some daily occupation, the daily occupation is followed by an evening routine, the evening routine is followed by a before-bed routine, which is in turn followed by going to bed. For this practitioner the daily occupation may have very specific time requirements (including travel time). As a result, the practitioner needs to leave the door at a certain time, meaning that the morning routine needs to be completed by that time. As a certain duration is needed to properly perform the practices of the morning routine the alarm is consequently also set a specific time.

This scheduling is complicated even further as practitioners are generally not dependent on just their own schedule. His or her schedule needs to be synchronized with the schedules of others as well. If a practitioner has a family, going to work may be combined with dropping the kids off at school or evening dinner may be scheduled such that everyone can be there at the same time. Scheduling may also be dependent on other organizations or practitioners. Doing grocery shopping may not have a very specific time requirement for a practitioner but it is limited by the opening hours of the stores he/she goes to.

Practices over time

Practitioners perform a number of practices every day and they are limited in the number of practices they can perform at the same time. As a result, not all practices are continuously performed. Meaning that there is time between the performance of practices and consequently that there are times in which the practice as entity is not recreated. Even though these practices are not continuously recreated they are able to persist in time. They are able to do so because the elements of which the practice consists do persist over time.

Practices make time

The last relation is the most abstract, namely that practices actually make time. This is not time as we know it in the objective sense but rather in the subjective sense. The way we experience time is dependent on the practices we participate in. During the weekend we perform other practices than during the week and as a result time is experienced differently.

Practitioners

Practitioners as human resource

Like space and time practices need practitioners to exist as a practice. These practitioners are the ‘body/minds who “carry” and “carry out” social practices’ (Reckwitz, 2002, p. 256; Shove et al., 2012). To be reproduced practices need populations of more and less faithful practitioners (Shove et al., 2012). As people are not capable of undertaking every possible practice it is crucial for practices to capture and maintain a population of practitioners.

Networks and communities

Individuals as carriers of practice exist in space. This space and mainly the social relations existing in this space influence the way practices are carried out by individuals. For an individual the family he/she is born in to, the historical development of practices in his/her location, and social networks are important for which practices are encountered and which are actually carried and carried out.

In mapping social relations of practitioners onto space a distinction can be made between social networks and communities of practice. Social networks overlap and extend the boundaries of individual practices, allowing for elements to travel between practices and for individuals to encounter new practices. Communities are, however, formed around performances of a shared practice, communities and practices constitute each other and communities are therefore important for the development of a practice.

Careers

Individuals as carriers of practice of course also exist in time. As practitioners, individuals take part in practice performances. Over time practices and practitioners have a dynamic relation, processes of sharing and learning transform both practitioner and the practice. These transformations of practitioners and practices can be understood with the notion of careers.

The notion of careers applies to individuals as well as collective practices. Individuals start off as novices when recruited to a practice, as they develop skill and expertise through practice performances their future practice performances are redefined. At any time, the collective practice will be populated by practitioners that are at different individual career stages, and therefore will be recreated by a variety of practice performances. Depending on the dynamics and relations between more and less experienced practitioners the careers of individuals and the collective practice are developed and redefined.

Connections between practices

Practices do not exist in isolation, instead any one practice coexists with the numerous practices that make up everyday life. Practices can link with one another to form inter-practice relations, but not all practices necessarily link and influence each other. When they do link up a distinction can be made between bundles and complexes.

Bundles are loose-knit patterns based on practices co-existing and co-locating. This can be because they share infrastructure (bathroom) or because they belong to a lifestyle (shared meaning). In doing so practice within the bundle may influence one another, but they do not become dependent on each other.

Complexes are more integrated combinations of practices. Within these integrated combinations practices become dependent one another, either because they need to be enacted in sequence (anaesthesia before surgery), they need to be synchronized with each other (different practices coming together when docking an oil tanker) or because they are performed in proximity to each other (different practices enacted through smartphones).

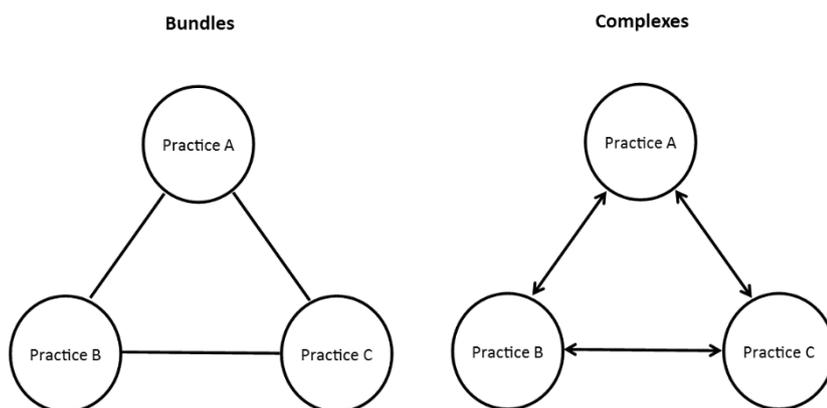


Figure 3.3 Left: Bundles - no dependent relations, Right: Complexes - dependent relations (retrieved from Shove et al., 2012)

What now remains is the nature of the influence that practices have on each other in inter-practice relations. Two different types of relations can be distinguished; **collaborative** and **competitive**. When practices have a collaborative relation they support the re-enactment of each other. For instance, a football match is often followed by a few drinks afterwards, playing sports is followed by socializing, which benefits team spirit but also provides revenue for the football club. When practices have a competitive relation they compete for the same resources. For instance, cycling and driving compete for the same resources. Both inhabit the same space (roads), compete for the same practitioners (commuters). Practices can also compete for time, as different recreational practices vie for a limited amount of 'free' time.

4. Conceptual framework



In the preceding chapter I introduced the practice theory concepts that are used in this research. In this conceptual framework, I will discuss how the concepts are applied in this research. I will do this for the two empirical parts of the research, the practice analysis and the alternative form of practice analysis. Besides the application of the practice theory concepts I will also discuss how environmental impact is considered in the analysis.

4.1 Practice Analysis

Before discussing the different segments of the practice analysis, I must first define what I consider to be the practice of clothing consumption in the Netherlands. In the introduction and in the discussion of the environmental impact of clothing in different lifecycle phases I already referred to a definition of practice that results in environmental impact being placed outside of practice. For a research that takes a specific interest in the environmental sustainability of practice this might seem odd and therefore I will explain why I chose to do so.

In principle when it comes delineating practice one can choose for any definition of practice as long as it is a recognizable entity that can be discussed (Shove et al., 2012). Which offers quite some degrees of freedom when defining practice. In this research, I have chosen to define clothing consumption practice as everyday dressing practice in relation to other practices that have environmental significance. Meaning that I put this everyday dressing practice in relation to production of garments used in practice, the waste treatment of garments after use in practice, and the laundry performed during use in practice. This means that I look into the relations between everyday dressing practice and these others, but will not discuss these other practices in detail. The flow of elements of practice to and from these others is thus considered, without going into detail on how these other practices are performed. My reason for taking this research scope is that in everyday dressing practice clothing is put to its intended use, while the other practices are in service to this dressing practice. By focusing on the functional practice, I hope to develop insight that may help to redefine relations with the other practices in order to reduce environmental impact.

Practice-as-entity

Figure 4.1 gives a visual representation of what the goal of this part of the analysis is. The Practice-as-entity is conceptualized as consisting of multiple sets of elements (meaning, material, competence). The goal of analysing the practice-as-entity is to develop these sets of elements. This means identifying which meaning elements belong to the shared practice-as-entity of clothing consumption and subsequently identifying their corresponding material and competence elements. Ultimately this leads to every meaning corresponding to one set of elements (e.g. fashion set is made up of one meaning, competence, and material element).

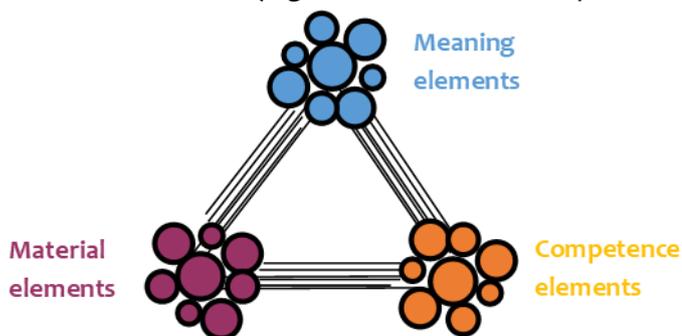


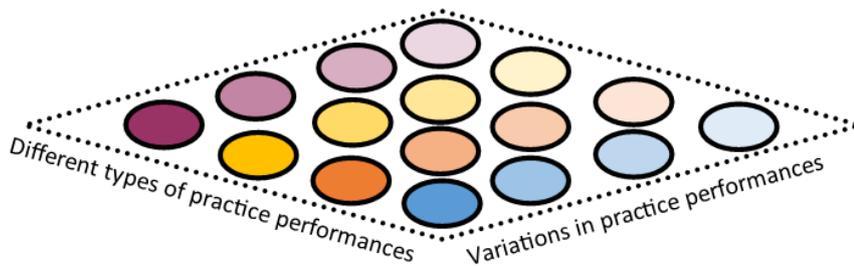
Figure 4.1 visual representation of practice-as-entity as a collection of multiple elements and multiple links (adapted from Kuijer, 2014)

Structuration

The structuration segment more or less forms the bridge between the practice-as-entity and the practice-as-performances. It does so by discussing how the dimensions of structuration, Space, Time, Practitioners and Connected practices, influence the manifestation of the elements of the practice-as-entity in practice-as-performances.

Practice-as-performances

Practice-as-performances represent the actual observable behaviour of individuals partaking in the practice. Considering the amount of individuals that partake in the practice of clothing consumption in the Netherlands, directly observing and describing their Practice-as-performances is impossible. Instead the analysis will focus on explaining the full range of practice performances that are re-enacted in the Netherlands by discussing the axes displayed in Figure 4.2.



Practice-as-performances

Figure 4.2 visual representation of different practice-as-performances along two axes (own figure)

In the development of these two axes, the analysis will first focus on developing an understanding of the different types of performances that make up the practice of clothing consumption. After this has been done, the next part of the analysis can focus on developing an understanding of what variations of these different types of practice performances exist in the Netherlands.

Different types of practice performances:

The first step is to determine what the different types of practice performances are. Essentially meaning determining which performances make up the daily dressing routine, as well as the performances through which this daily dressing routine relates to other practices. The next step is to determine which elements of the Practice-as-entity shape which types of practice performances. Lenneke Kuijer again has a very nice visualisation of this as can be seen in Figure 4.3. Not all the elements that make up the Practice-as-entity always manifest themselves in all performances, there will be performances in which they do, and there may very well be performances in which they do not.

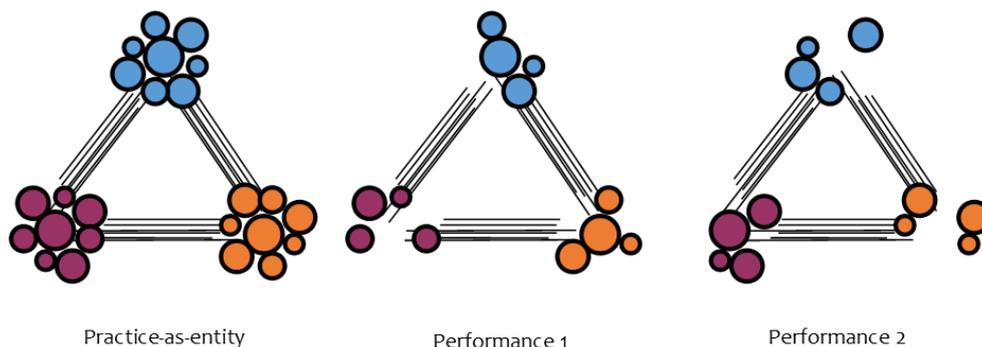


Figure 4.3 manifestation of different elements shared in the Practice-as-entity for different performances (adapted from Kuijer, 2014)

Variations in practice performances:

In Figure 4.2 variations in practice performances is depicted as a single axis. This however does not mean that variation of different types of practice performances only occurs on a single dimension. Instead the variation of different types of practice performances is actually the result of multiple dimensions and therefore the axis should be understood as a multidimensional axis. The variables that will be considered for this axis are, variation across practitioners, variation across space, and variation across time. These three correspond to the concepts also discussed in the conceptual framework. Analysing variation in different types of clothing is very relevant as the elements of practice manifest themselves in different ways for these different types of clothing.

Environmental impact of practice

The clothing consumption practice as studied includes environmental impact taking the relations between dressing practice and impact generating practices into account. When it comes to discussing the environmental impact of practice and how alternative forms of practice may provide potential sustainability improvements it is therefore important to discuss how these relations should be understood within the conceptual framework. From an environmental point of view the practice of clothing consumption can be understood as the stocks and flow model represented in Figure 4.4. The flow coming from preceding practice, the flows exchanging with laundry practice, and the flow going to succeeding practices have environmental significance (all flows denoted in blue). When considering these flows in this conceptual framework of practice theory they correspond to certain practice performances. To include environmental impact in the practice analysis and in the subsequent analysis of alternative forms of practice it is therefore important to discuss how the recreation of these performances contributes to environmental impact.

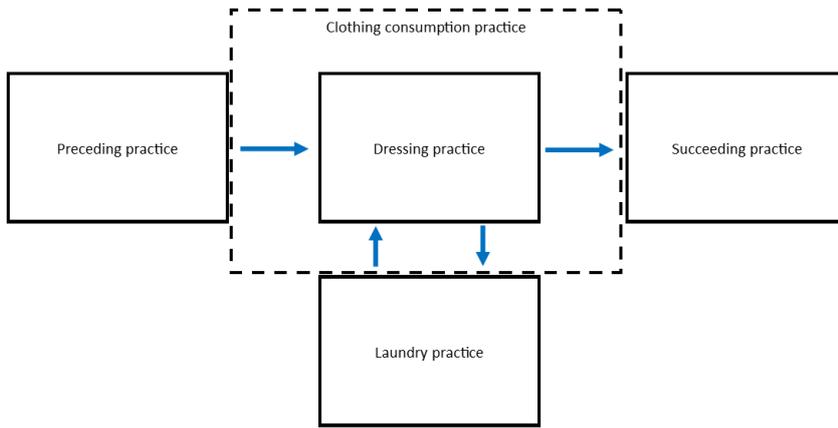


Figure 4.4 stocks and flows representation of practice (own figure)

4.2 Alternative forms of practice

The alternative forms of practice are not conceptualized as existing outside of the practice of clothing consumption. Instead alternative forms of practice should be understood as a subset of practice. This subset of practice deviates from normal practice as elements not within the practice-as-entity manifest themselves and/or as the circulation or travel of elements is restructured. Leading to practice performances that are distinctively different from *normal* practice.

Facilitators of alternative forms of practice

As the practice performances belonging to alternative forms of practice are distinctively different from normal practice they need facilitation in order to be recreated. If there is no facilitator providing the requisite novel elements, or facilitating the restructured circulation of elements, the recreation of the alternative forms of practice would be impossible. To put it simply, if no one ever opens a clothing library it is impossible to become a member and borrow clothing. Facilitators therefore play an important role in providing and/or facilitating the circulation of elements needed for the alternative form of practice. Besides the elements of practice, the facilitators also structure the alternative form of practice in Space and Time through the way they choose to facilitate. Therefore, as part of the analysis of the alternative forms of practice, the role of the facilitators will be analysed as well. In this analysis, the following concepts will be discussed.

Elements of practice facilitated

This first concept is concerned with the elements of practice the facilitator provides to practitioners. Either through directly offering them, or by facilitating the circulation of elements. These elements will in part be the recreation of shared elements of the practice-as-entity of clothing consumption, but also in part be specific to the alternative form of practice facilitated by them. Therefore, an understanding of the elements of practice that are provided by the facilitator needs to be developed. Meaning, identifying manifestations of shared elements of the practice-as-entity in the elements they provide, as well as identifying elements belonging to the alternative form of practice.

The influence of space on facilitated practice

This second concept is concerned with the role space plays in the way the alternative form of practice is facilitated. In the conceptual framework space is discussed as being a resource, a location, and a medium for the travel of elements. An understanding of the way space influences the facilitation of the alternative form of practice needs to be developed. This means, developing an understanding of the spatial requirements relative to traditional practice, identifying the locations inhabited by the facilitator, and identifying the way how the elements that are provided by the facilitator travel through space.

The influence of time on facilitated practice

The final concept is concerned with the role time plays in the way the alternative form of practice is facilitated. In the conceptual framework space is discussed as being a resource, sequencing and scheduling, a concept which is created through practice and a concept through which elements need to endure. An understanding of the way time influences the facilitation of the alternative form of practice needs to be developed. This means developing an understanding of the temporal requirements of the alternative form of practice facilitated, developing an understanding of the timing employed by the facilitator, and developing an understanding of how the elements provided by the facilitator are influenced by time.

Practitioners of alternative forms of practice

Practitioners need to integrate the elements supplied by the facilitators in their practice performances. The alternative forms of practice only exist if they are recreated by practitioners. Practitioners are therefore very influential on what the alternative forms of practice consist of. Even though the facilitators supply elements necessary for the recreation of the alternative forms of practice, they do not have a monopoly on supplying or circulating elements. Instead the elements that make up individual practice performances can originate from a great variety of sources, and are to some extent also carried by the practitioners. This inevitably means that variation in the way individual practice performances are enacted exists. This individual variation, is still shaped by the shared practice-as-entity, and more importantly by the socially shared alternative form of practice. The latter being the main interest in these case studies. To get an understanding of the alternative forms of practice and their recursive relation with practitioners, information on the following concepts needs to be gathered:

Relation between individual practice performances and the shared practice-as-entity

The second concept is concerned with how the practice performances of individual practitioners are shaped by the practice-as-entity. This is relevant because not all practitioners enact the practice of clothing consumption in the same way. Therefore, the way their individual performances are structured by the practice-as-entity may very well differ as well. Meaning that different elements of the practice-as-entity may manifest in their enactment of practice performances. Consequently, leading to different levels of clothing consumption. Which is relevant from an environmental point of view. But, also for the influence the alternative forms of practice may have on their practice performances. The way their individual performances are shaped by the practice-as-entity through structuration therefore needs to be determined.

The range of practice performances enacted by individual practitioners

The practice of clothing consumption consists of multiple practice performances for each individual practitioner. This first concept is therefore concerned with the range of practice performances that make up the practice of the individual practitioners. This means developing an understanding of the different types of practice performance enacted by individual practitioners in terms of the elements of practice that are integrated in these performances. Furthermore, an understanding of how performances and the elements of which they are made vary in terms of space (e.g. home vs. workplace), time (e.g. seasons), and type of clothing (underwear vs. coats) needs to be developed.

Performances of alternative form of practice

The final concept is concerned with determining the elements that belong to the alternative form of practice. Up to this point the concepts have all been concerned with the practice performance of individual practitioners. This final concept is concerned with the alternative form of practice that is shared by them. The aim of this concept to develop an understanding of the elements that are shared in the alternative form of practice. Meaning, identifying which meanings, materials, and competences are recreated by the different individual practitioners, which are not accounted for by the general practice-as-entity, but are nevertheless shared by the practitioners' subject in this research.

Analysis of alternative form of practice

In the preceding two sections I conceptualized how the recreation of alternative forms of practice can be understood on the basis of facilitators and practitioners. Ultimately however, this research is interested in practices rather than people. In this last section, therefore the way the alternative forms of practice are analysed will be conceptualized. In terms of concepts the analysis will consist of the elements of practice that manifest in the recreation or the alternative form of practice and the structuration of performances in the alternative form of practice. I will discuss these concepts in more detail below.

Elements that manifest in the recreation of the alternative form of practice

Any practice or form of practice needs the integration of elements of practice in order to exist. It is therefore important to analyse which elements of practice are integrated and manifest themselves in the recreation of the alternative form of practice. These might be elements belonging to the normal practice-as-entity, but also elements that are specific to the alternative form of practice. While analysing these elements it is also important to consider where these elements originate.

Structuration of performances in the alternative form of practice

Besides identifying which elements make up the alternative form of practice it is also important to consider how structuration influences the recreation of performances belonging to the alternative form of practice. This means considering how the alternative form of practice (as it is being facilitated) is bounded in space and time, and how this influences the recreation of the alternative form of practice.

5. Methodology



To be able to answer the research questions several research methods need to be employed. The methods used in this research will be discussed in more detail below. The discussion is structured into the three segments that follow in the remainder of the report.

Practice Analysis

The practice analysis consists of three segments; Practice-as-Entity, Structuration, and Practice-as-performances. Within these three segments of the analysis different 'parts' of the practice are analysed. As these parts have different characteristics the research methods used for them is different as well, main difference being that practice-as-performances describes observable behaviours, while the practice-as-entity and structuration do not. In discussing the research methods used for the practice analysis I will therefore make a distinction between the practice-as-entity and structuration on the one hand, and the practice-as-performances on the other.

Literature research: both the practice-as-entity and the structuration segment are based on literature research. In doing so they both use a similar set of literature sources discussing clothing consumption. The distinction between them is established in the analysis, as the analysis for the practice-as-entity focussed on identifying the elements of practice that make up the practice-as-entity, while the analysis for structuration focusses on the influence of space, time and practitioners on the manifestation of these elements. Also for the practice-as-performances segment literature research was performed. The literature researched however differs as it is more focussed on accounts of actual observable behaviour. The literature is often very much linked to one particular practice performance, disposal, dressing etc., and therefore provides valuable insight for the analysis of the Practice-as-performances.

Data gathering & analysis: as the practice-as-performances describes a large amount of individual behaviours it is supported by an analysis of data on Dutch clothing consumption. This data on the one hand stems from Dutch statistical sources, but as not for each type of performance data was available also some primary data gathering was performed. This primary data gathering consisted of reviewing the clothing on offer in web shops, and analysing web fora discussing laundry and disposal. The first of these was mainly aimed at developing an account of which types of clothing enter practice, and in what relative proportions. The second data analysis also aimed to develop an understanding of which elements of practice manifest in the respective performances as well as insight into flow size differences. To this end a more inductive approach of data gathering and analysis was applied. The different data analysis performed can be found in the appendix.

Case Studies

The case study approach was used to develop the main empirical results of this research. This is so because within the case study section insight into alternative forms of clothing consumption practice is developed. With regard to the overall research aims, insight into how alternative forms of clothing consumption relate to normal clothing consumption practice needed to be developed. The case study approach necessarily means that a case selection has been made, and therefore not all possible alternative forms of practice have been taken into account.

Case selection: As this study was aimed at alternative forms of practice and their role in clothing consumption, cases of alternative forms of practice needed to be selected. In the conceptual framework I gave a definition of alternative forms of practice which implied that an alternative form of practice needs to be facilitated for its existence and recreation. For the case study selection this meant looking for facilitators of alternative forms of practice. To this end a number of different options were identified and contacted. Not all the possible case studies identified were willing and able to cooperate. As a result I had to be pragmatic and settle for two different types of case studies; the clothing library and the clothing swaps.

Recruitments of respondents: The recruitment of respondents for the case studies more or less was a two-step process. These two steps also correspond to the two roles, facilitator and practitioner, researched in the case studies. The first step in recruitment is to find facilitators willing to cooperate in this research. This in itself proved a bit harder than expected as the initial picks either declined my requests or simply never responded. After some time, I managed to contact the facilitators now part of this research. Which completes the first step of respondent recruiting. The facilitators also played an important role in the second step of the recruitment. After I had interviewed the facilitators I asked them if they could help me recruit the practitioners of the alternative forms of practice. They then send out my request to their clients or participants. As the possible population of respondents was limited the second wave of recruitment was based on convenience sampling, which meant that all who responded to my request were also interviewed for this research.

Interviews: The data gathering in the case studies consisted of two rounds of interviews. In the first round, facilitators of the alternative form of practice were interviewed. This was followed by a second round in which the practitioners that practiced the alternative form of practice were interviewed. For both groups of respondents, a semi-structured interview approach was followed. The subject and therefore the protocols of these interviews however differed. The interview protocol for the facilitators was aimed at gathering data on the elements of practice facilitated, structuration in space, and structuration in time. A number of directed questions were developed for each of these three subjects, and these questions were supplemented with probes. The interview protocol for the practitioners was significantly different. The interview protocol consisted of three parts. In the first part respondents were asked to discuss their daily life, in the second part respondents were asked to discuss their clothing routines, and in the final part respondents were asked to discuss their participation in the alternative form of practice. The interview protocol consisted of three open questions to get respondents started for each of the three parts, and as they were talking probes were used. Both interview protocols as well as transcripts of the interviews can be found in Appendix B, D & E. In total eleven interviews were conducted over the course of six weeks. An overview of the conducted interviews is given below.

Case study	Respondent	Date	Place
Bij Priester clothing library	Facilitator	20-04-2017	The Hague
Bij Priester clothing library	Respondent 1	05-05-2017	Haarlem
Bij Priester clothing library	Respondent 2	06-05-2017	The Hague
Bij Priester clothing library	Respondent 3	09-05-2017	The Hague
Bij Priester clothing library	Respondent 4	14-05-2017	The Hague
City centre clothing swap	Facilitator	11-05-2017	Rotterdam
Old north clothing swap	Facilitator	19-05-2017	Rotterdam
City centre clothing swap	Respondent 1	23-05-2017	Rotterdam/Delft [by phone]
Old north clothing swap	Respondent 2	23-05-2017	Rotterdam
City centre clothing swap	Respondent 3	24-05-2017	Rotterdam
Old north clothing swap	Respondent 4	31-05-2017	Rotterdam

Table 5.1 Overview of conducted interviews

Coding and Analysis: The semi-structured interview method is aimed at gathering as much relevant information as possible. In doing so the gathering of information is not entirely structured. Which means that information pertaining to one of the particular concepts outlined before is not condensed in one part of the interview, but was spread out in fragments over the whole interview. Before being able to analyse how the concepts of interest applied, the information that was gathered in the interviews first needed to be structured. This structuring of the information was done through coding. This coding involved labelling phrases, sentences, and/or sections according to their relevance to the different concepts of interest. For the coding I printed out the transcripts and used a number of differently coloured markers to highlight segments belonging to different concepts. The different fragments of information were then sorted according to the labels that were assigned to them. These different fragments were then analysed and integrated to fill out how the concepts applied to the facilitators and practitioners

6. Practice analysis



The purpose of the practice analysis is to develop an understanding of how the variation of practice performances as enacted in the Netherlands are the result of elements shared in a practice-as-entity and structuration in space, time, and among practitioners. In this analysis, this understanding will be developed by first discussing the elements that make up the practice-as-entity, followed by discussing how structuration influences how these elements manifest in space, time and among practitioners, before discussing how the difference in the manifestation of these elements leads to the variation in practice performances that make up clothing consumption in the Netherlands. I will start the analysis by discussing the practice-as-entity of clothing consumption in the Netherlands.

6.1 Practice-as-entity

In this discussion of the Practice-as-entity of clothing consumption in the Netherlands different sets of elements (meaning, material, competence) are identified and discussed. These different sets of elements are divided into two layers that make up the Practice-as-entity; a functional layer, and a symbolic layer. This division into two layers of elements is based on whether the meaning element in the sets of elements is of a functional or a symbolic nature. Sets with a functional meaning element are attributed to the functional layer and sets with a symbolic meaning element are attributed to the symbolic layer. The division into two layers is not just made to distinguish between consumer culture and related research traditions, and a more recent interest in inconspicuous consumption. But furthermore, the distinction also helps to understand the practice of clothing consumption in the Netherlands. For now, I will first discuss the actual sets of elements that make up the two layers, starting with the sets of elements that make up the functional layer. Like the division into two layers, the discussion of sets of elements will centre around meaning elements, which will be complemented with their corresponding competence and material elements.

6.1.1 Functional layer of Practice-as-entity

As mentioned above the functional layer of the practice-as-entity of clothing consumption consists of the associated functional meanings. For these functional meanings corresponding competence and material elements are identified and discussed below. The point of departure for this discussion of the functional layer of clothing consumption will be the three domains of daily life discussed by Elizabeth Shove (2003ab): Comfort, Cleanliness, and Convenience. As it turns out these domains are very comprehensive with regard to discussing the functional layer of clothing consumption. Within the three domains meanings specific to clothing consumption are discussed. I will start the discussion with the domain of Comfort.

Comfort

Comfort can on itself be considered a meaning element which is reflected in the material properties of clothing and the competence used in the fabrication of clothing, as well as consumer performances of appropriating clothing for comfort. Comfort is however not such a straightforward meaning that all its dimensions can be covered by one set of elements. Instead I will therefore discuss three distinct meanings of comfort separately; thermal comfort, sensorial comfort, and body movement comfort.

Thermal comfort

Shove (2003ab) discusses comfort in relation to temperature regulation in buildings. This is also the basic function of clothing, as clothing provides a layer of insulation that helps regulate body temperature. The amount of insulation that clothing needs to provide to maintain thermal comfort depends on the environment in which the wearer of clothing is in. This shows in the material element of clothing consumption. As temperatures change with the seasons the clothing that is worn adjusts to these temperature changes. Clothing worn in winter needs to provide more insulation than clothing worn in summer, and the type of clothing that is worn is therefore different. Apart from seasonal changes in temperature people also switch environments more directly. As we step outside we go from an indoor environment to and outdoor environment. Often this coincides with a decrease in temperature, and we therefore have a specific type of clothing (jackets/coats) to adjust to this change. The example of jackets/coats illustrates that a part of the competence element of maintaining thermal comfort is embedded in clothing itself. By having coats for different seasons, it is relatively easy to adjust to different temperatures for thermal comfort. Nevertheless, people still need to have the know-how to adjust their outfit to weather conditions. The elements of practice for thermal comfort are:

Meaning: free from discomfort from the body needing to produce or being unable to release heat to maintain body temperature

Material: heat regulation properties, insulation or ventilation, of clothing items or outfits

Competence: knowing how to assemblage outfit to achieve thermal comfort

Sensorial comfort

Sensorial comfort is related to how clothing feels when it touches the skin. In relation to sensorial comfort, clothing is comfortable when it does not feel prickly, tickling, rough, raggy, scratchy, itchy, picky, clammy, damp, wet, sticky, sultry, non-absorbent, or clingy (Roy Choudhury et al., 2011). Essentially meaning that clothing is comfortable when it does not produce a feeling of discomfort when it touches the skin. Sensorial comfort is therefore achieved when only materials that do not cause discomfort, are worn directly on the skin. This is also reflected in the material element of the practice. The types of clothing that are worn directly on the skin are generally made of relative soft/smooth textiles. For instance, men's underwear is made from cotton and not from wool. How clothing feels on the skin is however also dependent on the activity of a person. What is comfortable when someone is passive and not sweating may not be comfortable when the same person does a sports activity and is sweating. This shows in the materials used for sports clothing which are different from the materials used in normal clothing. As a result, the competence element for sensorial comfort is largely embedded in the clothing offered by the system of provision. Nevertheless, to avoid sensorial discomfort people still need to have the know-how to not wear a coarse woollen sweater on the naked skin. The elements of practice for sensorial comfort are:

Meaning: free from discomfort resulting from clothing touching the skin

Material: tactile surface properties of clothing

Competence: knowhow of which materials cause discomfort

Body movement comfort

Roy Choudhury et al. (2011) define body movement comfort as the ability of a textile/garment to allow freedom of movement to the wearer. This type of comfort is again easier to explain negatively. Clothing provides body movement comfort when it does not hinder the freedom of movement of the wearer. The meaning of body movement is also reflected in material element of clothing. The dominant designs of clothing all provide some degree of body movement comfort, allowing the wearer to move the different parts of his/her body. Whether this body movement comfort that is provided in general clothing design is sufficient is dependent on the situation the wearer is in. For instance, a business suit may provide sufficient body movement comfort when going to the office, but may lack in body movement comfort for other activities such as running. In the case of running the business suits' lack of stretch or its fit may cause discomfort in moving. To avoid this discomfort, the wearer would need another set of clothing more suitable for running. To achieve this, the wearer depends on the competence of the system of provision for designing garments appropriate to running and his own competence of knowing what to wear when he/she goes running. The elements of practice for body movement comfort are:

Meaning: free from discomfort resulting from clothing inhibiting body movement

Material: Fit, stretch and slip properties of clothing

Competence: knowing how to assemblage outfit to prevent discomfort in moving

Cleanliness

The meaning of cleanliness has changed over time (Shove, 2003b). In the nineteenth century cleanliness was related to hygiene, cleaning was a means to maintain health and wellbeing (Menger, 2007). This meaning of cleanliness was advocated by hygiene doctors following Pasteur's micro-organism theory (Geels & Schot, 2007). Over time, the meaning however shifted to cleanliness becoming associated with fragrance (Shove, 2003b), cleanliness meaning freshness instead of hygiene. The rise of freshness as a meaning associated to cleanliness has not completely displaced the meaning of hygiene. Therefore, I will discuss both meanings and the associated sets of elements of practice below.

Cleanliness as hygiene

This first meaning of cleanliness is in essence truly inconspicuous. The bacteria and other elements that can cause harm to human health are not visible to the human eye. Which of course has significance for the set of elements of which make up cleanliness as hygiene. The meaning of cleanliness as hygiene is again best explained negatively, hygiene means to prevent clothing from getting unhygienic, to prevent clothing from becoming mediums in which diseases can develop and spread. Whether or not clothing, the material element, is unhygienic depends on the level of dirt and bacteria accumulated in the clothing items. The competence element, therefore consists of preventing clothing from becoming unhygienic by taking out the dirt and bacteria through cleaning. It is important to note that the manifestation of these elements is very much shaped by convention. Practitioners cannot observe hygiene directly, and therefore rely on conventions on what

acceptable levels of exposure to dirtiness are and on procedures that ensure that dirtiness is removed. In the structuration part I will return to this point. The elements of practice for cleanliness as hygiene are:

Meaning: preventing the spread and development of disease through keeping clothing clean

Material: level of dirt and bacteria that has accumulated in clothing items

Competence: knowing how and when to clean clothing

Cleanliness as freshness

While being clean has received significance through cleanliness as hygiene, the development of cleaning practices has made hygiene less relevant. Being clean has become the acceptable norm, and complying with this norm has become a meaning in its own right. This is where cleanliness as freshness comes in. Compared to cleanliness as hygiene, cleanliness as freshness is more conspicuous in its nature. Not in the sense that one's freshness in clothing can stand out in a crowd. But rather in the sense that a lack of freshness in clothing might get noticed. A lack of freshness could signal that someone is unclean, while in contemporary society being clean is the norm. This is because, through the way cleaning practices have developed, fragrance has become associated with being clean (Shove, 2003b). As clothing is worn it collects (bodily) odours through which it loses its freshness. Cleaning is then needed to restore the freshness of the clothing. This results in the following set of elements. The meaning element of freshness is smelling fresh to signify cleanliness. The material element then consists of the odours accumulated by clothing. The competence element is knowhow of how to remove odour from clothing. The elements of practice for cleanliness as freshness are:

Meaning: smelling and/or looking clean/fresh

Material: lack of odour and stains accumulated in clothing

Competence: knowing how and when to remove odour and stains from clothing

Convenience

Within her work on comfort, cleanliness and convenience Shove discusses convenience mainly in relation to technological devices that enable modern consumers to live their lives with a reduced need for scheduling or planning (Shove, 2003a). Even though, with regard to our everyday lives these devices are very influential, it is important to also consider the more traditional meaning of convenience when it comes to clothing consumption. In this traditional sense convenience is the reduction of time or effort needed to do something (Shove, 2003a). This traditional meaning of convenience manifests in the material element of practice through the inclusion of convenience technologies and the placement of these technologies in clothing and infrastructure. The competence element of convenience is for a large part embedded in the techniques used for the material element, but what is convenient is also influenced by the skills carried by practitioners.

Meaning: reduction of required time and/or effort

Material: technology applied in clothing and infrastructure

Competence: technique embedded convenience technology and skill level of practitioners

6.1.2 Symbolic layer of Practice-as-entity

In the symbolic layer of the practice-as-entity of clothing consumption in the Netherlands the emphasis shifts from functional attributes to symbolic attributes of clothing. Therefore, in the symbolic layer of the practice-as-entity the symbolic meanings associated to clothing consumption will be discussed. For these symbolic meanings corresponding competence and material elements are identified and discussed below. The first step is however to identify the meaning elements belonging to the symbolic layer. Considering the vast amount of research literature available discussing the symbolic meanings of clothing consumption the challenge was to distil a limited number of meanings that would still be comprehensive. This resulted in four meaning elements, looking good, custom, style and fashion, heading four sets of elements. Within the symbolic layer of the practice-as-entity the meaning elements are expressed as functions of taste. The usefulness of doing this will become apparent in the remainder of this research. I will start the discussion of the symbolic layer with the set of elements belonging to looking good.

Looking good

For the lack of a better word the first discussion of elements of practice from the symbolic layer is centred around the concept of looking good. In this discussion, I define looking good in terms of the aesthetic relationship between clothing and the body. Clothing in this respect offers tools to present one's body in a certain way. Through wearing clothing people can construct how their body appears to others by creating a

'look'. In doing so clothing may emphasize positive features and/or camouflage negative features (Tiggemann & Lacey, 2009). Whether or not, an assemblage of clothing items looks good depends on a taste of how the dressed body should look. The meaning of looking good is therefore an expression of this taste. Looking good is not just a meaning, it needs to be reflected in the material and competence element as well. For the material element looking good is related to the visual fit of clothing. This visual fit is a function of the visual properties of clothing in relation to the body, such as the way clothing is cut. Whether these visual properties are properly appropriated for achieving a good look depends on knowhow of how to achieve this. Therefore, the elements of practice for looking good are:

Meaning: taste of how the dressed body should look

Material: visual properties of clothing in relation to the body (colour, cut, fit, etc.)

Competence: knowhow of how (an assemblage) of clothing can make you look good

Style

The concept of style can be interpreted in a variety of ways. Sophie Woodward (2009), for instance, sees style as a specific set of clothing designs, and as such fashion shops introduce new styles as they introduce new fashion designs. In this understanding a style can be very fleeting, being gone as the next 'style' is introduced. Jukka Gronow (2009) instead argues that style is distinct from fashion because styles are not trendy, but rather traditional and conservative. In this sense style still relates to sets of clothing designs, but rather than being styles on their own, they are artefacts through which styles can be expressed. This leads to another understanding of style, in which style is more of a lasting phenomenon. According to Patrik Aspers style is a "multidimensional self-referential aesthetic system" that is recreated over time (Aspers, 2006; Aspers & Godart, 2013). In doing so styles function as cultural references which can be used to characterize objects of clothing consumption (Aspers & Godart, 2013; Gronow, 1993). Therefore, through styles clothing worn by different cultural groups can be characterized. The question then remains who these cultural groups are.

According to Dick Hebdige (1979) style is a subcultural phenomenon. Subcultural groups develop styles as forms of refusal by which they distance themselves from the mainstream culture. In doing so they attribute a meaning of refusal into objects they can use to distinguish themselves from others (Hebdige, 1979). The use of the subculture concept and its emphasis on resistance to mainstream culture has received significant criticism (Bennett, 1999). The use of the subculture concept implies coherent and fixed groups of people, whereas this does not reflect reality. People are not bound to subcultural groups, but instead can affiliate themselves with different cultural groups. These cultural groups are not fixed and are formed at sites of collective expression. People adhere not to the other people forming a group but rather the state of mind and/or lifestyle expressed at the collective site. As such people come together in cultural activity in the form of neo-tribes, in which they are not forced but they choose to become affiliated because of taste, aesthetics and affectivity (Bennett, 1999). Within these loosely defined groups shared tastes and aesthetics form the basis for the development of a self-referential aesthetic system, or style. Different social groups develop different styles, reflecting the differences in the appropriation of taste within them. Therefore, the elements of practice for style are:

Meaning: shared appropriation of taste in social groups

Material: clothing designs or assemblages associated with the style

Competence: knowhow of what the style is and how to recreate it

Custom

In general custom is about recreating traditions, doing something because it is tradition. These customs gain their significance from being shared within social groups, and these groups uphold norms for their recreation. In the general sense customs are very much similar in nature to practices. In this research I therefore define a more specified meaning of custom. In this analysis, I understand the meaning element of custom as a prescriptive norm or collective convention of taste on dress. In doing so I acknowledge that custom is not a singular thing, there are multiple different customs that different people/practitioners adhere to. These different customs draw on additional meaning elements for their recreation, for instance professionalism for the business suit, or religion for religious dress. What these different customs, however, share is that what is considered appropriate to wear is not shaped by a free development of shared taste, but by the custom itself.

Custom reflects itself in the material element of practice through the associated clothing designs. What these associated clothing designs are may vary. In the example of the business suit, custom is associated with a specific type of clothing, but the configuration of the business suit may still vary in terms of colour or other properties. Depending on the convention shared in the custom, the associated clothing design can be stricter

(uniform), or looser (carnival costumes, or wearing orange on Kingsday). The basic competence element for custom is know-how of what the custom is, while specific customs also require additional skills (e.g. being able to tie a tie). The elements of practice for custom are:

Meaning: collective taste convention on dress

Material: clothing designs or assemblages related to custom

Competence: knowhow of what the custom is and how to recreate it

Fashion

When it comes to the meaning of fashion there has been a long history of theory development in academics. I will therefore start the discussion with the trickle-down theory of fashion (Veblen, 1899; Simmel, 1904 [1957]; Aspers & Godart, 2013). This trickle-down theory is based on the concepts of social distinction and imitation. An elite-class selects a fashion to distinguish themselves from lower classes, the lower classes in turn imitate the fashion of the higher classes, leading fashion to trickle down the class pyramid. As fashion trickles down the elite-class needs to select a new fashion to be able to keep up social distinction. Resulting in a process of continuously changing fashions. This trickle-down theory of fashion has been subject to significant criticism, one of the most influential critiques was written by Blumer (1969). In his 1969 article Herbert Blumer argues for a shift from class differentiation to collective selection in fashion theory. He formulates it as follows:

“The fashion mechanism appears not in response to a need of class differentiation and class emulation but in response to a wish to be in fashion, to be abreast of what has good standing, to express new tastes which are emerging in a changing world.” (Blumer, 1969)

As such the elite-class does not set the direction of fashion, but is subject to it. Fashion does not change because the elite-class feels a need to reassert social distinction, but instead fashion changes to meet a developing collective taste. Fashion is about a collective selection mechanism in which fashion consumers independently from one another select from a range of designs the ones that reflect proper taste (Blumer, 1969). In doing so a new fashion reflects the developing collective taste of fashion consuming social groups. Each fashion on its own is a period in time when a taste for a specific range of clothing designs prevailed. This is therefore also the meaning element of fashion; prevailing taste in novel clothing designs. The inclusion of novel in the meaning element of fashion highlights the temporal characteristic of fashion.

After having established the meaning element of fashion, the next step is to discuss the corresponding material and competence elements. I will start with the material element of fashion. Foley (1893) argued that fashion is about change and social distinction. According to Foley, therefore every fashion is likely to contrast the preceding fashion. To speak in her terms, each new fashion selects a class of materials, forms and colours that is distinctively different from the previous fashion. However, the extent to which the fashion contrasts the preceding fashion is mitigated by what Foley calls ‘the resisting influence of habit’. So even though fashion aims to contrast, the change process follows a development of variations along a same line of choice (Foley, 1893). Jukka Gronow (2009) gives a summation that illustrates what these variations can be:

“... eternally repeating cycles of new designs with broader or narrower, shorter or longer legs of trousers, bigger or smaller buttons, longer or shorter haircuts, blue or yellow colour tones, and so on.” (Gronow, 2009)

This summation by Gronow is of course not complete. There are many more elements on which clothing design can vary. The takeaway however is that even though fashion continuously changes as time goes by it does not result in ‘real’ change in the design of clothing. The basic shapes, forms and materials used remain the same. What does change are features of clothing design which are recreated in the fashion. The material element of fashion therefore consists of recurrent features of clothing design related to the fashion.

Which brings me to the last of the elements of practice, the competence element of fashion. The competence element of fashion is fairly similar to that of style, you need the knowhow to know what the fashion is and how to recreate it. As fashion is also very much a process in which what is or is not fashion constantly changes a further competence needed to be in fashion is the skill to anticipate fashion. Therefore, the elements of practice for fashion are:

Meaning: prevailing taste in *novel* clothing designs

Material: recurrent (elements of) clothing designs belonging to fashion

Competence: know-how of what the fashion is and how to recreate it

6.2 Structuration

In this part of the chapter I will discuss how the elements that were described for the practice-as-entity manifest themselves and are maintained through structuration. For this discussion, the usefulness of the division between a symbolic and a functional layer becomes clear. In this discussion of structuration I will focus on how space, time, and practitioners influence the manifestation of these elements.

The elements belonging to the symbolic layer of the practice-as-entity of clothing consumption have been expressed as functions of taste. In this discussion of the structuration of the symbolic elements I will therefore primarily focus on the structuration of taste, rather than emphasizing the individual elements. With regard to taste there are a number of things to highlight before going into the discussion of structuration. First off, taste plays a role in aesthetic appreciation by practitioners and as such influences what is considered beautiful (or not). Shared tastes can do so because aesthetic appreciation is based on processing information loads (Axelsson, 2011). The information loads for clothing consist of the object of appreciation, the garments, and the context in which they are presented, space, time, practitioners. Tastes offer structures that help and shape how information loads are processed by individuals. This is mostly because familiarity can be important for processing information load, and for instance the preference for prototypes model of aesthetic appreciation emphasizes how we appreciate information loads that are closer to a mental prototype of how it should look (Axelsson, 2011). On the other hand, a certain degree of complexity also adds to our appreciation, either by the level of detail in the information load, or the novelty within it. Furthermore, processing capabilities, which can be structured by tastes, differ from one person to another, and as such differences in appreciation are inevitable (Axelsson, 2011).

This last point automatically leads to the next thing to consider when discussing taste. Which is that there is no such thing as objective taste. The development of tastes is not leading to an ultimate taste that appreciates the items of most beauty. Instead there is a plurality in equally valid tastes (Meyer, 2000), which can develop endlessly without objectively becoming better or worse. Having made these statements on taste, I will now start the discussion of the structuration of the symbolic elements of practice.

6.2.1 Space

In the theoretical framework, a number of ways through which space influences the structuration of practice were discussed. Below I will discuss how space as resource, space as location, and space as a medium for the travel of elements influence the manifestation of the elements of practice belonging to the functional layer.

Resource

With regard to the elements of the functional layer space as a resource is important as clothing needs to be stored. This storage of clothing has spatial requirements which need to be met as the manifestation of elements depends on them. For manifestations of comfort clothing needs to be stored in an accessible space in anticipation of changes from one environment to the next or from one activity to another. Depending on temporal conditions this means that clothing is stored in a wardrobe, on a coatrack, or in a bag. To take a summer coat as an example, it is stored in the wardrobe during winter, on the coatrack when at home during summer, and on a warm summers day in a bag until the evening. For manifestations of cleanliness similar spatial requirements apply, clean clothing needs to be stored until wearing, and dirty clothing needs to be stored until laundry. In between being clean and dirty clothing may also smell a little stale, which can be treated by having a space for airing the clothing. While for clean (wardrobe) and dirty (laundry basket) clothing defined spaces exist, there often is no space, or at least no defined space for airing out clothing. The lack of such space means that manifestations of cleanliness as freshness through airing out clothing are less likely to occur. Convenience is less dependent on spatial requirements for manifestation, but manifests in the location of storage spaces. Wardrobes are generally located where dressing performances take place, laundry bins where undressing takes place, and coatracks near the door, to facilitate a transition from indoor to outdoor and vice versa. How location influences the functional elements of practice will be discussed further below.

When it comes to the context of aesthetic appreciation space is an inevitable requirement. In the most simple form because the objects of appreciation exist in space. But also with regard to taste because clothing needs a space to be seen in. Tastes require social spaces for their recreation, because expressing tastes through our dressing only has significance if it is to be seen by others. Within particular social spaces our dressed bodies become objects to be looked at, while if we are in spaces such as the home they do not (Entwistle, 2015). In other words, whether or not looking good, fashion, style or custom means anything depends on the spaces we enter. When it does (social spaces), then these spaces matter as tastes, what it actually means to look good for instance, differs between different spaces. There are spaces that place greater emphasis on custom, spaces

that emphasize style, and spaces that emphasize fashion. Each of these individual elements requires spaces in which their meaning is given significance.

Location

With regard to the elements of clothing consumption practice, location influences practice in two distinct ways. These are location as the environment in which the dressed body is in, and the location of clothing on the body. I will discuss these two ways in which location influences the manifestation of elements of practice below.

Different locations in space constitute different environments meaning that different practice performances are needed to achieve thermal comfort. Of the six factors that determine whether thermal comfort is achieved, four are related to the environment one is in. These are air temperature, air movement, humidity, and mean radiant temperature (Yu, 2011). To achieve thermal comfort, the insulation and/or ventilation provided by the clothing worn by practitioners needs to be adjusted to these environmental factors. This is important as the environmental factors of thermal comfort are not uniform across space. Proper enactment of practice therefore means that practitioners adjust their clothing to the space they are in. Examples of this adjustment are adding an extra layer of insulation, coats, when going from an indoor environment to an outdoor environment. But you could also consider more distant travels, where Dutch consumers adjust their entire outfit when going on a beach holiday in warmer countries. The first case is an example of elements travelling directly through space, being worn by consumers leaving or entering an indoor environment. In the second example, the elements (literary) travel in a packed form, the suitcase is packed with materials which are adjusted to the information packed in a weather forecast for the holiday destination. In a similar way location also matters for sensorial comfort. The environmental conditions of the location one is in, influence skin moisture content, which in turn influences sensorial sensitivity, changing how sensorial comfort is perceived (Das & Alagirusamy, 2011). Besides influencing different meanings of comfort, location as the environment practitioners are in also influences the development of cleanliness. This can either be because the environment houses bacteria, dirt and odour that accumulates in clothing, but also as the environment is a space in which a particular level of activity is recreated, which influences the dirtiness instilled on clothing by practitioners themselves.

Locations matter for the manifestation of the symbolic elements of practice as each location influences which tastes are recreated. There can be spaces in which a more or less coherent taste is recreated. There however, can also be spaces/locations in which a plurality of tastes is recreated, which as a result means that none of the individual tastes is able to gain particular significance. On a more general level these mixed social spaces still can express some degree of shared taste. This because cultural regions can develop more general conventions on for instance looking good. When considering space as location, looking good varies between cultural regions as to what the socially defined 'Golden proportion' of body shape is (Yu, 2011). Miller & Woodward (2007) for instance, discuss how in Brazil an emphasis on the female buttocks has led to altering the design of jeans to become 'bras for the bumbum'. Other cultural regions emphasize other aspects of the body. For instance in Western culture cleavages are emphasized, while in Asian culture the opposite is pursued (Yu, 2011). In a similar vein, there is at a more general level the custom to appear dressed. Even though this custom may differ in the sense that being dressed on the beach is different from being dressed in a shopping street, there is still the underlying custom to be dressed (Entwistle, 2015).

When it comes to sensorial comfort location needs to be considered in terms of the environment near the body. Clothing inhabits this near body environment and the location different items of clothing take up in this environment is important in determining sensorial comfort. Sensorial comfort is about the relationship between skin and clothing. However, not all items of clothing are located directly on the skin. If a clothing item is located such that it only touches another item of clothing, it does not influence sensorial comfort. All clothing items that are located directly on the skin however, do influence sensorial comfort. When clothing does touch the skin, the location on the body where the clothing meets the skin also is important. Not all parts of the skin are equally sensitive to fabric prickliness, itchiness, roughness etc. The skin on the legs for instance has higher thresholds for discomfort than the skin on the abdomen (Das & Alagirusamy, 2011). Which of course influences which types of materials are tolerated on which parts of the body. The location on the body is also relevant for manifestations of cleanliness. Over the course of a day a human body releases bacteria and sweat that accumulates in clothing. As these bacteria are transferred through the skin most bacteria and sweat is accumulated by clothing items that are located on the skin. Furthermore, there are certain locations on the body in which release a higher concentration of bacteria and sweat; armpits, feet, genital region. Location on the body also matters with regard to the placement of convenience technologies. These technologies, such as zippers or buttons, are often placed on garments that require more frequent putting on or off. The placement

of these technologies is such that they reduce the effort or time needed to take off or put on these items of clothing. For instance, when considering pants, they often have some form of fastener technology located at the fly, reducing the effort needed for bathroom visits.

Travel of elements in space

When it comes to the integration of the elements of practice, travel of elements can be considered in two ways. On the one hand, elements of practice travel on bodies as they are worn. When it comes to the first type of travel elements of practice are integrated into an outfit that is worn on the body, and because they are already on the body they can manifest throughout the day. For instance, pants with a zipper may be an element of convenience that is part of an outfit that is put on in the morning, travels on the body, and can manifest in the case of bathroom visits. On the other hand, the material and competence elements can travel in packed form before being integrated in the enactment of practice. This second type of travel can for instance be the clothing that is stored in a suitcase for a holiday. Which is packed, taken along on a travel, to be integrated at a later point in time. Another (typical Dutch) example would be storing a raincoat in your bag, that can then be put on when it starts to rain.

Besides being a necessary resource, social spaces are also sites for the recreation of tastes. This means they are spaces in which elements of the symbolic layer of practice are recreated and circulated from one practitioner to another. As such it is through the travel of elements in social spaces that practitioners acquire meaning and competence. For instance, when it comes to custom in the workplace, it is through learning, by visiting the social space, that practitioners become carrier of meaning and competence, and become able to recreate the custom. At the same time, this custom is also very much situational and connected to the social space in which it is recreated. A group of colleagues may very well recreate a formal custom at the office, but forego this custom when they meet for a weekend barbecue. This is because the custom, and also tastes in more general, acquire meaning within contexts and social relations (Aspers & Godart, 2013).

Besides this direct travel of elements in social spaces, indirect travel also plays an important role in the development and recreation of tastes. This is because information loads can be captured in images. In doing so the symbolic elements of practice can also be packed into images. These images become available for interpretation in both physical as well as virtual spaces through media. This has a number of consequences for the development and recreation of tastes. Mainly because accessing tastes is no longer bound to physical spaces. This means that for instance alternative styles can be encountered through images and online communities that would not have been encountered in physical space. As such the recreation of styles can become less dependent on people meeting in physical social spaces. Another consequence is that the images that are circulated do not represent reality. This because images can be altered, photoshopped, but also because images can unevenly be distributed, with images representing the *good life* being circulated more (Featherstone, 2010). These images influence the development of looking good and fashion, as they present clothing in attractive contexts. Which can result in unattainable standards of looking good. But also fuels the development and recreation of fashions as images of a previous fashion are easily replaced with images of the next fashion.

6.2.2 Time

Resource

Different performances belonging to the clothing consumption practice have temporal requirements for their completion. As such time is a necessary resource for the recreation of practice performances. With regard to the recreation of the functional elements of practice temporal requirements also influence their manifestation. To put it simply, the proper re-enactment of the functional elements takes time, which means that comfort or cleanliness standards may not be achieved when one is stressed for time. Like space, tastes also require time for their recreation. When tastes are not recreated in time they lose their significance. For instance, customs need to be recreated in time or otherwise their meaning and necessary know-how of the custom will fade.

Over time

When it comes to the manifestation of the elements of practice over time a number of things need to be considered; the development of weather over time, the development of technology over time, development of shared systems over time, and the development of society over time.

Development of weather

As already mentioned within the discussion of space outdoor environments offer four out of the six factors that determine whether thermal comfort is reached. Furthermore, environmental conditions also influence the manifestation of sensorial comfort. These factors affecting comfort however change over time. This happens

on different temporal scales. This can be weather changes during the day, whether or not it rains or the sun breaks through the clouds, but also temperature differences throughout the day (day/night). The weather however also changes from day to day, going from a sunny to a rainy day for instance. On a yearly basis, seasonal changes very significantly impact the environmental factors, winter requiring the most insulation, while summer may require the opposite with ventilation. You might even consider even longer temporal scales, and include the way climate change impacts the environmental factors of thermal and sensorial comfort. Besides these comfort manifestations the development of weather over time also influences the manifestation of cleanliness. This mainly has to do with the production of sweat by the bodies that enter outdoor environments throughout the year. Because of the higher temperatures in summer people are more likely to sweat at higher rates, which influences the cleanliness of clothing in such a way that it loses its freshness sooner than in winter.

Development of technology

One important technology that has developed over time is our ability to regulate the indoor climate. Our ability to regulate the climate of indoor environments has developed to such an extent that we are able to live most of our lives in *thermo-neutral zones* (Holmer, 2011). This means indoor environments that are kept at 20-25 degrees Celsius. That indoor environments are kept at these thermos-neutral zones has however not always been as normal as it is today. Such strict regulation of indoor temperatures was fuelled by the development of technology. As climate control technology developed over time, our ability to control indoor environmental factors improved. Which also lead to questions regarding the optimal temperature for indoor environments. Ultimately leading to the convention for indoor climate we have today (Shove, 2003b). The research into comfortable indoor environments was however not conducted with naked people, but with people who had a layer of clothing on. To be able to be comfortable in the indoor environments practitioners therefore need to have appropriate clothing on with the insulative value used in the research. As such technological development has defined a norm for comfortable indoor temperature and correspondingly what is normal to wear (Shove, 2003b; Shove et al., 2012).

The most important technological development with regard to the recreation and development of taste is the internet, and subsequently social media platforms. These developments have extended the space of our daily lives with virtual space. Within this newly gained virtual space the availability of images expressing taste and the accessibility to different tastes has significantly increased.

Development of shared systems

One group of such systems are the size systems that are used to class different items of clothing. These systems have been developed at a certain point in time and selected some sort of measurement to classify clothing into size groups. The measurements that were selected at one point in time still influence current day clothing consumption as the size systems are recreated over time. This has implications for the manifestation of body movement comfort in current day practice. For instance, when it comes bra sizes a system was developed in 1935 which classified bra sizes according to circumferential measurement of full bust and under bust. Even though these are not adequate for finding the right bra in terms of body movement comfort because it disregards the complex 3d geometry of breasts, the size system is still recreated in current day (Yu, 2011). If you fall outside of relatively standard shapes accommodated by the size system, it will therefore be hard to find a proper garment. This also applies to other size systems such as pant sizes, or suit sizes.

Development of society

In discussing technological developments, I already mentioned the development of thermal comfort convention over time. There are however more conventions of the functional elements of practice that have developed over time. Among them is the development of cleanliness conventions over time. If it was not for a hygiene movement in the 19th century we may not have had the standard of cleanliness that is practiced nowadays. If we however consider the advised procedures and the conventions embedded in them of that time it becomes clear that the convention on cleanliness has significantly developed to a much stricter convention. McIsaac (1909) advises that the school clothing of children should be aired during the weekend.

With regard to the development of society and the manifestation of symbolic elements two things need to be discussed. The first one being the way taste formation has changed as a result of a developing society. This is because the way taste formation manifests itself has developed over time. Traditionally taste formation was seen as a top down process, legitimate taste was determined by upper classes and then followed by lower classes (Meyer, 2000). Considering the example of the corset, it was a garment which was initially only worn by the upper (leisure) classes, before diffusing to lower classes as well (Veblen, 1899). Following this diffusion, the

upper classes altered their taste and stopped wearing the corset altogether in a timespan of two generations (Veblen, 1899). The corset example illustrates an aristocratic typology of taste formation, in which looking good is defined by an elite class. Since the time of the corset, however, a lot has happened, and the aristocratic typology of taste formation does not explain current day taste development. In part because classes are not uniform in taste, and the taste of younger generations may be quite opposed to the taste of older generations (Bourdieu, 1984). Even more so as taste formation is not limited to elite classes, but rather each class is able to develop authentic taste (Meyer, 2000). And going even beyond pluralistic taste formation, to a point where taste is no longer a demarcation of class at all (Meyer, 2000; Purhonen et al., 2011). Even though the aristocratic model of taste formation may have been quite fitting at a particular point in time, the developments that led to our postmodern society diminished its value in explaining the development of taste to the full extent. Instead our current society allows for the development of multiple tastes.

Besides changing the way tastes are formed, the development of society also changes the context in which tastes are developed. A society that is more casual in its context influences the way customs are recreated (Shove et al., 2012). Styles are often developed in reference to larger societal developments (Hebdige, 1979). The symbolic meaning of fashion designs changes with the *Zeitgeist*, the symbolism embedded in fashion designs reflects the time in which they are made (Foley, 1893), and therefore the development of society also influences fashion.

Scheduling & synchronization

Simply put, the way we schedule our lives necessarily means that we must enter different environments. To live our lives, we need to travel from one environment to another. Whether it is to go to the store, or to work or school, we need to leave our homes on a nearly daily basis. This means going from one space to another, leaving home and going to work for instance. Furthermore, to get to work we also need to travel the space in between work and home. As both work and home are generally controlled environments in terms of climate, only the travel space between them requires an adjustment to achieve thermal comfort. How to adjust then also depends on the means of travel, modern cars generally also have advanced climate control systems, public transport generally also has climate control, but travelling with public transport often also requires some walking and standing outside, and walking or biking is entirely outside, but depending on the distance travelled the physical exercise also plays a role. In any case, our daily scheduling requires adjustment to different environments to some extent in order to achieve thermal comfort. Besides influencing thermal comfort, our daily schedule also influences body movement comfort. During the day, we can engage in different activities that have different implications for achieving body movement comfort. For instance, when we go to the gym after work, the same outfit likely does not suffice to achieve body movement comfort in both situations. This means that we need to schedule an adjustment in clothing in order to achieve body movement comfort in both situations.

On another note scheduling and synchronization matters for cleanliness. As clothing gets dirty over time being worn a need to restore the cleanliness of clothing arises. Fulfilling this need requires time, and in this time the clothing items are not available for integration in practice. In order to prevent situations in which there is no clean clothing available cleaning needs to be scheduled and synchronized concurrent with dressing practice.

Manifestations of the symbolic elements of practice are very much linked to social spaces. In order to manifest in these social spaces a coming together of the required elements needs to be scheduled and synchronized. Essentially meaning that practitioners, who make social spaces social, need to come together in time, and bring or carry the symbolic elements of practice. For the clothing consumption practice, this means that practitioners already need to be dressed before entering social spaces. Dressing therefore needs to be scheduled in advance of entering the social space in which the specific meaning is recreated.

To give an example, a concert venue may host different events from different music genres. These events can all have their own distinctive style, and in that respect differ from one another. For the recreation of these different styles the visitors, practitioners, need to come together at the time of a concert, and bring the elements necessary for the manifestation of style. As such the manifestation of style is scheduled and synchronized in time. In a similar manner a custom for formal workwear, requires office employees to come together during work hours and bring the requisite elements for the manifestation of custom.

Experience of time

Time influences how the elements of comfort are experienced. We need to be exposed to uncomfortable conditions for a longer period of time before we experience being uncomfortable. We can therefore shortly step out to throw out the trash without having to adjust our clothing. In a similar fashion, a short sprint to

catch a train, or a short bike ride to work will not be uncomfortable. But when we exercise for a longer period of time, our clothing needs to be adjusted to the additional heat generation and body movements or we will get uncomfortable.

In terms of cleanliness time also influences how hygiene and freshness are experienced. Reaching unhygienic levels of dirt accumulation of course takes time. It is not clear how much time it takes before clothing becomes unhygienic. Instead periods of time are used in determining cleanliness as hygiene. After these periods of time we find it unhygienic to continue wearing the same item of clothing. When it comes to freshness, the qualification can be based on observation. Again, however, time influences our experience of cleanliness as freshness. It is only after certain periods of time we actively observe the freshness of our clothing.

The experience of time mainly influences the manifestation of fashion. This because for fashion the novelty it provides wears off over time. New fashion designs initially provide some complexity through being novel that can be appealing in terms of aesthetic appreciation. But as fashion designs are recreated the novelty fades and what once was a novelty now becomes familiar. As such they essentially lose the part of the information load that made them appealing. The same principle also works on the practitioners that set the fashion, the social influencers, and this leads them to search a new fashion. Which then roughly goes through the same process.

6.2.3 Practitioners

Resource

Tastes are a social construct and therefore require practitioners to develop and maintain them. Styles and customs will not sustain without any practitioner to signify their meaning, fashions cannot become if there is no one to recreate them and looking good in the basis requires someone to look at. Beyond these basic requirements tastes are generally less dependent on individual practitioners. In terms of the functional elements practitioners are a necessary resource for the recreation of comfort and cleanliness elements because they are the bodies that produce heat, feel, move, observe and smell. When it comes to practitioners and thermal comfort they are responsible for one out the six key factors for achieving thermal comfort, body heat production (Yu, 2011). How much heat is produced by practitioners is dependent on their metabolism and different practitioners have different metabolic rates. These differences in metabolic rates stem from people simply being different from one another, we are simply not the same in biological make up and for instance differences in hormones influence metabolic rate.

Networks and/or communities

Practitioners form networks and communities of practice in which the elements of practice are circulated and recreated. When it comes to networks and communities there are a number of things to discuss. Within this discussion I do not identify and discuss networks in the traditional meaning of the word, but rather discuss how particular groups, and membership to these groups influence manifestations of elements. For some of these groups membership is voluntary, while others you are more or less born into.

In terms of functional elements of practice networks or communities are important for the development and continuation of conventions of comfort, cleanliness, and convenience. Even though these might be conventions that are to a certain extent shared throughout society, there still might be some small deviations within these groups of practitioners. For instance, there might be groups that recreate lower standards of convenience because of a manifestation of symbolic elements, while there might also be groups who recreate higher standards of convenience, and less manifestation of symbolic elements.

This is definitely so when considering different groups of practitioners on the basis of gender. Our society has historically developed a strong distinction between males and females, and clothing plays an important role in recreating such gender distinctions (Entwistle, 2015; Featherstone, 2010). For the manifestation of the symbolic elements of practice therefore gender is very influential. What it means to look good greatly differs from female to male practitioners; being slim versus being muscular (Featherstone, 2010). Such a difference can also be found for the other symbolic elements of practice. For instance when it comes to customs there is often a difference between what the custom means for males and females (Bartlett, 1994). Also, when it comes to fashion and style such a distinction based on gender can be made. Besides these different meanings for the different genders however, an even more important distinction between men and women is the significance the symbolic elements have. Historically fashion has been more closely related with women, and also looking good is generally more important for women (Entwistle, 2015).

Another group that you are generally born into is ethnicity based subcultural groups. Within these subcultural groups specific meanings of the symbolic elements of practice can be recreated. For instance African American

women do not identify with Caucasian conventions of looking good, which emphasizes slim figures, but rather recreate a meaning of looking good that emphasizes curves (Frisby, 2004; Sanderson, Lupinski, & Moch, 2013). Another example comes from personal experience of having partly Indonesian roots. Among the Dutch-Indonesian community in the Netherlands a batik style of dressing is recreated at cultural events. A lot more examples could be named, but for now it is just important to understand that ethnicity based cultural groups can recreate their own specific subsets of symbolic elements.

When it comes to religious groups you can also be more or less born into them, however you can also convert to a religious belief later in life. Within religious groups, in terms of the symbolic elements of practice, certain customs are recreated. These customs can be the wearing of a specific item of clothing, for example a hijab, or provide more general rules in terms of covering the body.

Lastly, there are activity based groups which recreate certain symbolic elements of practice. In the conceptual framework for instance, I discussed skateboarding. Which is an activity that has very much developed its own style in dressing. In a similar vein, practitioners partaking in sailing, music festivals, or art, to name a few, may recreate different styles of dressing that can be linked to the group partaking in the activity.

Careers

Clothing consumption, and with that the elements of clothing consumption, are very intertwined with our everyday lives. The significance of the manifestation of elements depends on the careers of practitioners. With respect to the careers of practitioners two things are important to discuss, the influence of age and life career, and the influence being a carrier of the symbolic elements of practice can have.

Metabolic rates depend on practitioners' life careers, metabolic rates peak at a young age and decline throughout a person's life, but also the body weight someone develops and the nutrition one gets influence the metabolic rates of practitioners (Roy Choudhury et al., 2011). But the metabolic rate of practitioners also depends on the activity they are in, being lowest when sleeping and highest with intense physical exercise. Consequently, different practitioners have different metabolic rates that change according to the activity they are in. These different metabolic rates lead to different levels of body heat production, requiring different levels of clothing insulation to achieve thermal comfort.

The significance the symbolic elements of practice have differs with age. As we are born we do not have a natural disposition to care about the symbolic elements of clothing consumption practice. We are however born into a world that does attribute significance to these elements (Aspers & Godart, 2013). As we get older the symbolic elements will start to manifest in our practice, peaking around our teenage and adolescent years. In our late twenties and onwards the overall significance of the symbolic elements of practice will decline again (Berkhout, 2012; Tiggemann & Lacey, 2009).

Beyond the influence of age, an even more important influence is practitioner career in terms of carrier of elements. In their life practitioners can encounter the meanings and competences of the symbolic elements of practice. Some practitioners may internalize the meanings and competences, and in doing so develop themselves from novices to competent practitioners. Other practitioners may also encounter the symbolic elements of practice but not internalize them. Whether or not practitioners become carrier of the symbolic elements of practice has significant influence on how they recreate the practice. This can be best explained by distinguishing between positive and negative manifestation of the symbolic elements of practice. To give an example, carriers of looking good may actively seek clothing that emphasizes their positive features, while practitioners that are not carrier of looking good may dress to blend in. The first practitioner tries to stand out positively while the latter tries to prevent standing out negatively (Banister & Hogg, 2004).

6.2.4 Structuration through connected practices

Clothing consumption is not a practice on its own, and therefore the influence connected practices have on clothing consumption need to be considered. In the first place because the material elements of practice circulate to and from the connected practices. The connected practices however also provide meaning elements, and competences in the form of shared systems.

First of the system of provision for new clothing. In terms of the material elements of practice it is quite clear what they do, they provide the material elements necessary for the recreation of practice. In doing so they also influence the recreation of elements of practice. For instance, the majority of clothing items provided are made from cotton. Cotton is a fabric type that is generally comfortable on the human skin and therefore the system of provision is already in large responsible for recreating sensorial comfort. They furthermore offer a range of sizes for body movement comfort, specific spring-summer and fall-winter collections for thermal comfort, and

embed fasteners and other technologies for convenience. They thus provide all the requisite elements for achieving comfort and convenience in clothing consumption.

At the same time, the system of provision also influences the recreation of the symbolic elements of practice. Through their advertising they communicate and recreate certain meanings of looking good and fashion. Furthermore, clothing brands or stores can align themselves with specific styles or customs (e.g. Vans with skateboarding, and Hugo Boss with business wear). In doing so they do not only influence, but also enable the development of the symbolic elements of practice. By having a constant provision of style items, novel fashion designs, and garments associated with custom they make sure that the symbolic elements of practice can be recreated and manifest over time.

The other connected practice that is very influential is laundry practice. The materials of clothing consumption of course continuously move back and forth from laundry. They enter the laundry practice *dirty* and come out clean. Over time laundry practice has however redefined the meaning of clean, and subsequently also the meaning of dirty. As already discussed in the practice-as-entity the meaning of cleanliness has shifted from hygiene to freshness. This shift was and is facilitated and reinforced by the laundry practice. By giving a fresh fragrance to our clothing items laundry practice still recreates what we consider fresh or not.

6.2.5 Interplay between functional and symbolic elements

Up to this point I have discussed the functional and symbolic elements of practice mostly separate from one another. In actual practice, there is however also interplay between the functional and symbolic layer of practice. It is therefore important to discuss how these two layers influence each other's manifestation. Below I will therefore discuss how the manifestation of symbolic elements downplays the manifestation of functional element, and how manifestations of symbolic elements are *checked* by functional elements.

Manifestation of symbolic elements downplays functional elements

In being mostly about the visual appearance of clothing and dressed bodies the symbolic elements of practice are not always considerate to the functional elements of practice. This can be to the point that the manifestation of symbolic elements inhibits the manifestation of functional elements. A very clear example of such a situation is the fashion for corsets in the 19th century. This fashion was inconvenient as it required assistance to put on a corset, but more importantly they were very much uncomfortable, to the point that they even left women physically invalid (Woodward, 2013). In recent years there has not been a fashion that inhibited comfort or convenience to such an extreme extent, and instead the best examples of symbolic elements inhibiting functional elements can be found in the manifestation of custom. For instance, formal business wear customs in white collar organizations can forego comfort and convenience. Bartlett (1994) describes a number of cases in which particularly custom for female employees was so uncomfortable and inconvenient that they actually went to court in order to change it. In these cases, female employees were obliged to adhere to dress standards in the office. These dress standards were however not written down in rules, but rather the community norm (custom) recreated at the office. Within this custom, women were prescribed to wear dresses or skirts and high heel shoes, and wearing more comfortable pants or flat shoes was not allowed (Bartlett, 1994). Besides these specific uncomfortable standards for women, formal workwear can also inhibit the manifestation of thermal comfort. Because the enactment of custom stable through the season, formal workwear is not well-adjusted to the different temperatures throughout the year, inhibiting the manifestation of thermal comfort (Shove et al., 2012).

Manifestation of symbolic elements checked by functional elements

Even though there are instances in which symbolic elements inhibit the manifestation of comfort or convenience, the manifestation of symbolic elements is most of the time checked by functional elements. Over time the uncomfortable dress standards discussed by Bartlett (1994) were challenged. The mitigating influence of functional elements on symbolic elements however shows best when reviewing fashion. When doing so it stands out that the development of fashions aligns with the season. Fashion therefore does not forego manifestations of thermal comfort. Furthermore, there is a significant difference between fashion as it is recreated on the runway, and fashion as it is recreated by practitioners. Where the haute couture designs presented on runway may not always be comfortable or convenient, the fashion that is ultimately worn by ordinary practitioners is, or at least to a much greater extent. Rather than recreating the designs presented in Paris or Milan fashion week, only elements of the designs are picked up and those then find their way to ordinary practitioners.

6.3 Practice-as-performances

After having discussed both the practice-as-entity and the structuration of clothing consumption in the Netherlands, it is now time to discuss how this results in actual clothing consumption. In this discussion of the practice-as-performances of clothing consumption in the Netherlands I will make the link between literature and what consumers actually do in practice. In doing so, my aim is not to discuss each and every single practice performance undertaken by Dutch consumers. Instead this discussion is aimed at developing an understanding of the full range of practice performances undertaken in the Netherlands. To do so I will discuss the different types of practice performances enacted in the practice of clothing consumption, as well as the variation with which these different types of practice performances are enacted. After having done this I will also discuss the environmental significance of different practice performances and possible improvements in this respect.

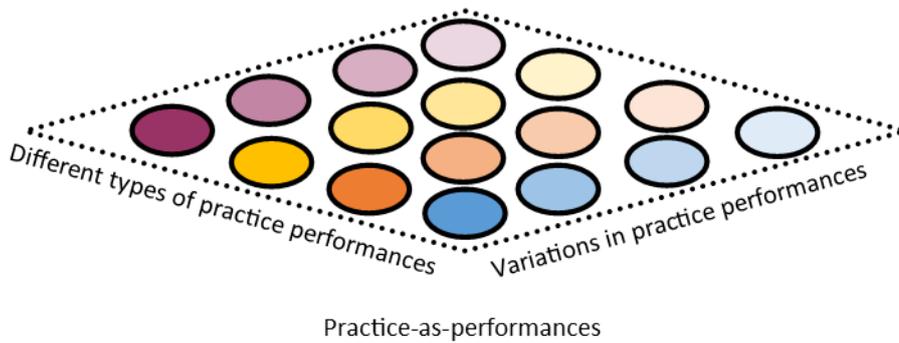


Figure 6.1 visual representation of different practice-as-performances along two axes (own figure)

6.3.1 Different types of performances

In my definition of clothing consumption practice, I included dressing practice and the relations with related practices. In this analysis of the practices-as-performances a same distinction applies. There is a set of performances that makes up a daily dressing routine that is related to dressing practice. While there also is a set of performances that constitute the relations with other related practices. Common denominator between the two is a practitioners' clothing collection. This clothing collection is a source of practice elements for the daily dressing routine, and it is maintained through the relation with related practices. I will discuss these two groups of performances in a bit more detail below.

Daily dressing routine

The daily dressing routine for clothing consumption consists of different types of performances. In these performances clothing from the collection is put to active use. The performances that make up the daily dressing routine are: dressing, undressing, adjusting, and wearing. The first of these three are active performances, meaning that practitioners need to physically do something to enact the performances. Wearing is a passive performance resulting from the other performances, but the space in which and the activity during which clothing is worn is very influential for the recreation of these other performances. Either because they are in anticipation of wearing, or because the elements of practice that manifest during wearing influence their recreation. I will discuss these four types of performances in a bit more detail below.

Dressing

Dressing is the act of putting clothing onto the body. The act of dressing is in anticipation of what is to be worn at the subsequent activity or activities. In the construction of the outfit items may be sourced from a variety of spaces in which the collection is stored, and different elements may manifest in the process.

Undressing

Undressing is the opposite of dressing and involves taking clothing off the body. Undressing can be in anticipation of (dressing for) another activity or the result of the clothing that was worn not being appropriate in terms of functional and/or symbolic elements. For instance, clothing may lose its cleanliness during wearing, therefore leading to undressing (and dressing with clean clothing). The space in which the items of clothing are subsequently placed can influence future practice performances.

Adjusting

With adjusting I mean putting on, taking off, fastening or unfastening a single item or a few items of clothing in anticipation or response to changing circumstances. For instance, putting on a jacket when going out the door, unzipping your jacket when you get warm or pulling down your pants during while visiting the toilet.

Wearing

Passive activity in which items of clothing are worn on the body. Even though wearing itself does not involve much doing, it is very important in terms of the manifestation of elements of practice. Wearing influences the experience of comfort and cleanliness, while it also recreates the symbolic elements of practice for other practitioners observing the wearer.

Collection maintenance

The daily dressing routine described above relies on a collection of clothing for its performances. The contents of this collection shape whether or not certain elements of practice can and do manifest in the daily dressing routine. For instance, when it comes to fashion the collection needs to contain fashionable clothing for the fashion to be recreated in daily dressing. Furthermore, when it comes to thermal comfort, the collection should offer different options with regard to thermal insulation to facilitate comfort in different environments. Whether or not the collection is able to facilitate the manifestation of elements of practice in the daily dressing routine is dependent on the collection maintenance by practitioners.

Acquisition

Acquisition are the acts through which the personal clothing collection is extended with new items of clothing. These items of clothing can be acquired through buying or through (gift) receiving. Important with respect to the acquisition of clothing is whether it is new or second-hand clothing, as well as the amount of clothing that is acquired. Different elements of practice may manifest in different acquisition performances. Symbolic elements for instance may manifest more strongly in buying than in receiving. Furthermore, acquisition can be in relation to the daily dressing routine as the collection does not suffice in terms of symbolic or functional elements. It can however also be the result of the recreation of shopping practice, and the symbolic elements that manifest therein. In doing so shopping practice can redefine the symbolic properties of the already owned collection.

Disposal

Disposal are the acts through which the personal clothing collection is reduced by taking clothing out of the collection. These clothing items can be disposed of by throwing them out with general waste, depositing them in a clothing recycling bin, handing them in at a store, gifting them to other practitioners, or selling them to other practitioners. The clothing that is disposed of is in general clothing that is not being used in the daily dressing routine anymore. Which can be the result of the manifestation of symbolic elements (e.g. change in taste), or the manifestation of functional elements (e.g. no longer fitting).

Cleaning

Cleaning are the acts by which the cleanliness properties of clothing items are restored. The cleanliness of clothing items can be restored by placing them in the laundry bin and thus submitting them to laundry practice, bringing them to a dry-cleaning service, or by hanging them to air out.

Repair

Repair are the acts by which the functional state and/or the appearance of clothing is restored. This is done by performing repairs on the items of clothing, or by bringing them away for repair.

6.3.2 Variation in practice performances

Before discussing the variation in the performances of the daily dressing routine and collection maintenance it is good to discuss some dimensions of structuration that cause variation on a general level. Below I will therefore first discuss the influence of seasons and gender on the performances of clothing consumption in the Netherlands.

Space

Social spaces

First of the space in which clothing is worn. In the discussion of the adjusting performance I went with the assumption that people go out the door on a daily basis, which is true for most practitioners on most days. There are however exceptions to this rule, for instance when you are sick you might just stay in bed all day. In that case you likely still have your nightwear on, and the above described performances likely do not apply. As you do not enter social spaces that day the symbolic elements of practice will likely not manifest. On most other days however, practitioners do go out into social spaces and the symbolic elements of practice do manifest. In going out to these social spaces a distinction has to be made between space practitioners travel through, and the space that is the destination of their travel (work/school/leisure). The space on travels through, whether it is in traffic or in public transportation, only has limited influence on the manifestation of the symbolic elements of practice. Beyond a more general custom to appear dressed, the great variation in practitioners prohibits the

manifestation of one particular style, fashion or custom. This does not mean, that these elements cannot manifest in the dress of practitioners, but mostly that there are too many styles recreated for any to become really significant. In that respect, the destination of travels is more important for the manifestation of symbolic elements. In practice, this means that this is the social space that influences dressing at the start of the day. If in this social space particular symbolic elements are recreated, then a practitioner already needs to consider this in their dressing performance. Different social spaces can recreate different elements of practice, some may emphasize a certain custom (formal workwear), some may emphasize looking good and fashion (schools), and some may emphasize a certain style (festivals).

Besides wearing clothing in social spaces, practitioners also wear clothing while performing certain activities in these social spaces. Whereas the social space mainly influences the manifestation of symbolic elements, activity influences the manifestation of functional elements. Activity influences the metabolic rate, as well as the movements made by practitioners. As such influencing the manifestation of comfort. Furthermore, some activities may be dirtier than others, and some will result in more sweat than other. Thus, activity can also influence cleanliness. Lastly, the variation in activity through which clothing is worn can also influence the manifestation of convenience. With respect to activity time also becomes important. When experiencing discomfort, time is an important factor. For instance, an office employee may wear an outfit that is not really comfortable to move, but as most activity is carried out stationary, he/she does not get uncomfortable. The same applies to cleanliness and convenience as well. Dirtiness accumulates over time, and therefore the duration of an activity is important. Similarly, the frequency of adjustments needed over time influence the convenience of the clothing worn.

Practitioners may undertake more than one activity per day. These activities may differ to such extent that a change in outfits is warranted. For instance, going to the gym after work may require changing from workwear to sportswear. But also, a change in social spaces may warrant a change from work custom, to a more casual preferred style. Or getting home after work may warrant a change from uncomfortable workwear to a more comfortable outfit. Overall there is variation in whether or not a practitioner has multiple situations on a day which warrant a change in outfits, the elements of practice that manifest in these situations and the subsequent change of outfit that is required, and the place in which the changing performance is enacted.

Location on the body

The influence the location on the body has on performances of clothing consumption mainly shows in the different types of clothing consumed in the Netherlands. A normal outfit consists of a number of different garments situated in layers on different parts of the body. The elements of practice manifest themselves differently for the different types of clothing. For the bottom layer, underwear, the symbolic elements of practice are much less significant. In most situations underwear is not visible to other practitioners, therefore manifestations of style, fashion or custom are much less likely to occur. Looking good may manifest in anticipation of intimate situations, in this manifestation of looking good a clear gender difference can be observed. The functional elements manifest more strongly in underwear, and cleanliness as hygiene in particular. As underwear is worn directly on the skin it accumulates relatively more bodily dirtiness than other items of clothing. A result of this is that underwear is submitted to laundry on a daily basis (bras are an exception, see Appendix C).

On top of underwear, a normal outfit either consists of one or more top garment(s) and a bottom garment, or a full body garment. These garments are generally much more visible than underwear, and therefore the symbolic elements of practice manifest more strongly. This shows in the variation of types of clothing that are available (much more than underwear, see Appendix C), and the variation of possibilities in constructing an outfit from these garments (specific combinations to create styles). Even though symbolic elements manifest more in these types of garments, even further differences in manifestation of elements can be recognized. Full body garments are generally less convenient than the other garments with which the upper layer of an outfit can be constructed. This means that the use of a full body outfit is always subject to strong manifestations of custom, style or fashion. For the other garments this is not necessarily the case, and practitioners can have a negative approach to the symbolic elements while wearing them. As a result full body garments are worn less than separate tops and bottoms. Also in large part because they are more comfortable and convenient. Whereas the clothing items belonging to underwear were subject to cleanliness as hygiene, the items making up the upper layer of clothing is subject to cleanliness as freshness. The result of this is that submission of clothing to laundry is more dependent on observation and with that on conventions of cleanliness upheld by practitioners.

The last type of clothing to discuss is outerwear, consisting of jackets, coats, and cloaks. Outerwear is not necessarily part of an outfit, but rather used to adjust to changes from indoor to outdoor and vice versa. Because of this specific function, thermal comfort really manifests in the design and use of outerwear. Furthermore, as they are frequently put on and off, they are characterized by convenience technologies embedded in the garments. These are fastening technologies, most often on the front of the body, and the use of fabric lining to allow for smoothly pulling them over other layers of clothing. Apart from these functional elements, they are also very much subject to symbolic elements. Which shows in the great variation of options available on the market.

Time

Seasons

Seasons are an important factor in the manifestation of both functional and symbolic elements of practice. As also discussed earlier there is of course a difference in temperature between seasons, which influences thermal comfort. With the exceptions of only a few days a year, clothing should offer insulation throughout the year in order to achieve thermal comfort. In the winter, the level of insulation required is higher, resulting in more (layers of) clothing being worn during winter than summer. This also shows in the distinction made between summer and winter coats, the latter offering significantly more insulation. Another functional element that is influenced by the seasons is cleanliness as freshness. During a review of web fora entries on submitting clothing to laundry, sweat came forward as an important determinant for cleanliness-as-freshness. The production of sweat is influenced by seasons, with several people emphasizing that clothing loses its freshness sooner in summer because of increased sweating.

Besides the influence on functional elements, seasons also influence the manifestation of symbolic elements. For the manifestation of fashion seasons form a natural rhythm of change, in which the composition of outfits already changes because of functional reasons, and new fashions align with these changes. Introduction of designs by the system of provision is thus aligned with seasons, and the majority of clothing is also sold before sales periods towards the end of seasons (Wijnia, 2016). When it comes to the other symbolic elements of practice seasons are also an important influence, as seasons significantly change the context in which clothing is worn. Manifestations of style, looking good, and custom adjust themselves to the weather conditions. This is however not a general rule, and for instance the custom for business clothing in corporate offices largely disregards seasonal changes as it is recreated in office buildings with climate regulation (Shove et al., 2012).

Practitioners

Career

In the extreme form career influences dressing as practitioners of very young or old age may require assistance with putting on an outfit. In a less extreme form, career influences dressing as the way elements of practice manifest depends on age. For teens and adolescents, symbolic elements may manifest more than for instance practitioners in their fifties. Furthermore, age influences metabolic rate and agility, therefore also influencing the manifestation of functional elements of practice. What is however, more important with respect to the elements of practice, is which elements of practice are carried by the practitioner. Two teens may still significantly differ from one another as they carry different elements of practice. For instance, they may have internalized different cleanliness conventions, or developed a taste for different styles. Which influences where their clothing is sourced in the morning, and which symbolic elements manifest in the appearance of their clothing.

Gender

As also discussed in the structuration segment, when it comes to the practice of clothing consumption it really matters whether you are female or male. The clothing consumption practice of women is generally much more influenced by manifestations of symbolic elements. This shows in the amount of stores selling women's clothing, but more important in the clothing categories women can choose from and the total number of items on offer. As can be seen in Table 6.1. The difference in the amount clothing categories on offer stems in part from functional elements (bras, and/or when pregnant maternity wear), but mainly from symbolic elements. Dresses, skirts and tights stem from a time when it was custom for women to wear these feminine items of clothing, while in current day women are also able to wear more convenient 'masculine' items such as pants. Dresses and skirts can still be associated with certain customs (religious, cultural or professional), but may also be associated with a feminine interpretation of looking good. Furthermore, the clothing categories for women also includes the jumpsuits category, which is very much the result of recent fashion. Beyond the categories, the significantly larger number of items on offer also suggests a more significant manifestation of style

variations and fashion. The shapewear category included in Table 6.1 also clearly shows that looking good manifests more for females. The four items that were on offer for men consisted of the same compression shirt in different colours, while there was a range of shapewear available for women and the number does not include push-up bras (which are essentially also a form of shapewear).

	# stores	Clothing categories	Total items on offer	Average of items per category	Shapewear
Men	4261	24	91959	3831,63	4
Women	5899	33	174663	5292,82	597

Table 6.1 Difference in clothing offering for men and women by Dutch clothing stores (based on Appendix C)

Besides these differences in the clothing offered on the Dutch market, a difference between men and women also showed in a review of web fora for washing behaviour. On female fora, there was a recurrence of entries in which stated that they would not wear the same items two days in a row. It recurred as a norm that was not really challenged in other entries. While if such statements were made on mixed fora they would not be accepted as a normal thing to do. Again, this is an example of how fashion manifests more with women, but then in day to day dressing. The difference in the symbolic importance of dressing also came forward in two wardrobe studies performed in the Netherlands (Berkhout, 2012; Laan & Velthuis, 2016). The first study was into women's dressing experience, and the women in the study had a somewhat positive approach to the symbolic elements of practice. For them dress was really a way to shape their appearance and identity (Berkhout, 2012). The second study was into men's dressing experience, and unlike the women they approached the symbolic elements of practice in a negative way. Meaning that they would consider them with respect to not standing out negatively, but in no way tried to construct an identity or appearance through their dressing (Laan & Velthuis, 2016). Overall it should be clear that it matters whether you are male or female for the practice of clothing consumption.

6.3.3 Practice-as-performances and environmental impact

At the end of this practice analysis what remains to be discussed is how practices performances and the elements that manifest in their recreation influence the environmental impact of practice. I have already assessed that the daily dressing routine does not directly result in environmental impact, but that rather the relations with other practices part of the collection maintenance do so. Below I will therefore discuss how the manifestation of elements influences the environmental impact of acquisition, disposal and laundry performances.

Acquisition

In discussing acquisition before I already mentioned that a distinction can be made between the acquisition of new and second-hand clothing. Of these two the acquisition of new clothing is the more common thing to do. Second-hand clothing often is circulated in more informal ways and therefore harder to track, you could also argue that they stay within the practice. Furthermore, when it comes to the environmental impact of clothing consumption the acquisition of new clothing is much more significant. In the discussion of collection maintenance through clothing acquisition I will therefore focus on new clothing acquisition.

Over the year 2015 Dutch consumers acquired a total of 330 million new garments (Wijnia, 2016). During that same year the population of the Netherlands was a little under 17 million. Resulting in 19.5 garments being acquired on average by Dutch consumers. This number is very much the result of the manifestation of symbolic elements of practice. When only looking at clothing from the perspective of the functional elements we as a society would be able to do with a lot less primary acquisition. Of course clothing may degrade over the time that it is being used, but that does not warrant the amount of clothing acquired by Dutch consumers annually. This becomes even clearer when we take a look at the expenditure of Dutch households for clothing acquisition. The Dutch statistics bureau made a distinction between men's, women's, children's, and baby's clothing when doing a study on household expenditure (CBS, budgetonderzoek). What mainly stands out in this study is the difference in expenditure between men's and women's clothing. From a functional perspective, this does not make any sense, as there is no difference in the number of men and women in the Netherlands and beyond bras there is therefore no reason for there being a difference at all. That there is a difference, can thus be very much related to the more prominent manifestation of the symbolic elements of practice among women. This also shows in the number of items considered in establishing consumer price index (CBS), for women a significantly larger number of items are considered (Walschots, 2016). Furthermore, when it comes to the acts of acquisition more than half of women goes shopping on at least a monthly basis, while only a little

over a quarter men does the same (INretail, 2014). This all results in women acquiring more clothing than men, see Appendix C for tables highlighting the difference.

Besides the difference between men and women in the manifestation of symbolic elements and its influence on acquisition, there are more factors that influence the manifestation of symbolic elements. Among which the clothing items the symbolic elements of practice manifest most on. The underwear categories are in normal life mostly invisible and therefore less subject to symbolic elements. Compared to the upperwear categories their acquisition is therefore relatively small (see Appendix C). The symbolic elements thus manifest most in the upperwear categories, and in the tops category in particular. Besides the symbolic elements manifesting more in specific clothing categories, their manifestation is also dependent on the age of practitioners. The symbolic elements manifest more in the practice of young practitioners, and they are also actively target by the fast-fashion industry (Cook & Yurchisin, 2017). Finally, acquisition can vary across practitioners in terms of their specific careers, and them being carrier of symbolic elements, with fast-fashion also specifically targeting fashion minded consumers (Cook & Yurchisin, 2017).

Addressing the impact of acquisition

As the acquisition of clothing is mostly the result of the manifestation of symbolic elements, and fashion in particular, addressing environmental impact means also addressing the manifestations of symbolic elements of practice. From an environmental point of view there are two ways to reduce the impact of acquisition. The first is to reduce the volume of clothing being acquired in the practice of clothing consumption in the Netherlands. Every garment that is not acquired means a reduction of 100% of the impacts associated with the production of the garment. This flow could possibly be reduced by improving the residence time (durability) of garments in the practice. If garments stay in the practice longer, and assuming overall garment stock remains the same, there are fewer garments that need to be replaced over time, reducing the volume of the flow. Another way to possibly reduce the volume of the flow would be an increased intensification of use. This would mean that the practice would work with a smaller stock, which would also reduce the flow needed to replenish stock. The slow fashion movement is an example of an attempt to mitigate the environmental impact of acquisition by addressing the manifestation of symbolic elements. By challenging conventions on the pace of fashion the durability of garments can be increased, and thus reducing the flow size of acquisition.

Besides reducing the volume of the flow, environmental impact can also be mitigated by changing the content of the flow. This can either be done by reducing the share of primary production in the flow or by increasing the share of best practice production within the primary production content. The share of primary production can be possibly reduced by reusing, remanufacturing or recycling garments. Increasing the best practice share of primary production would require shifting from non-certified to certified best practice garments. An example of such an approach is the Reshare stores of the Salvation Army, in which second hand clothing is presented in line with manifestations of fashion and style, thus replacing primary acquisition.

Disposal

In terms of the performances of clothing consumption practice, disposal is a bit of the odd one out. Whereas the different performances of the daily dressing routine, acquisition, and submitting to laundry are the direct result of the manifestation of elements of practice, disposal is not. In saying this I specifically refer to the act of disposing rather than the content of disposal. This has some implications for the recreation of disposal performances. Even though clothing has become an inactive part of the wardrobe due to the manifestation of elements of practice, it is not automatically disposed of. In fact clothing that is not worn anymore can be kept for years before being disposed (Laitala et al., 2015). Furthermore, practitioners may even find it hard to dispose of clothing (see Appendix C). For many practitioners clothing disposal therefore mainly seems to be related to storage space issues (Laitala, 2014; Appendix C). Disposal of clothing then becomes the solution to this issue, but often clothing is also taken out of the wardrobe and put into storage elsewhere in the house (Appendix C). The manifestation of functional and symbolic elements of practice influences which clothing items end up being taken out of the wardrobe. Where they end up depends on the elements that manifest in their exclusion. Studies of disposal behaviour often show a predominance of functional elements and looking good as motivations for disposal (Bianchi & Birtwistle, 2012; Cruz-Cárdenas & del Val Núñez, 2016; Laitala, 2014; Laitala et al., 2015; Morgan & Birtwistle, 2009). Data from web fora suggests that fashion, and changes in taste also play an important role. Such manifestations however seem to coincide with storing elsewhere in the house, or finding the clothing a new owner. Overall the manifestation of symbolic elements in acquisition indirectly also influence disposal. On the one hand as their acquisition leads to storage space issues, but also as they displace other items of clothing in terms of fashion or style.

Overall this results in more than 235 kilotons of clothing being disposed of on a yearly basis (FFact, 2014). This number however excludes informal recirculating of clothing. Of the 235 kilotons that are collected the majority (145 kiloton) is collected with general waste (FFact, 2014). This means that in terms of end-of-life scenarios, most clothing is burned with energy reclamation. Even though this has a positive effect for most fabric types, it is by far the least positive scenario to occur. Of the remaining 90 kilotons the majority (64 kiloton) is sorted and exported to other countries, while the remaining 24 kiloton is processed in the Netherlands. 9,5 kiloton is reused or recycled as clothing, and the rest is either downcycled or burned for energy reclamation (FFact, 2014).

Addressing the impact of disposal

When considering addressing the impact of disposal there are a lot of ifs. First of, the most positive scenario is if clothing remains used or reused within practice. This means addressing manifestations of symbolic elements that cause clothing to become unused, or positively aligning manifestations of symbolic elements with second hand circulation. If this can be done a reduction of the flow towards disposal would have a positive effect. However, as a lot of clothing is unused in practice there would also be a positive effect if the flow towards disposal is increased with these unused items of clothing. As the elements of practice do not directly manifest in the act of disposal it is not clear what needs to be addressed for this to happen.

The same applies to the direction of the flow as it is also not directly influenced by manifestations of elements of practice. In current scenarios however, a lot of clothing is thrown away with general waste, leading to the least positive environmental scenario. A possible improvement would therefore be to increase the relative share of garments being disposed through clothing collection schemes, such as clothing bins.

Laundry

The performance of submitting clothing to laundry and the elements that manifest therein mainly depends on the type of clothing that is considered. Underpants and socks are generally submitted because of cleanliness as hygiene. Whether they are clean is not determined on the basis of observing smells or stains, but rather clothing is put into laundry after daily use. This convention is relatively consistent among different practitioners (Appendix C). Other types of clothing are not put into laundry because of cleanliness as hygiene, but rather because of cleanliness as freshness. The conventions on submitting these other items of clothing are far less consistent, it not only depends on the type of clothing, but only on the convention as it is internalized by practitioners (Appendix C). The convention on how long clothing is worn, does however show some consistency depending on the relative position of clothing on the body. Upper layers of clothing are washed less frequently than shirts, and outerwear is washed less frequently than pants and sweaters (Steinberger et al., 2009; Appendix C).

Besides cleanliness manifestations, submitting to laundry can also be influenced by manifestations of fashion. Different practitioners emphasized that they adhered to a fashion norm of not wearing the same clothing two days in a row. Even though they acknowledged that clothing was not necessarily dirty, it often did end up in the laundry bin because of a lack of a temporary storage system (Appendix C). There are however also practitioners who do instead put clothing into temporary storage. For the practitioners who do so, the level of organization in their storage system is really influential in determining when clothing is submitted to laundry. Practitioners with an unorganized storage system (e.g. a chair), may still end up putting clothing into laundry after single use, because they end up not wearing the items from the temporary storage again. An organized storage system enables practitioners to wear items of clothing multiple times before submitting to laundry (Appendix C).

Addressing the impact of laundry

The number of garments entering the laundry practice determine how much impact is generated in the laundry processes. Therefore, a reduction in the volume of garments into laundry also means a reduction in the environmental impact generated in the laundry practice. The volume of the flow could be reduced by intensifying use before garments are put into laundry. Effectively meaning wearing items of clothing longer before throwing it in the laundry bin. In order to do so conventions on cleanliness need to be addressed. In this respect airing out clothing could play an important role, as odour based evaluations will be more positive afterwards. Furthermore, in cases in which fashion manifests in not wearing the same item two days in a row, a reduction could be achieved though providing systems for temporary storage of once worn clothing.

Another impact not directly related to the amount of clothing that enter laundry practice is the synthetic content of clothing items. As synthetic fibres contribute to the problem of plastic soup wearing and washing other types of clothing would reduce environmental impact. It is however, questionable whether this can be addressed on the basis of the elements of practice discussed in this chapter.

7. Case study: Bij Priester Clothing library



The alternative form of practice that is the subject of the first case study is clothing libraries. In clothing libraries, the practice of clothing consumption is altered in the sense that clothing is no longer owned, but rather borrowed. Whereas normal practice involves a transfer of ownership from business to consumer, the business remains the owner in clothing libraries. This means that consumers as practitioners can borrow and use clothing items, but must return it after use. When put in the perspective of this research clothing libraries can be conceptualized as presented in Figure 7.1.

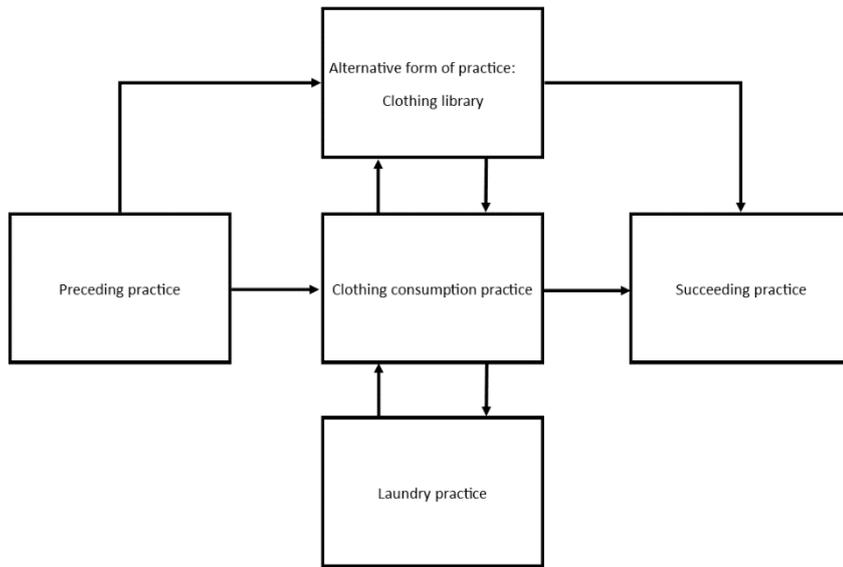


Figure 7.1 stocks and flows representation of clothing library (own figure)

The clothing library forms an additional collection that is maintained by the library. From this collection practitioners can select items to temporarily extend their own collection. This way the clothing library offers practitioners a different way of maintaining part of their personal clothing collections. In doing so a clothing library may be beneficial in terms of environmental impact as the clothing library can be more effective in maintaining their collection than the sum of practitioners with a subscription.

Within the Netherlands a total of three clothing libraries have established themselves; LENA Fashion library in Amsterdam, Kledingbibliotheek Middelburg in Middelburg, and Bij Priester in The Hague. The latter one, Bij Priester, is the subject of this case study. Below I will first introduce and discuss Bij Priester in their role as the facilitator of the clothing library. This is then followed by an introduction and discussion of the practitioners that have become member of the library. Lastly, this chapter will end with an analysis in which the Bij Priester clothing library is discussed as an alternative form of practice.

7.1 Facilitator

Bij Priester is a concept store that recently opened at the Zoutmanstraat in the Zeeheldenkwartier in The Hague. The name Bij Priester is in reference to the leather goods store that used to be located at the same address. As the Priester family did not have any successors for the family business, they gave their apprentice Amanda Hofman the opportunity to take over the store. Amanda took the opportunity and involved her husband Nick Spier and her sister-in-law Wendy Spier in the founding of the new store. Together they developed the idea for the new concept store, in which the sales and repair of (bespoke) leather goods was supplemented with workshops, events, and of course the clothing library. Below I will discuss how this clothing library is shaped and facilitated by Bij Priester.

7.1.1 Collection

An important part of facilitating a clothing library is developing and maintaining the collection of the library. It is therefore important to discuss how the Bij Priester clothing collection was established, and how it may be developed and maintained towards the future.

Current collection

At the moment of the interview the collection consisted of 150 garments. The clothing was sourced from either Dutch designers or Dutch labels. These designers and labels were selected on the basis of a number of criteria. The first selection criterion was sustainability. For the designers, this criterion meant that clothing was manufactured in the Netherlands and that materials were sustainably sourced in the Netherlands or Europe. For the labels, this meant that sustainability manifested in the brand philosophy, that production was located within Europe or the Mediterranean, and that sustainable materials were used (e.g. organic cotton). On the basis of this first criterion 30 designers and labels were approached. From these 30 finally 12 made it into the starting collection, these 12 were based on social interaction they had with them and the pricing of their garments.

Sustainability was the primary criterion for the clothing sourced for the library. There are however also a number of other elements that were considered in the development of the collection. Style variation was considered in the acquisition of clothing from the designers and labels. The designers were asked for their most outspoken pieces, while the labels offered more basic styles. Bij Priester emphasized that this style variation was important as the style preference of possible subscribers was not known yet, and that the variation also allows subscribers to experiment. Another element was the types of clothing taken up into the library. First off, underwear and socks are not part of the collection, which is mainly the result of hygiene considerations. Furthermore, the collection mainly consists of female clothing, but they also made an effort to include 10 to 15 % male clothing items in the library. They believe the clothing library could also work for men, and would have therefore liked to have larger share of men's clothing in the collection. Considering the previous criteria however, the amount of available men's designers and labels was limited. One way of coping with this issue is the inclusion of two labels offering genderless clothing in the collection. Another consideration was the ratio between tops and bottoms. In establishing the collection they chose to maintain a ratio of 2 tops to 1 bottoms. Their argument for doing so is that tops are more forgiving in terms of fit than bottoms and are therefore easier to borrow. The last consideration for the collection is the sizes of the garments that make up the collection. Again, uncertainty about future subscribers was the main consideration, therefore the collection covers the full range of available sizes. They furthermore make sure that the sizes of the garments they acquire are "on spec". Meaning that there is consistency in the sizes of the garments that make up their collection. Lastly, again as a means to cater to different possible subscribers, they also have a number of sizeless garments in their collection. Which are essentially pieces of clothing that can be adjusted to fit people of different sizes.

Development of collection

As discussed above the initial collection of the clothing consisted of about 150 garments. They very much see this initial 150 garments as a start, and aim to grow the collection as more people subscribe. Depending on whether or not they are successful in attracting this larger group of subscribers they are aiming to grow the collection to around 800 garments. This in order to facilitate choice in terms of sizes and styles, but they also emphasize that is important for their subscribers to be able to experience novelty. With a larger collection it is more likely that subscribers will encounter items of clothing that are novel to them.

For the growing of their collection they aim to learn from their subscribers. They do so by gathering size information of the people that subscribe to the library. But also by collecting data on what garments are borrowed in terms of the type of clothing and style. They also still have the ambition to grow the share of male clothing in their collection. As they experience that this will be hard to achieve with just Dutch designers or labels they are considering broadening their sourcing scope.

As clothing from the collection gets used the quality of these garments may go down. Up to a point where these items are no longer good enough to remain part of the collection. They acknowledge that at some point in time this is bound to happen. But at this point in time they are not yet entirely sure how long clothing lasts in the library. They have a general rule that garments become available for a discount after they have been borrowed a certain number of times. But they also state that this is something they need to look into further going into the future.

7.1.2 Structuration of performances

Besides maintaining a collection, they also shape how their subscribers perform the alternative form of practice. They do so through their subscription model, the location of their library, the infrastructure used in the library, their presentation and their opening hours. I will discuss these in more detail below.

Subscription model

At the Bij Priester clothing library practitioners can choose between three subscription options, €20 a month for one item at a time, €40 a month for two items at a time, and €60 a month for three items at a time. Depending on the subscription plan chosen either one, two or three items can be borrowed at a time with a maximum loan term of two weeks. Within this period of two weeks clothing items can be returned and swapped for new items of clothing, meaning that in principle the clothing items could be swapped on a daily basis. Furthermore, the clothing items can be returned dirty, as Bij Priester takes up the task of washing the clothing.

Location

The Bij Priester clothing library is located at the Zeeheldenkwartier in The Hague. This Zeeheldenkwartier is a quarter that is located next to the city centre, and as such the store is within walking distance from the city centre. Furthermore, the stores address is easily accessible by tram and there is sufficient parking space in front for visitors coming by car. The neighbourhood is characterized by having mostly smaller creative stores and restaurants which often also express an interest in sustainability. As such the meaning recreated by the Bij Priester clothing library seems a good fit for the neighbourhood.

Infrastructure

In terms of infrastructure the Bij Priester clothing library has two fitting rooms in the form of an old confessional that is placed in the store. Together with a mirror these facilitate the fitting process. Besides this fitting infrastructure they have three clothing racks on which the library collection is presented, as well as a number of mannequins on which combined outfits can be presented. Lastly, they have acquired a computer system on which the administration of the borrowed items is performed. For this administration process, they reviewed a number of options before deciding that the current computer system would be most convenient for the customer.

Presentation

They recognize the presentation of the collection and the shop as being an important part of the clothing library experience. They are therefore very conscience about presentation. In general, by limiting the amount of racks in the store and the amount of clothing that is presented on these racks. But also by renewing the presentation on a regular basis. Meaning that they change something in the window shop presentation every week, switch up the instore presentation on a bi-weekly basis, and adjust the part of the collection that is on display in the store to the seasons.

Opening hours

The Bij Priester clothing is open five days a week, from Tuesday to Saturday. On weekdays, the store opens at 12:00 and closes at 20:00, on Saturday it opens at 10:00 and closes at 17:00. The time for opening is synchronized with the opening hours of the stores in the neighbourhood. They however remain open longer in the evening. These evening opening hours are chosen to facilitate flexibility for practitioners, as they can now also come and visit the store after work.

7.2 Practitioners

For the clothing library case study a total of four practitioners were interviewed. In each of the interviews the practitioners' daily life, normal clothing consumption and the alternative form of practice were discussed. I will present the results of each of the interviews in the following order; structuration (daily life), performances (normal clothing consumption), and lastly alternative form of practice.

7.2.1 Respondent 1

Structuration

Practitioner

Respondent 1 is a 25-year-old social psychology consultant living in Haarlem with her husband and cat. Clothing consumption is a hobby for her, she spends significant time in making sure she looks good in terms of clothing and she enjoys seeking out and discussing the latest trends. At the same time however, she has also internalized a very strong taste for a minimalistic style, consisting of a-symmetrical pieces in black, grey and white tones. As a result, even though she really enjoys discussing the latest trends, they are only selectively applied in her clothing use. To stay up to date with the latest trends, she has a number of what she calls fashion subscription, on magazines like Glamour. Furthermore, she also seeks out the latest trends online, on websites, fashion blogs, and also watches livestreams of fashion shows. Apart from these media sources, she also has a number of colleagues at work with whom she forms a small community of practice, in which style and fashion is discussed, and that also inspires her to perform to the best of her ability.

Space

In her daily life she visits a number of locations. Of course, she has her home in Haarlem, but they have taken up the plan to move to Utrecht. A move to Utrecht would mean that she would live closer to her office in Nijmegen. But also moving to a student city which has more cultural and social activity throughout the week. As she works as a consultant she also spends a significant amount of work hours on location with clients. In her free time, she likes to visit friends and family throughout The Netherlands, going out to dinner, occasionally rollerblading with a friend and visiting festivals. In terms of her clothing consumption these different social spaces have limited to no influence. When meeting clients for the first time she puts a little more effort in making a professional appearance, when she visits her grandma she tones down her dressing a bit, and when she goes rollerblading she makes sure that she puts on more comfortable clothing.

In terms of spatial resources she has a number of storage spaces for her clothing. She has her own wardrobe, in which her clothing collection is ordered in terms of colour and type, resulting in a clear structure in her wardrobe. This structure is very important to her and she experiences her husband's lack of structure in his wardrobe as an annoyance. Besides her wardrobe that houses her active collection she also has another closet which she has dubbed her elimination closet. In this elimination closet, garments that she no longer wears are

stored. In the process of elimination, she also has an elimination bag, situated at the bottom of the elimination closet. Finally, she also has a laundry bin in which dirty clothing is stored before laundry.

When it comes to the travel of elements related to clothing consumption both direct and indirect travel takes place. Direct travel means that elements are directly transferred from another practice or practitioner to her. In order for this to work she needs to visit spaces in which these elements are circulated and transferred. Which elements are directly transferred therefore is dependent on the spaces she visits in her daily life. In her case, her office is a space in which meaning and competence related to fashion and style is directly transferred from one colleague to another. Furthermore, when it comes to material elements they are also mostly directly transferred from clothing stores to her. As well as her aunt gifting her clothing when she sees her. When it comes to indirect travel she is very active in seeking out and decoding meaning and competence embedded in fashion magazines, online blogs, and fashion show streams. Furthermore, she also partly acquires clothing online, in which case material elements travel in a packed form from shop to her.

Time

Clothing is very much a dominant practice in time for her. This means that she devotes quite some time to her practice performances, but also that when it competes with other practices for time the other practices will be displaced. As such her clothing practice does not run into any issues when it comes to temporal resources in terms of proper re-enactment of practice.

A normal week consists of four workdays, Monday to Thursday, a concept day, Friday, and the weekend. Of her workdays she normally spends two at the office, and two on location with clients. Monday is a standard office day, while the second day she spends at the office may vary. Her work is preceded by her morning routine and travelling to work. After work she travels back home and occasionally has another activity in the evening for which she goes out. The Friday is spent as concept day, this means that she plans one day to study concepts for a clothing store she might want to open in x amount of years. This is done from home, but also occasionally by visiting real life concepts. The leisure time in the weekend can be spent on a number of different activities, visiting friends and family all over the Netherlands, going out to dinner in different cities or since recently visiting the clothing library.

Unlike most other practitioners she does not really adjust her practice to different seasons. She has the same wardrobe that remains active throughout the year. The main difference between a summer and a winter outfit are the layers of clothing she puts on. Over time there is however a recurrence of elements that are circulated in her practice. On the one hand as she has her fashion subscriptions which get delivered on a regular basis, but also as every Monday is a shared office day in which she meets her colleagues that share an interest in style and fashion.

Performances

Daily dressing routine

Her daily dressing routine actually starts the evening before. In the evening, she stands in front of her wardrobe to think about possible style combinations she can wear the next day. Even though she stands in front of the clean collection, she can decide that she would like to wear something that is still in the laundry. In such a case, she will perform laundry practices to be able to wear that particular item of clothing the next day. This however does not mean that she will actually wear the item of clothing the next day. This can be because the laundry practice has not finished yet, effectively meaning that the clothing is not dry yet. But also because her morning dressing performance is a 'new' round of determining what to wear.

In this new round, she can start of by putting on what she thought of the day before. But also decide to start with something completely different, because she happens to feel like wearing something else. In any case, the first outfit that she puts on is always up for critical review in front of the mirror, assessing whether or not the outfit is the style and look she wants for the day. This is also influenced by the social spaces she will visit that day, for instance a new client means that more of a formal custom can manifest in her dressing. The review can be positive, and then no further dressing is needed, but it can also be negative, in which case dressing starts all over again. In this latter case, the additional time needed for dressing can displace other practice such as doing her make-up. Dressing can do so as looking good manifests more strongly in dressing than doing make-up.

After having dressed herself the next step is to travel to work or somewhere else. On work days, travel involves cycling to the station and taking public transportation. These different means of travel may pose some issues in terms of thermal comfort. Because the different means of travel constitute different environments, travelling requires adjusting to these different environments in order to achieve thermal comfort. But because her

dressing is mainly the result of a strong style manifestation, her outfits are generally not well suited for adjusting to environments. Meaning that daily travelling can actually be quite discomfoting, but this discomfort does not overpower her internalized style preference.

After having arrived at work or somewhere else, her wearing is mostly a passive performance. On days she is at the office however, more active performances of judging and discussing take place. In this situation, the outfit she wears is an active part of these performances, while the wearing itself is passive. The judging and discussing has however been anticipated by the performance of dressing in the morning, in which style and fashion have manifested themselves more than usual.

After work, travelling, and arriving back home, her daily dressing routine may involve changing her outfit. Going out for dinner, or doing something else, may be an occasion to change her outfit. This does not mean she changes into a radically different outfit, but it is more that she enjoys changing her outfit. The changing can be influenced by wanting a change of shoes, for instance putting on heels, which warrants an adjustment of the outfit to these other shoes.

At the end of the day the clothing is taken of and a pyjama is put on. After being taken off the items of clothing only sporadically end up on the floor. Most of the time the *dirty* garments are placed in laundry bin, while garments that are still fresh enough for another round are folded and placed back in the wardrobe.

Collection maintenance

New clothing that enters the wardrobe is mostly acquired through shopping in physical stores, but also occasionally online. Going shopping is often cued by inspiration gathered from fashion magazines and blogs, while the act of shopping itself can be a source of inspiration as well. Going shopping is not something she does on a regular basis and it does not equal acquiring new clothing. This may also be due to her strong style preference, which makes her very critical of clothing she acquires. This results in the acquisition of one item of clothing per month.

Besides the clothing that is bought she also receives second hand clothing from her aunt on a regular basis. These items of clothing, however, never become part of her active wardrobe as they do not meet her style preferences. Even though this is the case, she still accepts these items of clothing as she does not dare to decline her aunts' gifts. After being accepted, however, they immediately move into the elimination closet.

The disposal of clothing is a staged process. First clothing is moved from the active wardrobe into the elimination closet. This is often cued by a full wardrobe, which prohibits her from seeing all her items of clothing clearly. Upon the frustration of a full closet she sorts through her clothing to review whether or not she has worn garments recently. Items she has not worn for over half a year are then placed into the elimination closet. After being placed in the elimination closet, garments can be moved back into the active wardrobe again. If this does not happen over time, they move on towards the next stage, which is being placed in the elimination bag. The elimination bag, once filled to a certain extent, is then taken to either a store that takes in clothing for recycling or clothing bins in the neighbourhood. The clothing given by her aunt more or less shortcuts this process and ends up in the elimination bag more directly.

In general underwear, socks, and t-shirts worn directly on the skin are put into the laundry bin daily. Their cleanliness is not assessed and putting them into laundry is mainly given in by hygienic concerns. Other garments, such as sweater and pants, can be worn again, but are generally placed in the laundry bin after the second day of wearing. This is mostly cued by odour or stains which are noticed by inspecting garments by smelling or looking at them. Exceptions to the two-day rule are woollen sweaters, which can be worn more often, and formal jackets, which need to be treated with a different laundry practice (dry-cleaning).

Alternative form of practice

She lives in Haarlem, while the clothing library is located in The Hague. This means that she needs to travel a significant distance by train in order to reach the clothing library. Travelling this distance takes time, which means that visits to the clothing library need to be planned. Furthermore, as the clothing can be borrowed for a maximum of two weeks, visits need to be planned on a regular basis as well. She therefore visits the clothing library bi-weekly on Saturdays.

She first encountered the clothing library during one of her concept days. On those days, she was actively searching for concepts that incorporated fashion but transcended the need to buy products. Within this active search she also came across the clothing library at an earlier stage. During that time, the clothing library was still being developed and had not opened yet. After having had some contact with Wendy from Bij Priester

through email, she finally found time to visit and subscribed to the library. She chose the one item at a time subscription plan.

At the time that I interviewed her she had visited the library twice over the course of four weeks, and she was going to visit the library again the day after the interview. Nevertheless, she already had developed somewhat of a routine for visiting the library. In terms of recreation in time, every other Saturday, but also in terms of performances that make up the visit.

A visit to the library starts with travelling to The Hague from Haarlem. During the travel, in a somewhat similar way to standing in front of the closet in the evening, she thinks about what type of clothing she is going to select at the library. This thinking process is centred around what types of clothing might fulfil a need she has at the time. Upon arrival, this however does not mean that she only searches out the type of clothing she thought about during the travel.

After stepping into the library, she first greets whoever is working, makes some small talk, and discusses the latest additions to the library collection. This is followed by browsing the collection and trying some things on. The amount of clothing tried on may vary per visit. During the first visit, she tried on a number of items, while during the last visit, she only tried on a black vegan leather pant that was suggested by Wendy. At the first visit, she decided on borrowing a blue sizeless coat, and during the last visit she decided on the suggested pants. In anticipation of the next she already expressed that she heard from Wendy that more items from the label that also made the pants came in, and she planned to borrow one of those items.

During the browsing and trying on of clothing from the library the main consideration is style. On the one hand, she sees the library as an opportunity to experiment with her style. The colour of the blue coat was for instance a step away from her more general choice for black, grey, or white. The subsequent choice for the black pants was however, a very safe choice in terms of her style preference.

After having borrowed the clothing from the library they form a temporary extension of the clothing collection available for the daily dressing routine. During the time they were borrowed they were actively used by her. The blue coat was used a total of 7 times, as it was easily combined with other items of her wardrobe. The black pant was used a total of 3 times, which is of course significantly less, but is a lot in terms of the cleanliness standards she upholds. There weren't very particular moments on which the clothing was worn, as it was worn during normal everyday life. But she stated that there may very well be special occasions in the near future, for which she will borrow specific items of clothing.

7.2.2 Respondent 2

Structuration

Practitioner

Respondent 2 is a 23-year-old freelance photographer living in The Hague with her boyfriend. Over the years she managed to turn her hobby of photography into a fulltime occupation. And unlike the other respondents her subscription to the clothing library is mainly meant for use in her profession. Meaning that she generally does not wear the clothing herself, but actually lets her models wear the clothing. For her job she does a variety of shoots, ranging from architecture, portraits, to fashion shoots. For the latter she uses clothing from, among others, the clothing library. Her clothing use in these photoshoots is often aimed at creating a certain style for the shoot. What style this is, depends on the shoot, and can be determined by herself, but also in cooperation with a stylist. When it comes to her personal style preference for clothing to photograph she states that she prefers bright colourful pieces.

Space

She mainly works within or in the region of The Hague. Meaning that her clients are mainly located in The Hague, the architecture she photographs is in The Hague, and that the locations for other shoots are also in The Hague. Before becoming a member of the clothing library, she used to borrow clothing for her shoots from PR agencies in Amsterdam. This meant that she had to travel back and forth to Amsterdam for a few items of clothing. This travel by car cost a significant amount of time. One way of coping with this issue was to borrow clothing from commercial clothing stores in The Hague.

Time

Because the clothing is used for shoots the scheduling considerations are significantly different from other practitioners. The scheduling for a photoshoot starts with an assignment. The requirements of the assignment form inspiration for the development of a moodboard. Based on this moodboard a clothing style for the shoot is defined. Which is followed by searching for and borrowing a few expressive clothing items that fit the style of

the shoot. These expressive items are subsequently coordinated with other clothing items, before ultimately doing the shoot. As these different steps need to happen in sequence and require time for their coordination. Meaning that there would normally be a period of three days between borrowing expressive items and doing the shoot.

In terms of performance over time there is change from one photoshoot to the next. Meaning that every shoot is in some way different from the previously done shoots. For the clothing, this means that the same looks are not likely to be used in the same context. It is however very much possible that the same garments will be used for different shoots, as long as it is not for two big clients with whom there is a chance that the photos will be seen by the same audience.

Even though the temporal requirements for the borrowing of clothing are limited it is still a performance that needs to be planned. Within a busy schedule time needs to be found in order to go and borrow the clothing, which also is in consideration to the overall scheduling of leading up to a shoot.

Performances

Like ordinary practitioners the performances for the photoshoot can be divided into a photoshoot dressing routine performances and collection maintenance performances. The photoshoot routine consists of styling, fitting and shooting. In the styling performance different items of clothing are combined into outfit sets that are to be worn during the shoot. This is then followed by a fitting performance, in which all the outfit combinations are put on by the model one by one and reviewed whether they are looking as intended. Which is then finally followed by doing the shoot, in which again the different outfit combinations are worn over the course of the shoot.

At the shoot, a collection of clothing is brought from which clothing items are selected during the styling performance. This collection differs from shoot to shoot and is made up from clothing brought by the model, items brought by the stylist, a collection of items that she has developed herself over time, and a number of items that are borrowed. After the shoot the items of clothing return home with their respective owners, and the borrowed items are returned as well.

Alternative form of practice

She first encountered the clothing library because her boyfriend pointed out an article in local media about the clothing library, and suggested that it might be something for her. Up to that point she had been borrowing clothing from PR agencies in Amsterdam, and therefore the local clothing library proved a more convenient alternative. Furthermore, the expressive character of the library pieces appeals from a photogenic point of view.

A visit to the library is part of the schedule leading up to a photoshoot. In this process, a clothing style has already been selected and model(s) for the shoot have been selected. For visits to the library this means that they are very much focused at finding a specific style in specific sizes. Furthermore, the clothing items that are borrowed are often the most expressive in style, while the other items brought to the shoot will be more basic. Based on these characteristics she searches for the clothing items herself, but she may also ask the clothing library staff to help her find a specific style. After finding the clothing items that suit the look aimed for at the photoshoot, they are simply borrowed.

7.2.3 Respondent 3

Structuration

Practitioner

Respondent 3 is a 54-year-old former secretary living in The Hague with her husband. She had to quit her job after she got incapacitated for work because of an aneurysm. Because of this aneurysm she is very limited in her daily energy budget. Which means that she is only able to plan one *fun* activity per day. The activities she does on a day can be a variety of things, the only constant being babysitting on Thursday and subsequently a full day of resting on Friday. Besides the *fun* activity she normally also does some light housework.

When it comes to being a practitioner of clothing consumption she has a strong style preference for 20ies and 50ies clothing. At the same time, she also states she does not have the body of Marilyn Monroe, and therefore is unable to properly recreate the style of that period. Furthermore, due to the lack of energy she really can't be bothered by what she wears on a normal day. So even though she does carry a strong style preference, it does not normally manifest in her clothing consumption practice. But instead the functional attributes of clothing are emphasized.

Space

When it comes to the spatial resources needed for clothing consumption it is not likely that she will run into issues with regard to spatial constraints. This because she has a small room to her disposal for the storage of her collection. She furthermore has space in the bathroom to hang out and temporarily store her clothing at the end of the day, and of course a washing bin for laundry.

Because of her physical condition she is limited in the social spaces she visits during a normal week and most of her time is spent at home. Through her fun activity she however, does get out the house on a nearly daily basis. The actual activities she undertakes range from shopping, seeing a movie with friends, and visiting the Royal Theatre with her husband. She travels to these spaces either by bike or public transportation.

Going out of the house means entering social spaces in which elements of looking good are circulated. After having some negative experiences, she is now mindful to consider her appearance in such a way that she does not stand out in a negative sense. There are however also some activities for which she does enjoy dressing up, and it is for these activities that the clothing library comes into the picture.

Time

What she does in a normal week is more dictated by her energy budget than by temporal constraints. So she is not limited by temporal resources, but rather because her energy levels go down over time when doing something. In terms of scheduling this means that she has to plan moments of activity and moments for resting in the day. Resulting in the rule of one fun activity per day. When such an activity is already planned, she will not be able to plan another activity the same day, and babysitting on Thursday is so intensive that she needs the entire Friday to recuperate.

Performances

Daily dressing routine

Her daily dressing routine starts in the bathroom by reviewing what she still has hanging there from the previous days. How she goes about dressing then depends on the energy level she has that day. When she is tired she will just put on what was still hanging in the bathroom without critical review. When she has a little more energy she may put a little more consideration in determining what she wears. It then depends on what the fun activity for the day is. If she is babysitting that day she may on purpose select clothing that is already stained. When she goes out for her fun activity she may consider what she feels like wearing that day. Overall her dressing is however mostly functional in nature, a standard outfit consists of pants, a shirt, and depending on the temperature a sweater or vest. In terms of appearance her main considerations are whether the colours of the items she puts on match one another.

She then goes on to do her daily activities, consisting of some light housework, the fun activity, and also resting. If she goes out the door for the fun activity she makes sure to not look like a crazy bag lady. But this normally does not warrant an adjustment of her outfit. However, when the fun activity is a night out this might be a reason to change her outfit. For these activities, she likes to look good, and the symbolic elements of practice do manifest. Besides the days she has these evening activities for which she likes to dress up, she normally however only dresses in the morning.

At the end of the day, the outfit she put on in the morning, or on occasion has changed into later on the day, is taken off. The bottom layer of her clothing, underwear and socks is thrown onto the wash pile, other clothing is normally hanged out to air in the bathroom, depending on the activities that day t-shirts can however also directly end-up on the wash pile.

Collection maintenance

Over the years she has developed quite an extensive collection that is housed in her clothing room. Within this collection she has everything she needs, so therefore she does not need to buy anything. This does not mean that she does not acquire any clothing. She actually quite enjoys browsing online vintage clothing stores, and bidding on vintage clothing items on an online auction platform. This can result in quite a few packages coming in over time, which also include non-clothing items such as jewellery and bags. Once in a while her husband puts her on a ration and the flow of items coming in halts. Besides these online acquisitions, she also visits the summer and winter sales period with friends. For her this is however mostly a social activity with friends and this does not necessarily mean she will acquire something.

She has a habit of keeping her clothes in her collection and not throwing them away. If she does dispose of some of her clothing she prefers to bring it to the second-hand store, while items that are not good enough anymore are put in clothing recycling bins. Furthermore, old underwear is reused a cleaning rag before

ultimately ending up in general waste.

When it comes to laundry, underwear and socks are thrown on the washing pile on a daily basis. The other items of clothing are however generally hanged out to air in the evening, and then inspected the next morning. They are then smelled to evaluate whether or not they can still be worn. For t-shirts this results in wearing them 2-3 days, while for pants and sweaters this might be even longer.

Alternative form of practice

She encountered the clothing library when she read about it in a local newspaper. At the time she read the newspaper article she already knew she would go to a gala dinner in the near future. This gala dinner was an occasion for which she liked to dress up. At the same time it was an unusual event, for which she did not have the right type of clothing. As she did not expect to go to such events more often in the future, she did not feel like buying something she would only wear on one occasion. The clothing library therefore really came forward as a solution to this issue. She therefore decided to visit the clothing library, and that was such a pleasant experience she decided to join.

Her visits to the library can be divided into two types. One being visits in which she tries on different clothing and then borrows something and the other being visits to return the clothing she has borrowed. The first type of visit requires more energy and therefore needs to be planned as the fun activity for the day, while the other is more easily scheduled in.

A visit to the library is always preceded by having some special occasion on the agenda for which she likes to dress up. She then visits the library in order to select a clothing item that fits the occasion. During her first visit it was the gala dinner, for which she borrowed a jacket. Her second visit was aimed at finding something to wear for a Prince remembrance party, for which she borrowed a colourful legging. The third time she had a number of events that also had a cloakroom, in this last case she already seen the item she borrowed, a cloak, at earlier visits to the library, and she more or less needed a proper occasion to wear it. So, after this occasion was found, she then actually went and visited the library to borrow it. She also stated that she already knew of a denim jacket she would like to wear when it would get warmer, again she would then also first need some sort of activity in which it would actually be seen by others.

7.2.4 Respondent 4

Structuration

Practitioner

Respondent 4 is a 23-year-old student living in The Hague with her boyfriend. Besides her Bachelor studies in Rotterdam, she also interns at Trias Centre for the Arts in Rijswijk, and furthermore works as a beer sommelier at a restaurant in The Hague. In her free time, she likes to go skating or to go to yoga class with friends, to play music, and to do a lot of other arts and crafts. Furthermore, she also likes to meet up with friends for drinks in the evening.

When it comes to being a practitioner of clothing consumption she has internalized a specific meaning of looking good, which involves always having her legs and shoulders covered. The idea that hotpants, or a tanktop is her outfit for the day gives her the jibbers, as she put it herself. When it comes to her style preference she describes it as eclectic, which means as much that she purposely tries to mix and match items from different distinct styles into one outfit, as long as there is colour in it. On a more general level she has also made a transformation from being a girly girl, to a city girl, meaning that she now prefers pants over skirts or dresses. She is also very mindful of custom, and adjusts her dress to different social spaces. For novel social spaces, she makes sure to overdo it, before learning what the actual custom is.

She also likes to stay up to date with trends and fashion. In this respect, social media networks are very important. Within these networks she specifically seeks out trends presented by artsy fashion bloggers rather than the mainstream trends presented by big fashion labels. A group of classmates at her university form a community where the meanings and competences communicated by these bloggers are discussed and recreated.

Space

When it comes to the spatial resources of practice she has a lot. Within her bedroom she has three clothing racks, a closet of which the top is also used and a chair on which worn clothing piles up. In the hall, she has a coatrack and a barrel of scarves. Furthermore, she also has three laundry bins. Overall these different spaces are not particularly structured or organized, and it functions because she has photographic database of her clothing items in her mind. She tried to introduce a system for the laundry bins, in which clothing was already

sorted into three colour groups. But a lack of cooperation from her boyfriend made this a failing system.

In her daily life she visits a number of social spaces. At her study she has a group of friends that also follow and discuss the latest trends. It is therefore a social space in which her efforts to incorporate input from blogs into her own dressing is appreciated. At her internship she feels she needs to represent the organization, therefore she makes sure to incorporate a bit more formal items into her outfit. At her work she needs to wear a prescribed set of clothing, which she partly brings herself and is partly provided by the business. When she goes to bars with friends she does not experience a specific influence on her dressing. She nevertheless often changes her outfit before going. For her this is a way of closing off one particular part of her life and going on to the next one.

When it comes to the travel of elements in space direct transfer of elements only plays a limited role. Within the different social spaces, she visits meanings of looking good, and fashion are circulated directly. But these for a large part also reach her in packed form through blogs and social media. When it comes to the material elements of travel direct transfer almost never happens. Instead she prefers to mainly order clothing online.

Time

Over the course of a day she may enter a variety of different social spaces. As she likes to, or simply must, adjust her dressing to these different spaces there is some scheduling involved when it comes to her daily dressing routine. This either means that she needs to be home in between different activities, but she is not always able to schedule in a visit home. In those cases she must either put on clothing in the morning that fits the different activities, or pack the items of clothing that are needed for the second activity and change into them there. This scheduling is mainly an issue when she needs to go to work directly after her study or her internship.

Even though she states not to follow the big chain trends, she does follow trends as communicated by fashion bloggers. Because of this she might rediscover items that have been in her wardrobe for a significant amount of time, but over time this also means that new items are added to the wardrobe. Besides these trends her clothing use also changes as the weather changes with the seasons. This change from one season to the next is mainly in the amount of layers that are worn, and the type fabrics worn, but the basic elements of an outfit stay the same.

Performances

Daily dressing routine

Her daily dressing routine starts by getting up, showering/washing and then changing into a onesie which she finds really comfortable. This onesie she then wears during the remainder of her morning ritual before actually dressing for the at the end of her morning routine. This dressing for the day can be quite a process. Often, she may already have an idea about an item she would like to wear, and in those cases dressing is about styling, selecting other items which complete the style. Because of the unstructured way her collection is dispersed among different racks, her wardrobe, and the hall, this styling can be more about searching items than the actual act of putting them on. The overall process is very much in anticipation of the social space she will visit that day, and the activity she will perform. For instance, for her internship generally custom manifests, but when she knows she will be moving musical instruments all day, body movement comfort will manifest.

After being dressed she goes out the door and she travels to her occupation for the day. During this occupation wearing is very much a passive performance. However, her outfit becomes part of the discussion on fashion and style at her study, and also at her internship her clothing can be part of the conversation on looking good. After study, internship or work, she often goes back home for a while, before meeting up with friends in the evening. Meeting up with friends in the evening is preceded by changing her outfit, which often consists of changing only one item of clothing or shoes, but can also be more. At the end of the day her clothes are taken off. Dirty clothing is placed in one of three washing bins, while clothing that can be worn another time is added to the pile on the chair.

Collection maintenance

New clothing that enters the wardrobe is mostly acquired through ordering in online stores and second-hand marketplaces. She dislikes the shopping experience (mainly the fitting rooms) in physical stores, and therefore has developed a preference for online shopping. There is not a regularity in the acquisition of new clothing through online shopping, but once in a while she is overwhelmed by an urge to shop, often cued by sales, that result in her stuffing her online shopping basket. This is however a behaviour she has since recently been trying to improve. Informed by a sustainability meaning she now tries to restructure her shopping behaviour such that it results in the acquisition of a few high-quality items rather than a large quantity of clothes. In practice, this

now means that she still stuffs her online basket, but then does not proceed to actually acquire it. As a result, she states, her monthly acquisition of clothing has dropped from five items to only one item.

When it comes to the disposal of clothing from her collection it is something she would like to do more because a significant part of her collection is not used. At the same time she also still attributes value to these clothing items she would like to get rid of. She therefore tries to sell them via second-hand marketplaces. As this process of selling takes a lot of time, and not all pieces are sold, over time there are bags of clothing aimed for disposal that wander around her bedroom. After a while these bags are then deposited at clothing recycling bins.

In general underwear, socks, and t-shirts worn directly on the skin are put into the laundry bin daily. Their cleanliness is not assessed and putting them into laundry is mainly given in by hygienic concerns. Other garments, such as sweater and pants, can be worn again, and are therefore placed on a chair at the end of the day. When dressing in the morning she does not pay particular attention to putting something on that she has already worn before, as a result the items of clothing on the chair can really pile up. Once a month the chair is cleared from clothing and all the clothing on the chair is put into laundry. Within this month items on the chair can be worn again, but also not indefinitely. When the items get observably dirt, odour or stains, they are put into the laundry bin. Besides smell and vision, pants and jeans are also assessed as being dirty through feeling that they have become more pliant.

That she attributes value to her owned clothing also shows in the repairing of her clothing items. When her work pants start wearing out along the inner legs, she first brings them to a tailor for repair. When they then wear out a second time, she tries to repair them herself or asks her mom to do so. And ultimately, they end up on a folded pile on her wardrobe, anticipating being repaired someday.

Alternative form of practice

She first encountered the clothing library because she saw a sponsored post on social media. This was before the clothing library had opened and they were still in the process of developing the store. She really liked the concept and believed that it would solve a lot of her problems. She then started following them on social media, took interest in their opening party but was unable to attend. She then visited the store a week later, and ended up becoming the first subscriber. Before actually visiting the store, she was already 90% sure she was going to subscribe for the one item at a time subscription. Upon entering the store, she was however so blown away by the items that made up the collection of the library that she ended up taking a subscription for two items at a time. In the beginning, she visited the library on a weekly basis. As she recently became busy with her thesis the frequency of visits went down to once every week and a half. She mostly visits in the evening hours and really appreciates that the library gives her the ability to do so, as it is a convenient time for her.

During her first visit she did not know what the collection of the library would be like. She then browsed the collection and saw a lot of items that she would like to borrow. These items formed a mental wish list and before visiting the library, she often already has an idea of which item she would like to borrow. In the beginning she really liked to borrow clothing items which had a really expressive design, as these were most exciting in terms of experimenting. Later she started to appreciate the more basic items as well, and also selected them to borrow.

A clothing library visit consists of browsing, selecting and then borrowing clothing items. Unlike others she does not like to fit clothing before borrowing. This because she developed an aversion of the act of fitting in stores. During her visits style and fashion therefore manifest the most, while comfort is accounted for by considering the size of the garments. Over the course of her membership this only resulted in one item of clothing that was borrowed unsuccessfully, this item, a dress, ended up being a good fit in terms of comfort, but she did not feel it looked good on her.

The items that are borrowed become an active part of the daily wardrobe for the period they are possessed. On the first day after a visit she always makes sure to wear one of the two items of clothing she borrowed. When considering her dressing performance, this item then becomes the item for which the rest of the outfit is styled. Besides this first day after a visit there can be great variation in when and how often the items from the clothing library are worn. There have been items that have only been worn on one occasion, for instance she borrowed blue pants which were more classic in style and therefore less easily integrated in her normal dressing practice, a formal event at her internship was the only suitable occasion for wearing them. There are however also items that she could more easily combine and therefore integrate into her daily dressing, resulting in being worn more than three times.

7.3 Analysis of alternative form of practice

Below a short analysis of the alternative form of practice is performed. This analysis will consist of the elements of practice manifesting in the clothing library, as well as the structuration of performances by the clothing library. This is followed by some general remarks on the clothing library as an alternative form of practice.

Elements of practice

The alternative form of practice facilitated by the Bij Priester clothing library is very much related to the positive manifestation of the symbolic elements of practice. With the respondents, these elements manifested because they were either carrier of these elements, or because they engaged in activities or visited social spaces where these elements manifested. Furthermore, the manifestation of these elements was also very much related to change. Change in style from one photoshoot to the next, change in custom and style from one fun activity to the next, and change inherent to the manifestation of fashion as carried by the practitioners. To this end, the variation in the collection of the library as it is now and as it will develop towards the future was deemed an important factor recognized by both facilitator and practitioners.

Structuration

In terms of structuration by the facilitator of the alternative forms of practice two things stood out. First of all, they have made themselves responsible for the laundry practice of the library items. This does not mean that the practitioners may or cannot wash the clothing items, but they have set a norm in which they are the ones doing the laundry after clothing has been returned. Second, they set a maximum loan term of two weeks. This short loan term made sure that the borrowed clothing items were an active temporary extension of the practitioners' collections and were treated differently than the clothing belonging to their own collection. Together with the laundry norm this meant that the borrowed clothing could stretch personal conventions on cleanliness. The loan term gave some urgency for frequently wearing the clothing, while the clothing was not washed in between because of the laundry norm.

General remarks

The elements manifesting with the clothing library, and the performances belonging to these manifestations do not seem to match general manifestations of the symbolic elements. For all practitioners clothing consumption was a dominant practice in time. Either as they were carrier of symbolic elements, which resulted in frequent manifestations in the form of practice performances, or as they frequently encountered situations for which they devoted time to clothing consumption practice. The frequency of performances implied by the subscription model, seems to match these dominant practices. With practitioners for whom clothing consumption is a dominant practice there is likely most room for improvement. That the clothing library will have a positive effect in terms of environmental impact is not a given. The case study results however did suggest a positive effect.

8. Case Study: Clothing Swaps



The alternative form of practice that is the subject of the second case study is clothing swaps. In clothing swaps, the practice of clothing consumption is altered in the sense that clothing items that are not worn anymore are swapped for other clothing items between (groups of) consumers. Whereas in normal practice clothing items are generally only worn by one consumer before leaving the practice, swapping means that clothing items are potentially recirculated among consumers before leaving the practice. When put in the perspective of this research clothing libraries can be conceptualized as presented in Figure 8.1.

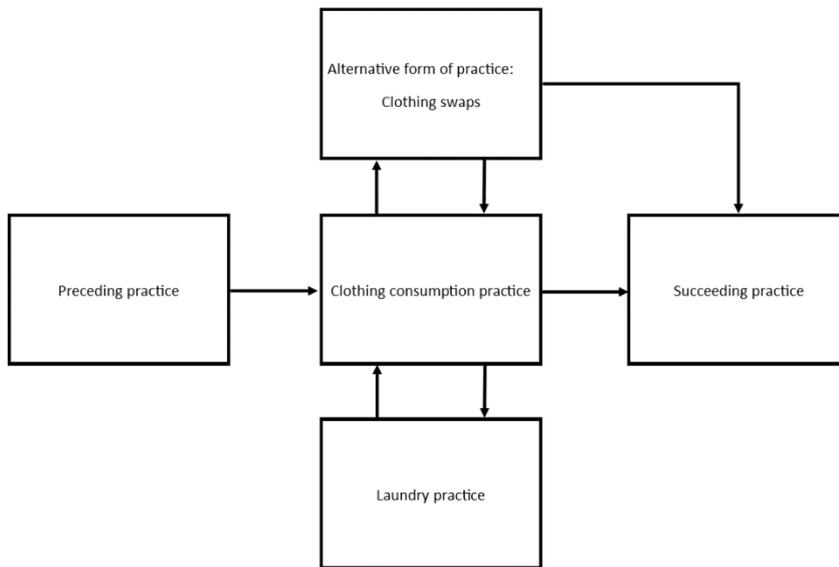


Figure 8.1 stocks and flows representation of clothing swaps (own figure)

At clothing swaps, a collection is formed based on clothing items brought in by participants. From this collection practitioners can select items to extent their own collection, while the remainder of clothing is often disposed through a charitable cause. This way clothing swaps offer practitioners a different way of maintaining their personal clothing collections. On the one hand by offering them a different way of disposing of their clothing, and on the other by providing a new way of acquiring clothing. In doing so a clothing swaps may be beneficial in terms of environmental impact as no longer worn clothing either finds a destination with other consumers, and thus displacing primary acquisition, and/or by making no longer worn clothing available to end-of-life process in which materials and energy can be reclaimed.

Within the Netherlands numerous clothing swapping initiatives have come up, and also disappeared, over time. There are organizations that organize clothing swaps all over the country, there are organizations that integrate clothing swaps into bigger events or festivals, or organizations that only organize clothing swaps on a one-time basis. For this case study however, I selected two facilitators that organize local clothing swaps in Rotterdam on a regular basis. Below I will first introduce these facilitators and discuss the variant of clothing swaps they facilitate. This is then followed by an introduction and discussion of the practitioners that visit clothing swaps. Lastly, this chapter will end with an analysis in which clothing swaps is discussed as an alternative form of practice.

8.1 Facilitators

Within this case study of clothing swaps two facilitators of the alternative form of practice were interviewed. Both organize smaller scale clothing swaps in the Rotterdam region on a regular basis. Even though they are to some extent similar, they are not one and the same. I will therefore first shortly introduce them both, before discussing how they facilitate clothing swaps.

8.1.1 City centre

The first facilitator is a 32-year-old woman living in Rotterdam. At the time I interviewed her, she was purposively unemployed and contemplating her further career moves. She used to work as an organizer of congresses for the oil- and gas industry. She now however hopes to find a new career that is more in line with her values on sustainability.

She has been an active practitioner of clothing swaps for over six years. First, she mainly was a visitor and visited a great variety of different clothing swaps. However, when she moved from Amsterdam to Rotterdam

she found it hard to find clothing swaps that were to her liking. She therefore decided to start organizing clothing swaps herself, so she would be able to visit clothing swaps within the region that were to her liking. She has now been organizing clothing swaps for about three years and always actively participates in her swaps.

8.1.2 Old North

The second facilitator is a self-employed architect living in Rotterdam. She became self-employed after being fired from her previous job in 2010. In becoming self-employed she made the decision to mainly work on projects in her direct environment, because she felt there was enough for her to work on there. This also manifests in the things she undertakes besides her job. She has been active in setting up a neighbourhood theatre/community centre, was involved in developing a solar energy cooperative, organizing a repair café, and she also put effort in getting an electric car sharing scheme to the neighbourhood. All of these activities are somehow an integration of sustainability and social values. Her organization of clothing swaps should be seen in the same light.

She first encountered clothing swaps when she signed up as a volunteer for Little Green Dress, an organization that organizes clothing swaps throughout the country. She did that once, and because she volunteered she got a free ticket to visit on as well. After these visits, she already had the idea in mind of organizing clothing swaps herself. Because of being preoccupied with other activities, she however did not do so until the end of 2014, when she planned a clothing swap aimed at finding party outfits for the holidays. Since then she has been organizing clothing swaps on a regular basis.

8.1.3 Collection

In principle the collection available at clothing swaps is brought in by the participants. As a result they also are the ones that determine what types of clothing make up the collection. The facilitators of clothing swaps can however influence on some extent what participants bring in for the clothing swaps. Below I will discuss how they influence the collection that is brought together at their clothing swaps. I divided this discussion into how they influence the size of the collection and the content of the collection.

Size of collection

When it comes to the size of the collection both facilitators influence it in a different way. The city centre facilitator sets a maximum of 10 participants, but asks them to bring at least 10 items of clothing each. The old north facilitator on the other hand does not work with a maximum of participants, but she limits the amount of clothing to a maximum of 10.

Content of collection

A first way in which both facilitators influence the content of the collection that is brought together at their swaps is through their participants being women. The city centre facilitator explicitly has a ladies only phrase in the title of her invite, while the old north facilitator does not make it this explicit. The result is however the same as both facilitate clothing swaps that are only visited by women. The same also applies to the quality of clothing brought to the swap. The city centre facilitator again explicitly states in the invitation that the clothing should be in wearable condition, while the old north facilitator does not make explicit mention of the state the clothing should be in. Again the result at their swaps appears to be the same. When it comes to the types of clothing that are brought to the swaps they both do not make explicit mention of the types of clothing that can be brought. The collections at their swaps however never include underwear or socks. That these types of clothing should not be brought is somehow implicitly understood by all participants. Lastly, both align their clothing swaps with changes in season and also make this explicit in the meaning they attribute to the event. As such mostly clothing items are brought that are suitable for wearing the upcoming season.

8.1.4 Structuration of performances

Besides influencing the collection, they also shape how participants perform the alternative form of practice. They do so through the location of the clothing swap, the infrastructure present, the timing of clothing swaps, the structure in which the swap is organized, and the repetition of clothing swaps over time. I will discuss these in more detail below.

Location

Both facilitators organize their clothing swaps in Rotterdam. The city centre facilitator organizes the swaps at her home in the city centre of Rotterdam. She emphasizes that for organizing her clothing swaps it is important that her house is located in the city centre, as it is a central and easily accessible location. The old north facilitator organizes her clothing swaps at different locations in the Old North of Rotterdam. Besides being in

the Old North neighbourhood she does not pay particular attention to accessibility of the locations, but rather tries to find underutilized spaces which can give a boost by organizing an event there.

Infrastructure

The city centre facilitator organizes her clothing swaps in such a way that she does not need infrastructure to present the clothing collection. The infrastructure requirements for her clothing swaps are therefore limited. Her living room is made ready for clothing swaps by closing the blinds and moving her mirror from her bedroom to the living room. Furthermore, her bedroom functions as a dressing room for participants uncomfortable with undressing in *public*.

The old north facilitator organizes her clothing swaps in such a way that she does present the clothing collection and she therefore needs some form of infrastructure to do so. She therefore often brings a clothing rack, and furthermore improvises with whatever is available at the location of the swap. She refuses to provide any further infrastructure as she believes the participants can solve any lack of infrastructure through self-organization.

Timing

Both align the planning of their clothing swaps with changes in season. Furthermore, they both also in general plan their clothing swaps on weekend days in the afternoon. Within these constraints, the clothing swaps are planned based on their own schedules, and the dates set are not up for negotiation.

Structure

Even though the basic elements of their clothing swaps are the same; participants bring clothing, select and fit clothing, and acquire clothing in the end, the way the facilitators structure the swaps differs significantly. The city centre facilitator's clothing swaps start with a walk-in period of about half an hour. During that time participants get to know one another, and have some tea and snacks. After the walk in she first explains the rules of the clothing swap. This is followed by a presentation round in which five participants, one by one present the clothing they brought to the group. During this presentation round participants can raise their hand if they would like to try on an item. After the first presentation round, there is a fitting round in which everyone tries on the items they selected during the presentation round. This is then followed by a second presentation round in which the remaining participants present their clothing. Which is followed by another fitting round. At the end of this the wanted clothing pieces are divided, and items that are wanted by more than one, are allotted by chance.

The clothing swaps in the old north follow a slightly different structure. Upon arrival participants hand in their clothing to the facilitator, she then starts hanging the clothing for presentation. In the meantime, the participants have a chat, with some cheesecake and coffee. After she is done presenting the clothing, she first informs the participants of the rules of the clothing swap. This is followed by two people giving a short talk on clothing and/or sustainability related issues. After these talks the participants may start browsing the collection and try on whatever they like. The clothing items people like are put on a separate rack. In the end, these garments are divided, and the contested items are either allotted through socially awarding them, or by chance.

Repetition over time

Both aim to repeat the clothing swaps every season. For the old north facilitator, however, whether she will actually organize a clothing swap every season also depends on her further schedule. If she happens to be really busy at a time she would normally plan a clothing swap it may very well be that she will skip a season.

8.2 Practitioners

For the clothing swapping case study a total of four practitioners were interviewed. In each of the interviews the practitioners' daily life, normal clothing consumption and the alternative form of practice were discussed. I will present the results of each of the interviews in the following order; structuration (daily life), performances (normal clothing consumption), and lastly alternative form of practice.

8.2.1 Respondent 1

Structuration

Practitioner

Respondent 1 is 52-year-old journalist/text writer and she lives in Delft with her husband. She mainly works from home due to chronic illness, and this illness also restricts her in the further activities she undertakes in life. Besides doing some basic groceries, she also meets up with friends, goes for a tour on her bicycle, and likes to work in her allotment (garden). When it comes to her clothing use, functional elements are most important due to her illness. Even though this is the case, she still cares about looking good. So even though her ordinary

clothing use is necessarily functional, she also makes sure to achieve some standard of looking good. With assistance of a stylist she has internalized a number of rules that help her to look good. These rules address the colours she wears, the neckline of garments, types of clothing, and the motifs used in clothing.

She is not part of many networks or communities in which elements of practice are circulated. She however does have one friend with whom she shares a body figure and preference for feminine clothing with a certain cut. They also share a liking for a particular chain of stores in France, and whenever one of them visits they also buy something for the other. Furthermore, she also shares or passes on other items of clothing with this friend.

Space

Within her house there are a number of storage spaces she uses in her clothing consumption practice. These are a closet, in which her collection is stored, a laundry pile on which her dirty clothing end up, and a bag in which clothing that is to be disposed is stored before actual disposal. Within her closet she makes a distinction between the clothing that is an active part of her wardrobe and clothing that no longer is. The clothing that no longer is worn, is stored on a separate shelve in her closet, before eventually ending up in the disposal bag.

When it comes to (social) spaces, she spends most of her time at home. Within her home mainly functional elements of clothing consumption practice play a role. She does however also get out of the house, and then does enter social spaces. An important social space in her life is her allotment (garden) that she regularly visits. For this allotment, an adjustment in dress is needed to fulfil the functional elements of practice, but there also is a slight manifestation of looking good. Which means that within her functional dressing she tries to have items that look good on her. Besides working at home, she also has meetings or interviews for her work that are on location. At these social spaces looking good manifests more than at the garden, and the balance between functional and symbolic shifts. Apart from these regularly visited spaces, she also occasionally has a night out. For these nights out, she enjoys dressing up, and they are occasions on which looking good and style most strongly manifest in her dressing.

Within her everyday life she uses public transportation to travel when she is on her own. When she is together with her husband she may travel by car. From her house in the city centre of Delft she has easy access to different public transportation services. When it comes to the travel of the elements in her practice they all travel directly. Meaning that meaning, competence, and material elements are directly transferred from another practitioner to her and vice versa.

Time

Her everyday dressing practice normally only takes up limited time, this is not because of temporal constraints, but rather energy constraints. She does however adjust or change her dressing to different circumstances. So, if she has more energy enabling her to undertake different activities, her dressing practice also takes up more time. At the same time, she may also very well have social occasions for which she would normally would like to dress up, but a lack of energy at that moment may prohibit her from devoting time to actually dressing up.

The lack of energy also influences her scheduling. In general, she finds it difficult to plan things because she does not know whether she will be able to live up to appointments. As a result, most of the time her day is not scheduled out, and what she does depends on her energy level that day. When it comes to appointments for work, however, they are necessarily scheduled in. For those occasions, her dressing practice also becomes scheduled, meaning that she will already decide on an outfit the day before actually having the work meeting.

Performances

Daily dressing routine

Her daily dressing routine starts with dressing in the morning. When she has a work activity that day she has already prepared an outfit the day before that is appropriate for work, and she will just proceed to put on that outfit. On other days, her outfit is not yet prepared, and she will initially just put on clothing that is comfortable and convenient. When she decides to visit her garden later on the day, she has to adjust her outfit. This is mostly because what is comfortable and convenient for gardening differs from working and resting at home. Furthermore, the garden is a social space for which she likes to look good to some extent.

When she returns home from a work activity, her outfit is changed. This is mostly out of cleanliness concerns. They used to have cats, and in order to keep her work clothes free from cat hairs she developed the habit of taking of her work clothes and hanging them back in her closet. If there are other moments of changing during the day a similar procedure is used. What is still clean, can be hanged back in the closet, while dirty clothes end up on a laundry pile. At the end of the day her clothing is taken off and placed in the same way, clean clothing can be hanged back in the closet, while dirty clothing ends on the pile.

Collection maintenance

The acquisition of clothing is mostly unrelated to her daily dressing routine, and there is no particular regularity or structure in her acquisitions over time. The clothing that is acquired mostly comes from second-hand stores, and she states that growing up she was very used to having second-hand clothing. Besides second-hand clothing she also acquires new clothing, part of this new clothing comes from the French store she and her friend like to visit, but also from stores in the Netherlands. Overall the majority of clothing that is acquired is second-hand. She does however also acquire more than one new item of clothing on average per month. With a larger number of second-hand items coming in as well.

The disposal of clothing is necessary to prevent her wardrobe from getting out of hand. She has a stepwise process for the disposal from her collection. When she encounters an item of clothing she is not sure about in her daily dressing routine it is first placed on a separate shelf in her closet. This shelf is then cleared out once in a while, and stuff is then placed in a disposal bag. If the clothing in the disposal bag is not missed in her daily dressing routine the bag is eventually disposed of. The route for disposal is either the second-hand store, a clothing swap, or more convenient disposal routes.

The majority of clothing she wears ends up on the laundry pile after single use. Upper layers of clothing may be hanged back into the closet after a first use. But they also end up on the laundry pile after a second round of wearing. There does not seem a judgement practice in place in order to assess the cleanliness of her clothing, and there is no space in which once worn clothing can be placed. As such throwing everything on the laundry appears to be the most convenient route considering her lack of energy at the end of the day.

Alternative form of practice

She encountered clothing swapping already over ten years ago by actually organizing clothing swaps herself. At that time, she was part of an exchange network, which was aimed at exchanging services and goods. Within this network she then at a certain moment suggested to organize a clothing swap. After the first clothing swap, she then proceeded to organize it for a couple more years until she became ill. After becoming ill there was a period of years before finally encountering the meetup website, and in that way encountering the city centre clothing swaps around three years ago.

Over time she has registered for the city centre clothing swaps numerous times. She however only visited twice and both times it was over two years ago. Even though she has registered numerous times since, she had to cancel due to not feeling good enough. The travel distance also plays a part in this respect (needing to go from Delft to Rotterdam), and she believes that it would be easier for her to visit if it were organized closer by.

The first visit to the city centre clothing swaps required some getting used to the way her swaps were structured. The clothing swaps she organized herself always used to be somewhat of a self-regulating chaos, while the city centre facilitator keeps up a strict order and procedure. Besides bringing in a bag of clothing she also selected some items she took home. These items were mostly jewellery, but she also selected one dress. At the clothing swap, she got feedback on the dress looking good on her, but once home she had to conclude that it did not really fit that comfortably. The second visit was roughly the same in terms of experience, with the difference being that she ended up with more items of clothing.

Overall the visits to clothing swaps have not lead to successful additions to the wardrobe. The dress acquired in the first clothing swap was passed on to a friend because it did not fit comfortably. While the items acquired during the second visit were recently disposed of after never really being worn. She nevertheless states that she really likes the experience, and enjoys the social character of the clothing swaps. She attributes being unsuccessful in terms of acquisition to her unusual sizes, which are generally not available at the swaps. She therefore mainly sees it as a fun and social incentive to clear out her wardrobe. But it does not really influence her daily dressing routine.

8.2.2 Respondent 2

Structuration

Practitioner

Respondent 2 is a 58-year-old advisor and lecturer in facility management that lives in Rotterdam with her husband and cats. Her advisory she does for the municipality of Rotterdam for three days a week. The other two workdays she lectures at the Albeda College in Rotterdam. Besides her work she regularly visits gym classes, likes to go hiking or cycling in nature, and enjoys reading. Furthermore, she really has an interest in clothing, and has completed a study programme on textile entrepreneurship. As such she carries a number of skills in terms of fabric knowledge, know-how of production methods, stain-removal, and sewing. She set up

business in which she gives workshops on pimping and repairing clothing items to put these skills to good use. However, as she has never made any money with these workshops, it is now more somewhat of a hobby for her. She has furthermore internalized a strong sense of custom for different occasions that is often stricter than how it is recreated in the social spaces she visits. Besides the execution of custom, mainly functional elements are considered in her clothing use.

When it comes to network or communities of practice she became part of a network of women with whom she had styling advice sessions. Furthermore, she also is a subscriber of *Genoeg* magazine. This magazine also organizes events for its community which she also visits. Through both the women's network and the magazine community she had already countered the concept of clothing swaps. Besides these two, she already got to know Ariane through her activity in repair cafes before eventually visiting her clothing swaps.

Space

Within her house there are a number of storage spaces she uses in her clothing consumption practice. These are a former bedroom that functions as a closet, a bar in front of a window, the edge of the bathtub, and the laundry bin for dirty clothing. The clothing room is shared with her husband, however she takes up more than two thirds of the room for the storage of her collection. Within the clothing room they have a closet system in which the active wardrobe is stored, on top of these closets, clothing that no longer is part of the active wardrobe is stored. The bar in front of the window is used to air out her work clothing, while the edge of the bathtub is the storage space for her house suit.

Within an ordinary week she visits a number of different (social) spaces, and she has a habit of adjusting her dressing to these social spaces. At her home, she often wears a house suit (*huispak* in Dutch), which is mostly worn for comfort, but also to keep her other clothing free from cat hair. She furthermore has two workplaces for which she dresses to her own custom standards, with a slight difference between the two social spaces. In her leisure time, she visits the gym and also goes hiking on the weekends, for these activities she also has separate outfits.

Her primary means of travel in her everyday life is a bike. They own a car as well, but that is only used occasionally. Furthermore, she also occasionally travels with public transportation when she needs to work on locations elsewhere in the country. When it comes to the travel of the elements of practice they all mostly travel direct. Meaning that meaning, competence, and material elements are directly transferred from another practitioner to her and vice versa.

Time

In her daily life performances of clothing consumption practice take up multiple moments of time. Most of these performances are however very limited in their temporal requirements because it does not take much time to execute them. Furthermore, the performances that take up additional time are scheduled such that they are performed at moments when there is more time available to do them. As such her clothing practice does not seem to compete for time with other practices.

Nevertheless, there are a number of performances of clothing consumption practice that are scheduled in into daily life. These are selecting and laying out an outfit the evening before, and dressing and changing throughout the day. She schedules her activities such that she in most cases visits her home between different performances. Because she does so she does not have to bring along clothing during the day.

Performances

Daily dressing routine

Her daily dressing routine starts the evening before with selecting an outfit for the next day. In selecting this outfit, she takes into consideration what she will do for work the next day as well as the weather forecast. Her morning dressing therefore only consists of putting on the outfit she prepared. She then wears the outfit during the activity she undertakes that day. Upon arriving back home the outfit she had on for the day is taken off and another outfit is put on. The outfit she takes off is hanged to air out. What she proceeds to put on depends on the further scheduling that day. If she goes to the gym after work she will put on her sports outfit, and change into her house suit after the workout. On other days, she will directly change into the house suit. On non-working days, a slight variation in scheduling may occur as she visits the gym in the morning. In which case, she will first put on her sports outfit, and then later her outfit for the day. At the end of the day, her house suit is hanged over the bathtub.

Collection maintenance

She acquires clothing for her collection through going shopping. Which she finds an enjoyable activity to

partake in. When she goes shopping she mostly visits second hand clothing stores. She however also likes to buy clothing in high-end stores. She however does not regularly visit these stores, and will only do so if she has a special occasion that warrants an expensive purchase, or if the stores have a sale. Overall, she acquires more than 25 items of clothing on a yearly basis, both new and second-hand.

When it comes to the disposal of new clothing there is no spatial urgency to get rid of clothing. As such she does not get rid of a lot of clothing. For the clothing she does dispose of, she follows a somewhat systematic approach. Items that are worn out or really odd are disposed of in clothing bins. She however also has items that are still too good for the clothing bins. These are items that she will not wear herself anymore. That she will not wear these items is roughly assessed on a seasonal basis. In part items are filtered out during her daily dressing routine, while selecting an outfit for the next day. She however also takes specific moments to critically assess her wardrobe for the upcoming season. Clothing that she feels she will not wear anymore is then placed on top of the closet system. It will lay there until she finds an appropriate occasion to dispose them. Over the recent years clothing swaps have been such an occasion.

During the interview, it did not become entirely clear when her clothing ends up in the laundry bin. Her work outfits are always hanged to air out, and their cleanliness is assessed on a later moment after being aired out. Often these items of clothing can be put on another time, but sometimes they also end up in the laundry bin. The house suit she puts on at home is worn for a longer period of time. As it does not really acquire smell she only puts it into laundry as it becomes really stained.

Unlike other practitioners she carries competences that allow her to repair and alter clothing in her collection to her wishes. She furthermore has a sewing atelier in which her equipment and tools are ready to use. She can therefore easily carry out minor repairs in between other activities, an on rainy days she takes on bigger projects in which she adjusts the style and fit of her clothing.

Alternative form of practice

Before visiting the old north clothing swaps, she already encountered clothing swapping through a women's network and a magazine community. Within the women's network a clothing swap was a one-time event organized by a stylist for the network. For the magazine community, the clothing swap was part of a community day. She then met the old north facilitator through her involvement with the repair café in Rotterdam. The facilitator then directly invited her to visit one of her clothing swaps a little under a year ago.

Over time she has visited the old north clothing swaps two times and had to skip one time because she already had other plans. For the clothing swaps, she has to cycle over half an hour, which is not an issue when it comes to visiting the swaps. However, if there would be clothing swaps closer to her home she would find it more convenient to visit those. At the same time, she does not actively seek for clothing swaps closer to her home.

Before her first visit to the old north clothing swap she first sifted through her wardrobe for clothing she could bring. In part, she already had a pile on her closet that was already deemed for disposal earlier. The invitation for the clothing swap was however a stimulus to critically review the items in her collection. This resulted in a bag full of clothing she brought to the clothing swap. At the swap, she first brings in her clothing, has some coffee and cake, and listens to the rules and presentations. This is then followed by actively browsing the collection of the clothing swap. She likes to have a thorough look at all the clothing items in the collection and also tries on a lot of items. Most of the items she tries on she would not even touch when shopping in a store. However, she feels it is the norm to try on and select items to bring home during the swaps. This compels her to bring home items she would normally not select and what she ends up selecting is shaped by feedback she receives from the other participants. Her experience during her second visit was very much similar to the first visit, with the only difference being the items she brought home.

The items she brought home from the clothing swaps do not become active parts of her wardrobe. The first time she brought home a dress and a bag. The dress she brought was not really her style and ended up in a clothing bin without wearing. The bag she brought as a model for hobby practices, but she also has not done anything with it yet. The second time she brought a skirt, a scarf, and a divided skirt. Again, she was not really sure about the items. She however considered wearing the skirt and scarf in her daily life. Before wearing them, she wanted to wash them and both were ruined in the process. The divided skirt is still in her wardrobe, and she considers it an item that she might be able to wear on vacation. But at the time of the interview she had not yet worn it.

8.2.3 Respondent 3

Structuration

Practitioner

Respondent 3 is a 22-year-old student living in Rotterdam. Besides her study in Nijmegen she has recently completed an internship at Witte de With cultural centre in Rotterdam, and she is currently looking for a job beside her study. She furthermore goes to fitness, likes to visit museums, and occasionally a theatre or a concert. On the weekends, she likes to meet up with friends, hang out with roommates and explore the nightlife of Rotterdam. When it comes to her clothing use she has internalized a strong sustainability meaning, and is still in the process of developing competences to also put it to practice. In this respect, the capsule wardrobe concept already offers her a lot of know-how and rules on maintaining a smaller but more effective clothing collection. As already said she is however still in the process of learning how to put it into practice. This is not an easy process as she does not have a well-defined style, but likes to incorporate elements of different style into her dress. Furthermore, she also carries a sense of custom and as a result adjusts her dress to different occasions.

When it comes to networks and communities influencing her practice a rough division into three can be made. On the one hand, there are networks in which the sustainability meaning and related competences are circulated. In this respect, a small community of practice also plays a role, and one friend in particular played a key role in introducing her to the sustainability meaning and its related networks. This is the type of network she is now actively engaging. On the other hand, she also has her more general network, through which she unintentionally encounters fashion meanings. Even though she aims to not be subject to fashion anymore, she finds it hard to ignore and when she encounters it on social media she has a habit of watching/clicking/reading it anyway. Besides these two she also has a family network that she can rely on when it comes to repairs of her clothing.

Space

Within her house there are a number of storage spaces she uses in her clothing consumption practice. These are a closet in a shared living room, a closet in her bedroom, a number of boxes under her bed and a laundry bin. Within the living room all her housemates have their own closet. In her closet in the living room clean clothing is stored. In her bedroom closet she also stores clean clothing, but also clothing she has already worn once or more. The boxes under the bed are used to store the part of her collection that is not in season.

During a week, she may visit a great variety of social spaces to which she also tends to adjust her dressing. At her home, she prefers to wear more comfortable lounge clothing. At her internship, she used to dress more in line with a formal custom. When she goes to a social space to study she wears a more casual style and when she goes sporting she adjust her dress as well. Furthermore, in her leisure time she visits the Rotterdam nightlife, meets up with friends, and visits cultural events/spaces. She adjusts her dress to these different spaces, and can also be very particular in adjusting to a certain style that is prevalent in the club she will visit.

In her daily life, she travels short distances by bike or foot, and takes public transportation for further distances. These longer travels consist of going to her university in Nijmegen, but also visiting family on the other side of town. When it comes to the travel of elements of practice they travel both direct and indirect. Direct travel occurs as she visits social spaces, for instance at her internship she first dressed in a business casual style, so she could alter her style according to the custom that was recreated there. Also, when it comes to clubbing she learns about specific styles through visiting and adjusts her dressing accordingly. Living in the city she also encounters new fashions in the dressing of others she sees on the streets. Furthermore, when it comes to sustainability and dressing, she first encountered sustainability meaning directly through interaction with a friend. Indirect travel however also plays an important role. Through social media she encounters a lot of fashion elements and she finds it hard to avoid them. Furthermore, online media are also a source of information when it comes to developing know-how on sustainability.

Time

She does not have a constant schedule when it comes to how she fills her week. Apart from agreeing with classmates to study in Nijmegen on Tuesdays, the remainder of the week is not planned out on beforehand. She does however adjust her dressing to different social spaces she visits during the day. There are therefore multiple performances of dressing scheduled in on a day. These performances however only take up limited time as she has developed competences on selecting outfits without needing to fit them before. One exception to this is rule is dressing for an evening out, which may consist of putting on numerous outfits before choosing one. Overall her dressing practice does not seem to compete for time with other practices.

She clearly adjusts her practice to weather conditions over time. On a daily or weekly basis by adjusting her dressing to the weather conditions. But also in storing her clothing collection, clothing that is inactive during the season is stored under the bed, while the closets are filled with clothing that is worn. Besides weather adjustments her dressing practice is also influenced by trends over time. Even though she consciously knows she should not follow these trends when it comes to sustainability, she finds it hard to ignore them. She distinguishes between short-term and long-term fashion trends. She ignores the short-term trends, but acknowledges that she will adhere to long-term trends. As she puts it: “I do not want to be seen in a style from the zeros”.

Performances

Daily dressing routine

How her daily dressing routine starts is dependent on the weather conditions. When the weather is relatively constant she already selects an outfit the evening before, and already brings the items from the closet in the shared living room to her room. When the weather is more precarious she however selects an outfit in the morning because she then has more certainty about the weather that day. In either case, because she has relatively fixed outfits, or because she can follow rules for composing an outfit, the selection process does not require fitting. It however does take into consideration the (social) space she will visit that day, in terms of custom, but also comfort. After having selected an outfit she therefore just needs to put it on. She then wears the clothing until there is a change in activities and social spaces. This may often be a reason to change her outfit for the new occasion. At the end of the day she changes into her pyjama. During the course of the day clothing that is taken off is either placed into laundry, or hanged to air out, depending on its cleanliness.

Collection maintenance

The acquisition of clothing is quite an issue for her. She has really internalized a sustainability meaning, which she applies through the concept of a capsule wardrobe. Because of this sustainability meaning a lot of stores she used to go to before are no longer an option. The stores she crosses of her list are however not replaced with other stores as there is a lack of availability in Rotterdam. She therefore resorts to mainly visiting second hand stores. At the same time shopping is a practice she also undertakes with friends. When she goes shopping with these friends she is less likely to visit second hand stores. She therefore resorts to only buying clothing at little boutique stores, of which she does not know whether or not they are sustainable. Besides purchasing she also receives second hand clothing from her mother or her friends. Irrespective of the source, she is very conscious about what clothing items she acquires. Because she follows the capsule wardrobe approach she only acquires clothing items that are still missing in the collection, or to replace an item of her collection. This forces her to be very critical of what she acquires and she will not acquire clothing that does not fit her capsule wardrobe.

When it comes to the disposal of clothing she distinguishes between clothing that is still wearable but that does not fit her collection anymore, and clothing that is worn out. The first group of clothing is the result of her growing up and consists of clothing she bought as a teen, but that no longer fits her adolescent life phase. As she feels these items can still have value for others she tries to get them new owners herself. Either by selling them on Kingsday, or by visiting clothing swaps. The second group of clothing is worn out and she deposes these in clothing bins, because the textile might still have value. Overall that she disposes of the first group of clothing is very much the result of her transitioning towards a capsule wardrobe. As she gets closer to completing her capsule wardrobe this group may therefore cease to exist.

Underwear ends up in the laundry on a daily basis. Furthermore, on warm days tops also end up in the laundry on a daily basis because of sweating. Other items of clothing are hanged to air out and can therefore be worn multiple days before ending up in laundry. She did not seem to have a clear schedule in terms of days clothing can be worn, and during the interview her method for assessing cleanliness also did not become clear.

In her family network, she has a number of relatives that are able to repair clothing for her. When items require some repairing she therefore brings them with her when she visits these relatives, and they repair it during her visit.

Alternative form of practice

She was introduced into clothing swaps by the friend that had also introduced her to sustainability in more general. At the time of the interview she had already visited two clothing swaps, and had made plans to visit a city centre clothing swap. This means she had not visited the city centre clothing swaps yet, and therefore the other two swaps she did go to were discussed in more detail during the interview.

The first clothing swap she visited was organized in Rotown, a bar, club and performance venue in Rotterdam. She visited this clothing swap with the friend that introduced her to the concept. This clothing swap had a maximum of 10 items that anyone could bring in. She was awarded points for the clothing she brought in that she could spend on items that she would like to bring home. It was furthermore a clothing swap in which you could walk in and out to your liking. Which also meant that if you were the first to grab and select an item, then it was yours. She describes her experience at this clothing swap as very successful and she proceeded to acquire four items.

Her second clothing swap was during the fair fashion festival in Rotterdam. This swap more or less followed the same principles as the swap in Rotown. She however arrived late, and as a result the collection that was still available mainly consisted of leftovers; extreme sizes and worn out clothing. At this swap she could not find any items that were to her liking, and therefore she retrieved the remainder of the items of clothing that she brought in. With the idea of needing them as currency to participate in future swaps.

Over time she has visited two clothing swaps in little under a year. By visiting those clothing swaps her swappable collection shrunk to ten pieces. Which she saved to bring in at the city centre clothing swap. Due to her following the capsule wardrobe approach she likely runs out of swappable clothing in the near future. She therefore already considered also bringing in other people's clothes at swaps, but she also wonders whether or not her collection will be finished soon. Therefore, having no incentive to visit a clothing swap anymore.

The items she brought home from the first clothing swap have become active parts of her wardrobe and she was actually wearing a swapped item during the interview. That these items do become active parts of the wardrobe is because she is very critical of what she acquires, also at swaps. Furthermore, because of the way the swaps were organized, there was no social feedback leading to unsuccessful acquisitions. Also highlighted by the fact that she was able to bring her own clothing home during the second swap.

8.2.4 Respondent 4 Structuration

Practitioner

Respondent 4 is a 52-year-old industrial designer living in Rotterdam. She recently became unemployed and therefore has a lot of time on her hands. Besides searching for a new job, she also tries to set up her own projects, and she has just submitted a project proposal for subsidy to the municipality. Since becoming unemployed she became a volunteer caregiver to family members, and she started doing much more in and around the house. She furthermore likes to have some social interaction on a daily basis, which she achieves by visiting meetup events, going sporting, or just meeting up with friends.

When it comes to being a practitioner of clothing consumption, she sees it as a non-interest practice. For her it is an unavoidable practice, but she rather does not put too much effort into it. She however does not want to stand-out in a negative way, and she had styling advice in which she learned which colours suit her best. By abiding to such rules, she is able to make sure she blends in without too much effort. In terms of networks she has managed to position herself in a network through which she receives and channels a lot of second-hand clothing. In this network, she either just receives clothing from others, or she takes it upon herself to hand in clothing from others at charitable causes.

Space

Within her house there are a number of storage spaces she uses in her clothing consumption practice. These are a closet in which her wardrobe is stored, a chair on which worn clothing is stored and a laundry bin in which dirty clothing is stored. These storage spaces are all relatively straightforward. Only her closet has an additional division within it, clothing that she does not wear is stored in a separate section in the bottom of her closet, while the remainder of the space is taken up by the clothing she does wear.

As she currently is unemployed she does not have a workplace for which she needs to put on her *uniform*. She nevertheless still visits numerous social spaces on a weekly basis. The influence of these social spaces on her dressing is however limited with her main concern being not standing out negatively. Rather than the spaces themselves, the people that she will encounter in these social spaces may have a bigger influence. When she goes to social spaces with her neighbour or specific friends she makes sure to put more effort in dressing feminine. When she goes to spaces in which she may encounter people that can offer her a job opportunity she also puts more effort in dressing formal.

Her primary means of travel in her everyday life is a bike. She owns a car as well, but that is only used when she needs to visit another city as caregiver. When it comes to the travel of the elements of practice they all mostly

travel direct. Meaning that meaning, competence, and material elements are directly transferred from another practitioner to her and vice versa. She receives second hand clothing directly from other practitioners, and the symbolic elements of practice are also transferred through direct interaction with other practitioners.

Time

She does not have a constant schedule when it comes to how she fills her days. There are a number of recurrent elements on a day; having three meals, doing something outdoor, and socializing with other people. She furthermore likes to work on creative projects and to study. These different and additional elements do not follow a defined order, and most activities do not significantly influence her dressing practice. Whether she will enter a situation in which her dressing matters is therefore not known at the start of the day, and generally requires adjustments later during the day. Overall, she does not seem to devote a lot of time to her dressing practice and it does not seem to compete for time with other practices.

There does not seem to be a lot that influences her clothing consumption practice over time. She adjusts her practice to weather conditions as they develop over time. Besides seasonal changes there do not seem to be any other developments that influence her practice over time.

Performances

Daily dressing routine

She describes her daily dressing routine as a non-interest practice. This also shows in the performances that make up her daily dressing routine. As her day is generally not planned out when she dresses in the morning she often selects an outfit that is already dirty. This because the activities she undertakes in and around the house will make her clothes dirty, so she might just as well put on dirty clothes. Depending on how the day develops she might need to change to adjust to the social spaces she may visit. In generic social spaces, this means not standing out negatively in terms of looking good. When visiting specific social spaces, or meeting specific people, custom may manifest in her dressing as well. At the end of the day the clothing she worn during the day mostly ends up on a chair, as well as the laundry bin.

Collection maintenance

She has positioned herself in a network in which she is on the receiving end of a lot of second hand clothing. The majority of clothing she acquires therefore is received through these second-hand sources. Besides receiving clothing, she also sews clothing herself. Purchasing clothing, like many others do, is a last resort for her and she feels she actually does not need to acquire as much clothing as she does now. Not all the second-hand clothing she acquires also ends up in her collection. She reviews the clothing items in terms of functional elements, and style before submitting them to her wardrobe.

The nature of her acquisition also means that she actively disposes of clothing. This can be because people asked her to hand in their second-hand clothing for them. But also, because the clothing she acquires does not fit her requirements. The clothing she disposes of is not limited to the second-hand clothing that did not make it into her collection. Over time her wardrobe becomes full, which warrants a clean-out as well. In part, this clothing is then handed in at charitable causes in the city, but also clothing swaps are an important means of disposal. Occasionally clothing may also end up in clothing bins, but this is something she only reserves for clothing that is only good for its fibre content.

During her daily dressing routine most clothing ends up on a chair. The pile of clothing on this chair can build up. Occasionally she however needs the chair, which prompts a clear out of the pile on the chair into the laundry bin. Items of clothing also move directly from the chair into the laundry practice. This happens when the laundry machine is not full enough, in which case items that are most in need of laundry are selected from the chair to fill the machine. Clothing also ends up in the laundry bin, this because they are really dirty. Which is observed through smelling odour, and observing stains. Even though items of clothing end up in the laundry bin, this does not mean they will move into the laundry practice. This because the laundry bin can also be a source of clothing in the morning.

When it comes to performing repairs, she appears to carry the necessary competences to carry them out. Whether this is something she also does did not become clear during the interview.

Alternative form of practice

She already knew the old north facilitator before she started visiting her clothing swaps. When she heard she was going to organize a clothing swap she decided to visit. She enjoyed the first time so much that a lot more visits followed. Furthermore, she also once visited a clothing swap in Leiden. Over time she has developed a habit of visiting a clothing swap around once every season. She furthermore started giving talks during the old

north clothing swaps as well. For the clothing swaps, she has to cycle for half an hour, which is not an issue when it comes to visiting the swaps. However, if there would be clothing swaps closer to her home she would find it more convenient to visit those. At the same time, she does not actively seek for clothing swaps closer to her home.

Before visiting one of the old north clothing swaps she first determines if it is at a location that is suitable for parking her car. If so, she can bring in more clothing, and if not, she goes by bike with less clothing. The clothing she takes is often already situated in a separate section at the bottom of the closet. She checks these items of clothing for freshness, and whether they may need to be ironed. Besides bringing the already designated clothing from the bottom of her closet she also critically reviews the rest of her collection. She then brings the clothing to the swap, hands them in, and often helps with hanging the collection. Which is followed by some coffee, getting introduced to one another, and then talks, in which she often also plays an active role. After the talks, the actual swapping starts. Because she helps with the hanging she often already has seen part of the collection. She starts with also checking out the part of the collection she has not seen yet. This is followed by fitting the clothing she likes, and then ultimately selecting several items to bring home. Even though she does not care much about clothing in her daily life, she is tempted to fit and choose a lot of clothing during the swaps. At the swaps, her judgement gets blurred and she feels like a magpie bringing in items into her den.

After every swap she brings home numerous items of clothing. These items of clothing however do not always become active parts of her wardrobe. There is a difference between how she judges the clothing at a swap, and how she does in daily life. As a result, she brings home a lot of clothing that she does not really wear in daily life. Overall, she thinks that she has an average of two successful acquisitions per swap. As she has already visited numerous swaps, the successful acquisitions already make up a significant part of her active wardrobe. At the same time, she also brings home a lot of clothing she does not proceed to wear. They end up in the bottom of her closet and are brought along to the next clothing swap.

8.3 Analysis of alternative form of practice

Below a short analysis of the alternative form of practice is performed. This analysis will consist of the elements of practice manifesting in the clothing swaps, as well as the structuration of performances by the clothing swaps. This is followed by some general remarks on the clothing swaps as an alternative form of practice.

Elements of practice

The alternative form of practice of clothing swaps as studied in this case study is in different stages related to the manifestation of different elements of practice. First off, before participation practitioners already have a collection of clothing that is not or no longer worn. This collection of unused clothing is very much a manifestation of looking good, style and fashion. The garments in the collection are no longer adequate for the practitioners' manifestation of looking good, style and fashion. There are exceptions to this rule in the form of garments that are not worn because they do not comfortably fit the practitioner. Nevertheless, the majority of the collection is the result of a manifestation of symbolic elements of practice. Subsequently, participation in clothing swaps is the result of the manifestation of sustainability and/or social meaning elements. These elements manifest because they are circulated by the facilitators, but also to a more important extent because they are also carried by the practitioners. At the clothing swaps in the performance of selecting and acquiring garments, mainly looking good and style manifest. Within this situation meanings of looking good are circulated among practitioners, while internalized style preferences shape which items are or aren't selected and acquired.

Structuration

The performances of clothing swapping were very much influenced by the dimensions of structuration. Timing was very influential as participation depended on being able to attend on the time set for the clothing swaps. Furthermore, the timing also sets a norm for active participation when attending. It is an event which is hosted on a specific moment, in which people come together, hand in clothing, and select clothing to take home. This norm for taking something home can overpower manifestations of style preference, as socially shared meanings of looking good are circulated. The community of practitioners that was brought together was also very influential for the performances of clothing swapping. Within the community that is brought together the practitioners differ in sizes, carriers of elements. This influences the collection that is brought together, and results in a collection that contains variation in size and style. A larger community would therefore increase the likelihood of finding clothing that is a good match in terms of taste and size. As the facilitators recreate a form of clothing swaps with a relatively small number of participants the chance of successful acquisitions is limited. Furthermore the relatively small number of participants also influences the recreation of the norm that

everyone takes something. The result of all this is that clothing acquired at the clothing swaps has a smaller chance of becoming part of the active wardrobe than clothing acquired through other methods. Meaning that the influence of clothing swaps on everyday dressing practice is limited.

General remarks

Participation in the clothing swaps was more linked to the manifestation of non-practice elements. All respondent either emphasized a social or sustainable meaning for participation. The sustainability meaning in particular also manifested in their normal clothing practice, which meant that the participants already acquired the majority of their clothing from second hand sources. In terms of the content of their acquisition these practitioners were already relatively sustainable. Also meaning that there was less room for improvement in terms of sustainability. As a form of practice, clothing swaps are very much dependent on there being a surplus of clothing in normal practice. In the clothing swaps unused surplus clothing stock is activated and brought together. As such the clothing swaps are dependent on a phenomenon of an essentially unsustainable practice. This became particularly clear for the third respondent who adhered to the capsule wardrobe concept. She was in the process of reducing the size of her wardrobe, which meant that in time she would no longer have a surplus of clothing, nor a reason to participate in swaps. While the swaps were effective in activating the disposal of unused clothing stock, they were much less effective in terms of acquisition. For the practitioners the collection that was brought together in clothing swaps did not always match their style or size. Furthermore, the social norm of taking something meant that items were picked that would not have been picked through more regular acquisition channels. As such most of the clothing acquired at swaps did not become part of the active wardrobe. However, after numerous participations the share of swapped clothing in the active wardrobe can become quite significant. Overall the main environmental gain of clothing swaps is the activation of an unused clothing stock. Even though most items do not become reused as a result of the clothing swap, other positive end-of-life scenarios may occur.

9. Sustainable transition in practice



In this chapter the case studies that were presented in the preceding chapters will be discussed in more detail. Specifically their potential to influence overall clothing consumption practice will be discussed, their potential to reduce environmental impact of clothing consumption will be discussed, and finally their potential to establish a transition of practice will be assessed.

9.1 Potential to reduce the environmental impact of practice

In chapter 2 environmental impact of clothing consumption was discussed. This discussion was divided into cradle-to-gate impacts preceding consumption, laundry impacts during consumption, and end-of-life impacts after consumption. In chapter 6 these different sets of environmental impact were allocated to different practice performances of collection maintenance. Acquisition corresponds with the impact flow entering practice from the cradle-to-gate, laundry submission corresponds with the impact flows to and from laundry practice, and finally disposal corresponds with impact flow of end-of-life. The potential of the alternative forms of practice to reduce the environmental impact of practice should therefore lie in how and how effectively they can address these flows. Below I will therefore discuss if and how the alternative forms of practice address the acquisition, laundry, and disposal flows, and what potential they have to reduce the environmental impact of these flows.

Clothing library

Acquisition flow

For reducing the environmental impact of the acquisition flow two approaches were distinguished; reducing the volume of the flow, and changing the content of the flow. With respect to addressing the environmental impact of the acquisition flow, it is important to have an understanding of the content and the volume of the acquisition flows as it is recreated by the practitioners of the clothing library. The practitioners of the clothing library mainly acquired new clothing, and did not pay particular attention to the sustainability of manufacturing. The potential to reduce the environmental impact of acquisition through a change in the content of the flow is there. As the facilitators of the clothing library paid specific attention to the manufacturing sustainability of the garments they acquired, the potential to reduce impact through changing the content of acquisition is there.

This reduction is however only realized if the acquisitions of the library displace primary acquisitions by the practitioners. If the clothing within library constitutes an additional flow it only contributes to greater environmental impact. How the clothing library addresses the volume of the flow is therefore also really important. In essence the clothing acquired for the clothing library should displace a similar number of acquisitions by practitioners. While even greater environmental benefit would be achieved if the clothing library acquisitions displace a greater number of primary acquisitions by practitioners. This because the volume of the acquisition flow of practice would be reduced, thus also reducing environmental impact further. With one practitioner there was clear evidence that the library did significantly displace primary acquisition. Hinting towards the clothing library being able to reduce the volume of the overall acquisition flow. However, the clothing library did need to acquire a significant collection in order to facilitate the practitioners. Therefore, their potential to reduce impact is dependent on scale, and they need to expand their subscriber base to get to real environmental impact reduction.

Laundry flow

For reducing the environmental impact of the laundry flow two approaches were distinguished; reducing the volume of the flow, and changing the content of the flow. The clothing library addressed the laundry flow, by taking it upon themselves to perform the laundry practice. Whether this will lead to a reduction in the environmental impact of the laundry flow depends on the performances by practitioners. The borrowed items of clothing seemed to be worn more actively than normal clothing. Suggesting that the clothing library leads to a reduced size of the laundry flow. In this respect it is however important to note that this does not apply to all types of clothing. In particular the renting out of coats, which are normally not washed as much as other items of clothing, could potentially lead to an increase of the laundry flow. Besides addressing the volume of the laundry flow, the library could potentially be more efficient in laundry because of scale advantages. Whether, they will actually do so depends on their laundry practice, and them developing the user base for scale advantages.

Disposal flow

For reducing the environmental impact of the disposal flow two approaches were distinguished; reducing or increasing the volume of the flow depending on whether clothing is still being worn, and changing the route of the flow. The clothing library did not have a clear influence on disposal performances. Therefore their potential to directly reduce the environmental impact of clothing consumption through disposal is limited. Limited,

because they do directly influence the disposal of library items. With regard to this disposal of library items the potential to reduce environmental impact through effectively determining what should be disposed, and determining the route the disposed clothing takes, is there. Due to their relatively short existence, whether or not they are able to live up to this potential is not yet clear.

Clothing swaps

Acquisition flow

For reducing the environmental impact of the acquisition flow two approaches were distinguished; reducing the volume of the flow, and changing the content of the flow. With respect to addressing the environmental impact of the acquisition flow, it is important to have an understanding of the content and the volume of the acquisition flows as it is recreated by the practitioners of the clothing swaps. The practitioners of clothing swaps already acquire a significant share of second hand clothing. If an acquisition from a clothing swap displaces second hand acquisition there is no reduction in environmental impact. For a reduction in environmental impact an acquisition therefore needs to displace the acquisition of new clothing. Based on the results of the case study there is no evidence that a clothing swap acquisition effectively does so.

Laundry flow

For reducing the environmental impact of the laundry flow two approaches were distinguished; reducing the volume of the flow, and changing the content of the flow. The clothing swaps did not address laundry, and therefore they did not have any influence on the laundry flow.

Disposal flow

For reducing the environmental impact of the disposal flow two approaches were distinguished; reducing or increasing the volume of the flow depending on whether clothing is still part of the active wardrobe, and changing the route of the flow. The clothing swaps clearly led to disposal performances in which unused parts of the collection were activated. The practitioners of the clothing swap were often hesitant in disposing their clothing through other channels. Therefore, with respect to disposal performances the clothing swaps have a clear potential to reduce the environmental impact of practice. With respect to improving the route of disposal the clothing swaps offer the most positive scenario as it is recreated in the Netherlands. First, by allowing clothing to be swapped for second hand use, and later by submitting it to separate clothing collectors. Relative to the disposal performances of the practitioners of the clothing swaps the environmental gain is however limited to none, as they would already dispose their clothing through second hand clothing store, clothing bins, or other best practice routes.

Concluding remarks

Both alternative forms of practice have the potential to reduce the environmental impact of clothing consumption practice. Their ways for doing so are however very different. The clothing library takes over all the collection maintenance performances, while the clothing swaps offer a date and place for disposal and possibly acquisition. Furthermore, the order in which they address these performances differs. At the clothing library items of clothing are first temporarily acquired, then *disposed*, which is then followed by laundry practice. At clothing swaps, items of clothing are first disposed, which is then followed by possible acquisitions. This different order of performances has implications for the influence these alternative forms of collection maintenance have on daily dressing routines. At the clothing library one or more items are selected, depending on the subscription. These items are selected in anticipation of the period of two weeks (or shorter) that follows, and the dressing *requirements* that will be encountered during that period. The result is that the borrowed items are put to active use in the daily dressing routine while borrowed. The clothing swaps on the other hand start with the disposal of clothing. The clothing that is disposed of is often not used anymore in the daily dressing routine, but still in wearable condition. There being a surplus implies that practitioners have a sufficient collection for their daily dressing routine. This means that the acquisition of clothing at swaps is not necessarily informed by requirements from the daily dressing routine. Overall this means that clothing acquired at clothing swaps needs to be *better* than clothing that is already owned, to become an actively used addition to their collection. Acquisitions at clothing swaps are however influenced by a social norm for acquisition, and socially shared meanings of looking good. As a result, acquisitions from clothing swaps are only occasionally better than already owned clothing, and therefore clothing swaps only have limited influence on daily dressing routines. Overall, both alternative forms of practice have the potential to influence practice in a different way. The clothing library can influence the full range of performances that make up clothing consumption practice. The clothing swaps mainly influence disposal performances, to a lesser extent acquisition performances, and to an even lesser extent the daily dressing routine. In doing so both forms of practice influence very different parts of practice. The clothing library does not address the disposal of unused clothing from practitioners' collections,

while the clothing swaps very much do so.

9.2 Potential to establish a transition in practice

Whether or not a transition in the practice of clothing consumption will take place sometime in the future cannot be empirically validated. This discussion of the potential the alternative forms of practice have to influence a transition is therefore mostly explorative. Before getting to the alternative forms of practice though, I will first shortly discuss how transitions in practice, and the role alternative forms of practice play within them, can be understood.

In the final chapter of their book Shove et al. (2012) discuss how transitions in practice can be promoted. In this chapter processes of change that take a more systemic account of the social world are discussed. They furthermore introduce four strategies through which these processes of change can be configured by policymakers. These are; configuring elements of practice, configuring relations, configuring careers, and configuring connections. Configuring these processes of change is however not limited to governmental actors, and non-governmental actors could also use these processes to influence the dynamics of practice. With respect to this research the facilitators can be seen as non-governmental actors trying to influence such a change. The alternative forms of practice can subsequently be seen as the application of particular configurations of change processes. A similar conceptualization can be found in a conference paper by Spekkink et al. (2017). In this paper they conceptualize grassroots initiatives on repairing and energy presuming as attempts of re-crafting practices. This re-crafting practices is the configuring elements of practice strategy as discussed in Spurling et al. (2013). In this discussion I will however not limit myself to one strategy for change, but instead discuss all four change processes presented in Shove et al. (2012), and the way they do or do not apply on the alternative forms of practice studied in this research. By performing a more detailed discussion I also enable myself to do more in-depth policy recommendations in the discussion at the end of this report.

Configuring elements of practice

The first change process is aimed at influencing the circulation of elements of which practices are formed. This can either be hindering elements that make the practice unsustainable or facilitating and creating elements that make the practice more sustainable. One's ability to control the circulation of elements is, however, very limited. Many elements circulate in ways which are impossible for anyone actor to comprehend and control. When it comes to configuring elements of practice a rough division of two approaches can be made.

The first approach is to single out one of the elements of the practice and then try to influence that element. This can be campaigns to influence the meaning element, negotiated industry standards to influence the material element, and training and schooling to influence the competence element (Spurling et al., 2013). With this approach, only one of the elements of the practice is being addressed. For the element to be taken up by the practice it cannot be radically different from the existing elements, implying that only incremental change of the practice can be realized by only following this first approach.

This brings us to the second approach, which aims to address all the elements of practice at once. This second approach requires systematically analysing the practice, taking into consideration all types of practice elements and the relations between them (Spurling et al., 2013). Having said this, no single actor has the ability to enforce their reconfigured elements on the practice as a whole. Instead, actors aiming to utilize this second approach need to find spaces in which they can negotiate and establish the reconfigured practice. After having established the reconfigured practice it can then diffuse to reconfigure the practice as a whole.

Application by the alternative forms of practice

In principle, both alternative forms of practice can be seen as applied versions of the second approach. Rather than aiming to reconfigure one element for overall practice, they both aim to reconfigure practice within a niche environment. In establishing these niches however, they reconfigure local practice in such a way that a diffusion to overall practice is far from just a matter of time. This because the specific configurations of practice pose limitations to diffusion. I will discuss these limitations below.

The first of the limitations is in the basis quite simple, the types of clothing that are not part of the alternative forms of practice. Because of hygiene considerations they both exclude underwear. Therefore underwear needs to be provided through normal practice or other alternative forms of practice. Furthermore, beyond the types of clothing, they are also both limited in the amount of clothing they provide. The clothing library only allows for the borrowing of one, two, or three items of clothing. An outfit can of course be made from this limited amount of clothing, but it is not feasible for practitioners to visit the clothing library so much that they only wear borrowed items. Therefore, practitioners still need to maintain their own collection for their daily

dressing routine. The clothing swaps could in this respect be more effective. If practitioners bring home as much as they brought, they would in principle be able to maintain their collection, and thus their daily dressing routine through participation in clothing swaps. In practice this however far from happens, and if you consider that clothing wears out over time other sources of acquisition are inevitable.

Another limitation is the elements that manifest and subsequently the practitioners that are attracted. The clothing library is very much related to manifestations of symbolic elements, and these manifestations correspond to practitioners for whom clothing consumption is a dominant practice in time. This is not a disposition that is generally shared by practitioners of clothing consumption in the Netherlands, and therefore the clothing library is limited to a niche group. The same applies to the clothing swaps, where sustainability and social elements manifested. This is also a disposition that is not generally shared, and therefore limits the alternative form of practice.

So even though the alternative forms of practice follow the strategy of reconfiguring the elements of practice, more is needed to establish a transition in practice. It is therefore fruitful to also take a look at the other change processes described by Shove et al. (2012).

Configuring relations

Practices do not exist in isolation, but can connect with one another. In doing so they can establish either collaborative or competitive relations. The second change process is aimed at influencing these relations between practices. The approach to be taken depends on the type of inter-practice relations the practice of interest has. When the practice of interest has collaborative inter-practice relations then actors can try to influence the re-enactment of practices that support the practice of interest. When the practice of interest has competitive inter-practice relations then actors can try to promote the favourable practice and displace the less favourable one(s).

Application by the alternative forms of practice

Working on configuring competitive inter-practice relations is on the one hand already beyond the power of the alternative forms of practice, and furthermore it would require there to be an alternative for clothing consumption/dressing practice, which simply is not there. In terms of collaborative inter-practice relations, there might be an opportunity for the alternative forms of practice to develop them. For instance by positioning themselves within sets of lifestyle practices. Thus far there is however no indication that they are doing so.

Configuring careers

The previous change process was aimed at influencing the relation between practices that can function as alternatives for each other. This third change process takes a slightly different approach and focuses on the careers of carriers/practitioners and practices. When it comes to configuring the careers of practitioners, there are a few options to focus on. Policy makers may focus on the accessibility of different practices, attempting to influence the probability that someone is introduced to and captured by these practices. They may also focus on the meaning and competence carried by practitioners, attempting to influence how practice performances are recreated.

When it comes to configuring the careers of practices you can focus on effecting change indirectly through influencing the careers of practitioners, but you can also try to influence the careers of practices directly. Policy makers may do this by capitalizing on existing developments within and surrounding the practice. Within a practice they can do this by promoting the reproduction of a more favourable variant of practice. As such the approach is roughly the same as the one for competing practices described before. The main difference is that this approach is intra-practice instead of inter-practice. They can however also attempt to influence careers by aligning practice development with greater societal trends. This can for instance be demographic trends such as an ageing population or changes in the composition of households, technological trends such as digitalization, and social trends such as growing concerns for a healthy lifestyle.

Application by the alternative forms of practice

Both alternative forms of practice as studied in this research try to configure the careers of practitioners. Not so much in terms of accessibility, but rather by focusing on the meaning and competences carried by practitioners. The old north clothing swap has the most clear strategy in this respect, as each clothing swap event is started with a number of talks on sustainable clothing consumption. The other clothing swap and the clothing library have a less clear strategy, but instead expect the recreation of sustainability meaning and competence through informal conversation.

Both alternative forms of practice do not actively work on configuring careers of practice. As they pose new ways of collection maintenance they evidently compete with normal collection maintenance practice performances. They furthermore try to promote their own practice, but are not in the position to displace, or hinder the recreation of normal practice performances. In terms of aligning with societal trends, or developing supportive intra-practice relations, the alternative forms of practice also do not have a clear strategy. This is however, something that would be very interesting for them to consider. As it fell outside of the scope of this research I will not give a detailed discussion on how they could do so. But to give an example, the clothing library could align with the capsule wardrobe concept followed by the third respondent of the clothing swaps.

Configuring connections

The last change process is about influencing the connections that allow the reproduction and development of practices. When it comes to connections there are two possible ways to influence them. The first approach is to build and facilitate connections which may lead to more favourable practices. Effectively bringing actors together, setting up a coalition or community and stimulating them to interact. The second approach is to do the opposite, and instead focuses on breaking down connections that hold less favourable arrangements in place.

Application by the alternative forms of practice

Essentially this last one is about developing or breaking down communities or networks of practice. Again whether the alternative forms of practice have the power to break down unfavourable communities or networks is questionable. There is furthermore no evidence that they are actively trying to do so. With regard to developing networks or communities they may have the opportunity to develop favourable conditions for the further development of the alternative forms of practice. The clothing library seems to be most active in this regard, emphasizing the development of social relations with their suppliers, as well as situating themselves in a community of sustainable business. For the clothing swaps such strategies are less clear, the facilitators engage in multiple networks on their personal title, rather than the alternative form of practice being part of and/or developing networks or communities of practice. For both alternative forms of practice however, this is something that could be developed further to promote a transition of practice.

Concluding remarks

Lastly, what does this all mean for a possible transition in practice. Simply put, neither has the potential to fully transform the practice of clothing consumption in the Netherlands. This because both have limitations in influencing a diffusion and thus transition in practice. Therefore, I will instead discuss their potential contribution to a transition in practice.

Clothing library and a transition in practice

The clothing library can potentially contribute to a transition in practice as it addresses manifestations of fashion and symbolic element in a more sustainable way. The clothing library studied in this case study does so with a collection that supports the recreation of sustainable manufacturing practices. Through their efficiency of scale they may furthermore play a role in developing a circular economy for clothing in the Netherlands. Which could ultimately also be beneficial for improving the sustainability of clothing not provided by them. The main limitation at this point is however that the short loan term limits the recreation of the alternative form of practice to practitioners for whom clothing is a dominant practice. This could possibly be addressed by extending the loan term, or by the development of libraries with longer loan terms.

Clothing swaps and a transition in practice

Clothing swaps can possibly lead to a sustainable transition in practice by an intensification of clothing use. From primary acquisition clothing can cascade through multiple practitioners before ultimately being disposed of. For this to happen clothing swaps are dependent on normal practice to start the cascade. Clothing needs to enter the second hand circuit from normal practice. Clothing swaps may play a role in facilitating the recirculation of second hand clothing by giving meaning to second hand disposal. Either as normal practitioners participate in clothing swaps, or as clothing swap practitioners acquire surplus from normal practitioners to submit in clothing swaps. In either case, clothing swaps will not address manifestations of fashion in a sustainable way. There still is the need for primary acquisition, and subsequently a need for clothing that is still of good quality to circulate. So even though clothing swaps can make a positive contribution, they do not radically transform the unsustainable aspects of practice.

Conclusions

This research was aimed at answering a number of research questions in support of an overall research question. I will discuss and answer the individual research questions below before developing an answer to the overall research question at the end of this section.

How does clothing consumption in the Netherlands result in environmental impact?

The aim was to get an understanding of the environmental impact of clothing consumption from the perspective of the consumer. To this end the life cycle impacts are divided into three phases: the cradle-to-gate manufacturing phase that precedes consumption, related use impacts during consumption, and end-of-life impacts that follow consumption. Of these three the cradle-to-gate is responsible for the majority of impact, followed by the use related impacts, and end-of-life generally has a negative environmental impact. The cradle-to-gate impacts are the result of clothing acquisitions by consumers, while the precise impact of an acquired clothing item depends on fibre type, yarn thickness, cloth production method, and weight. The use related impacts are the result of clothing being submitted to laundry by consumers, while the precise impact depends on weight/frequency, fibre types, and laundry practice itself. The negative impacts of end-of-life are the result of clothing items being disposed for resource reclamation by consumers, while the precise impact depends on the route of disposal, fibre types (purity), and weight.

How can practice theory be used to understand clothing consumption in the Netherlands?

In this research a practice theory conceptual framework was developed based on the work by Shove et al. (2012). This framework consisted of three main building blocks; practice-as-entity, structuration, and practice-as-performances. Of these three, practice-as-entity and practice-as-performances were the main analytical units. They could be discussed and studied by conceptualizing them as active integrations of elements of practice; meaning, competence, and material. The practice-as-entity describes the socially shared component of practice, while the practice-as-performances describe the individual acts of practitioners carrying out practice. Between the two, structuration described the dynamic relation between the socially shared entity and individual performances. It did so by addressing the dimensions of space, time, and practitioners.

How is the practice of clothing consumption constituted in the Netherlands, and how is individual behaviour shaped by a shared practice?

Based on the concepts developed in the conceptual framework a practice analysis was performed. In this practice analysis first the elements that make up the shared practice as entity were identified and defined. The elements that made up the practice-as-entity were divided into two layers. One comprising of functional elements; thermal comfort, sensorial comfort, body movement comfort, cleanliness as hygiene, cleanliness as freshness, and convenience. And one comprising of symbolic elements; looking good, custom, style, and fashion. This was followed by a discussion of the dimensions of structuration and how they influence the manifestation of the shared elements of practice. For the dimension of space important concepts for discussing the manifestation of elements were; space as resource, location as physical environment, location as social space, location as near body environment, and the travel of elements through space. For the dimension of time important concepts for discussing the manifestation of elements were; time as resource, development of weather over time, development of technology over time, development of shared systems over time, development of society over time, scheduling and synchronization, experience of time. For the dimension of practitioners important concepts for discussing the manifestation of elements were; practitioners as resource, networks and communities of practitioners, and practitioner careers. Based on the practice-as-entity and structuration, the practice-as-performances could be discussed. In the practice-as-performances a distinction was made between daily dressing routine and collection maintenance. The first describes the performances we undertake in our everyday dressing while the latter describes the performances we undertake in maintaining the collection of clothing we use in everyday dressing. For these two groups of performances important causes of variation were discussed, and the link between elements of practice and environmentally significant performances was discussed in more detail.

How is clothing consumption shaped in the alternative forms of practice, and how do they influence the recreation of normal practice?

In this thesis two alternative forms of practice were studied; a clothing library in The Hague, and clothing swaps in Rotterdam. These alternative forms of practice shape individual behaviour by influencing a collection of

clothing that is part of the alternative form of practice, and by influencing dimensions of structuration. I will shortly discuss how both forms of practice shape individual behaviour through addressing the collection and dimensions of structuration.

Clothing library

The clothing library maintains a collection from which practitioners can borrow clothing. This collection is very much aligned with the positive manifestation of symbolic elements of practice by providing multiple styles and types of clothing. Thus the collection provides the necessary elements for the manifestation of these elements in individual behaviour. The clothing library furthermore also provides different sizes and clothing suited to different environmental conditions. In doing so they also ensure the manifestation of elements of comfort in individual behaviour with their collection. In terms of the dimensions of structuration two things were important. They made themselves responsible for laundry practice, which prevented practitioners from submitting clothing to their own laundry practice. Furthermore, they set a maximum loan term of two weeks, which gave practitioners a sense of urgency for incorporating the borrowed clothing in their daily dressing routine. The combination of the two meant that clothing was actively worn for the period it was borrowed, and in doing so also challenging conventions of cleanliness.

In doing so the clothing library influences a great number of practice performances. It redefines the relations between the daily dressing routine and the acquisition, disposal, and laundry of clothing. In redefining these relations it also influences how the performances of the daily dressing routine are recreated, as the borrowed clothing becomes an active temporary extension of the personal collection.

Clothing swaps

At the clothing swaps a collection of clothing is brought together by the practitioners. The items of clothing that practitioners bring are sourced from an unused part of their personal collection, which is very much the result of negative manifestations of symbolic elements of practice. As the swap gets underway the selection process is shaped by positive manifestations of symbolic elements of practice, and the manifestation of comfort (fit). The collection however does not always align with these manifesting elements, and therefore relatively little is acquired in comparison to what is disposed. Structuration of clothing swaps plays a very important role in determining the recreation of disposal and acquisition performances. First of it determines whether practitioners are able to attend. Subsequently when attending the temporal nature of clothing swaps empowers the recreation of a norm where everybody, in spite of the collection not aligning with symbolic elements, is supposed to acquire something. Furthermore, the amount of practitioners that are brought together at a swap determine the size of the collection from which practitioners can select. A relatively small group means that the variation in style and sizes of the collection will be limited.

Overall the clothing swaps support the recreation of disposal performances. They furthermore redefine the route of disposal, taking a different route than normal practice. Beyond disposal the clothing swaps however only have a limited influence on the recreation of normal practice. They do not become an important source of acquisition, and what is acquired mostly does not become an active part of the personal collection of practitioners.

What potential do the alternative forms of practice have to reduce the environmental impact of clothing consumption, and what potential do they have to establish a transition in overall practice?

Clothing library

The clothing library mainly addresses the impacts that follow from the acquisition of clothing. By aligning with manifestation of symbolic elements they provide a more sustainable alternative than primary acquisition. The nature of their subscription model furthermore also influences the impact of laundry practice, and disposal. The clothing library therefore has the potential to significantly reduce the environmental impact of the clothing that makes up their collection. At the same time however, the clothing that is borrowed only makes up part of the outfits that practitioners assemble in their daily dressing routine. Practitioners still need to maintain their own collection and therefore still contribute to the environmental impact of clothing consumption. But as borrowing may displace primary acquisition the clothing library could potentially result in a significant reduction of the environmental impact of practice. In order to do so they however need to develop their user base, so that the impacts of the clothing library are shared by a greater number of users.

In terms of transitioning practice the clothing library is unable to transform practice on its own. As already said it only provides a part of the clothing items that make up an outfit. Furthermore, the clothing library in the form as was studied in this research aligns with practitioners for whom clothing consumption is dominant practice.

For most practitioners however clothing consumption is not such a dominant practice, and therefore the alignment of the clothing library with dominant practice needs to be addressed for a widespread transition. If the alternative form of practice is able to overcome this limitation they may play a significant role in transforming clothing consumption practice. Not only by redefining the clothing consumption practice itself, in particular the manifestation of symbolic elements, but also as they recreate sustainable production process and circular economy initiatives.

Clothing swaps

In practice clothing swaps are all about disposal. When it comes to reducing the environmental impact, clothing swaps could therefore contribute as disposal performances are recreated through them. In principle clothing swaps could also lead to a reduction of acquisition impacts by displacing primary acquisition, in practice their potential to do so however seems limited.

In terms of transitioning practice clothing swaps face the same limitations as the clothing library. At clothing swaps not all the types of clothing are provided that make up an outfit. Furthermore, participation in clothing swaps aligns with manifestations of social and sustainability meanings. These are not dispositions that are generally shared among the practitioners of clothing consumption. Clothing swaps furthermore have a dependency on normal practice for their recreation, a surplus of clothing resulting from this normal practice is needed to perform clothing swaps. As such clothing swaps may contribute to a transition to a more sustainable practice by intensifying clothing use, but in doing so they may also lock in unsustainable arrangements to a greater extent.

Main research question

The questions discussed above were all in service to the main research question. I will provide an answer to this main research question below.

How do the alternative forms of practice, clothing library and clothes swapping, relate to the practice of clothing consumption in the Netherlands and what potential do they have for reducing the environmental impact related to Dutch clothing consumption?

The practice of clothing consumption is constituted from elements of practice. These elements manifest in varying degrees in a great variation of practice performances. Alternative forms of practice relate to normal practice by aligning themselves with manifestations of elements. In the case of the clothing library this meant aligning with the manifestation of symbolic elements such as fashion and style. Clothing swaps similarly related themselves to manifestations of symbolic elements, however, participation and thus recreation of practice was more related to manifestation of social and sustainability meaning. In aligning with these manifestations the alternative forms of practice address specific performances of practice. The clothing library provides an alternative performance to primary acquisition performances, while the clothing swaps recreate disposal performances that would otherwise not always occur. By providing an alternative form of acquisition the clothing library also influences the daily dressing routine of dressing. The clothing swaps on the other hand were not particularly successful in acquisition performances, and therefore their influence on the daily dressing routine is limited.

When it comes to reducing the environmental impact of practice their potential mainly lies in the performances they directly address. The clothing library addresses acquisition and therefore the most environmentally significant performance of practice. The clothing swaps address disposal, which has a negative performance in terms of environmental impact. Even though both could potentially significantly reduce the environmental impact of Dutch clothing consumption, they are limited in actually doing so. Mainly because they address only part of practice, and even though there is room for growth they are not likely to transform the entirety of practice.

Discussion

The nature of this research warrants a good discussion. Therefore I will discuss the results of, the approach taken in, and the limitations of this research below. This is followed by a discussion of recommendations for further research, as well as recommendations for the further development of alternative forms of practice.

Results

In this research alternative forms of practice were studied, as they were seen as developments that could potentially lead to a transition towards a sustainable clothing consumption practice. The research specifically focussed on two alternative forms of practice of which the results did not indicate that they would be able to inform a sustainable transition of practice. Below I will therefore discuss the limitations that prevent these alternative forms of practice from taking on such a role. Furthermore I will also discuss the more general idea of alternative forms of practice influencing a transition.

The alternative forms of practice studied in this research would not be able to singlehandedly inform a transition in practice. This because they do not address the entirety of practice. Instead they only address specific parts of practice in terms of practitioners, space and time. Now, these are limitations that in principle could be overcome. The alternative forms of practice studied align with specific manifestations of elements, and take place at certain locations and times. These are all things that could be addressed, and the alternative forms of practice could be recreated in a slightly different form to address these issues. What then however still remains, is that the alternative forms of practice are limited in the performances that are addressed and changed by them. Not all types of clothing can be provided by the alternative forms of practice, and both will not be able to (completely) displace acquisition performances. As such both may contribute to a more sustainable practice, but more is needed to inform a true transition to sustainability.

The question then remains, can alternative forms of practice play a role in such a transition? The results from this research suggest they could. Through the alternative forms of practice studied in this research a part of clothing practice, even though limited, was changed. The results therefore affirm the idea that alternative forms of practice can and actually do lead to a change in practice. At the same time the alternative forms of practice are necessarily limited. They often focus on a specific part of practice as it is easier to influence a change there, rather than working on a complete change of practice. As different alternative forms of practice address different parts of the practice, the sum of all those alternative forms of practice could become a transition in practice. For this to happen it is however important that the different forms of practice develop collaborative, rather than competitive relations.

Approach

This research used an unconventional approach for studying environmental impact. The approach was furthermore an application of practice theory that I have not observed elsewhere yet. This may have been hard in the process as I did not have examples as how to take on certain issues. At the same time, a lack of examples made me very thorough in applying practice theory, which resulted in a thesis very rich in analytical detail. By taking this approach and sticking to it, this thesis shows such an application of practice theory can be performed. As such this thesis also contributes to the development of practice theory as an analytical framework. Below I will shortly discuss the value taking this approach had for me as a researcher, as well as how I had to limit the approach due to the constraints of this thesis.

The approach forced me to develop an in-depth understanding of practice and behaviour. In doing so it tries to develop a sort of comprehensive understanding of all types of behaviour belonging to practice, rather than focussing on the execution of one type of behaviour. As such it is particularly suited to study variation, while other research approaches may be more limited. For me the result of this approach was that I was able to develop an in-depth understanding of clothing consumption, and in particular also on the experience and performances of women in clothing consumption. Consequently, during the interviews I did not encounter responses that completely surprised me, or that I could not understand from the concepts as I developed them in my research. Furthermore, from this understanding I was able to ask follow-up questions that helped me to gather all the required data. That I was able to do so was really the result of the approach. In normal life I do not have a particular interest in clothing and fashion, and to an even greater extent in talking about clothing. The approach however allowed me to do so in a very fruitful way.

Even though the approach has proved to be very valuable, I had to limit the application of practice theory due to time constraints. Specifically the application of structuration was really simplified in this research. Normally

structuration is understood as a process, a recursive relation between entity and performances. A *proper* application of practice theory would therefore imply studying this process over time. Within this thesis I however did not have the time to do so. Instead this research consisted of a more or less snapshot application of structuration. This meant that the dynamics that are normally described in structuration were less prominent in this research. Furthermore, the recursive relation, in which performances recreate and alter the entity was not considered. Instead a top-down approach was followed, in which the shared elements of practice from the entity were distributed to individual performances through the dimensions of structuration. This application has proved to be valuable in this research, but is thus also limited.

Limitations

Naturally the approach taken in this research also resulted in a number of research limitations. First of, there were limitations in doing the practice analysis. The first part of the practice analysis, the practice-as-entity, consisted of identifying and analysing the elements that make up practice. In doing this part of the analysis you are very much dependent on the work already performed in academia. It is very hard to identify the entirety of elements that shape essentially normal behaviour. Therefore you are limited to reading, identifying and analysing elements from preceding research. They often emphasize a particular part of practice, and in doing so have particular ideas about the nature of human behaviour. It was my job to distil the meaning from such works, and to translate it towards the perspective followed in this research. The result of this all is that the practice-as-entity is a representation of the literature I was able to read, and thus the significance given to clothing consumption practice in the past. As such it is impossible to be fully comprehensive in establishing the elements of practice. Even more so because normality is less often the subject of studies.

The same roughly applies to the other parts of the practice analysis. For the structuration I was also very much dependent on preceding research and the way they covered practice. The analysis of the practice-as-performances was more in reference to actual practice, as it was on observable behaviour, but still limited to my understanding of this behaviour, which was also given in by the elements identified at the practice-of-entity.

The case studies had some other limitations. The main limitation was the method for data collection. When discussing practice it is really about what people actually do. The interviews however recorded what people said they do. As such the validity of the results depends on the respondents ability to voice what they do. This difference between saying and doing should therefore be considered when interpreting the results. Another limitation of the case study approach, was the number of respondents. It was not easy to recruit a great number of respondents, and I therefore had to do with less respondents than anticipated. This of course also limits the generalisability of the results. Furthermore, as the different respondents showed some variation it might also very well be that additional respondents had changed my understanding of the alternative forms of practice.

Recommendations

Below I will make some recommendations with regard to further research, as well as policy.

Further research:

On the basis of my experience during this thesis I have a few recommendations for further research. These recommendations range from research that could follow my own, to research into specific phenomena of clothing practice, to the application of practice theory in other consumption fields.

Follow up: the research as I have performed it knows some limitations. These are the amount of case studies performed, the method for data collection and subsequently the amount of respondents. Further research could therefore focus on increasing the amount of case studies, take on other methods for data collection (it would for instance be interesting to do a longitudinal study in which practitioners are observed for a longer period of time), and finally further research could focus on increasing the data by interviewing more respondents.

Alternative research: over the course of this research I developed a more in depth understanding of clothing consumption practice and how it is shaped. With regard to shaping practice it would be very interesting to study how the design of space and infrastructure influences practice performances. This research could for instance focus on more sustainable performances of laundry practice, for instance the airing out of clothing came forward as a performance that seemed really related to spatial design and infrastructure.

Consumption practice research: in this research I focused on clothing consumption. It would however be very interesting to apply the same approach to other fields of consumption. For instance laundry and mobility would be interesting practices to study further. Laundry because it is a much more functional/inconspicuous

consumption practice. Which could lead to insight very different from this research. Mobility is a consumption practice that is likely more symbolic in its nature. What is particularly interesting about mobility however, is the fact that actually different practices serve the same need. The competitive and collaborative relations between these practices would be interesting to study in further detail.

Policy:

As discussed in chapter 9 the alternative forms of practice will not be able to transform clothing consumption practice on their own. At the same time the development of these practices is very interesting from an environmental point of view. For policymakers it would therefore be fruitful stimulate the further development of sustainable clothing consumption practice. The change processes discussed in chapter 9 offer a variety of options to do so. In particular policy makers could focus on the change processes that cannot be influenced by the alternative forms of practice themselves. Meaning that they could for instance play an active role in setting up networks through which sustainable forms of practice can collaborate and develop. Furthermore, they could promote sustainable forms of practice more directly through financial or other measures. In either case policymakers need to realise that the transformation of clothing practice is a long-term process. My experiences during this thesis however, suggest that the potential to do so is there.

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Appendix A: Environmental impact of clothing

Explanation of ReCiPe methodology

The ReCiPe methodology was developed by the RIVM (national institute for public health and the environment), CML (institute of environmental sciences Leiden University), Radboud University Nijmegen, and PRé Consultants (private consulting firm). The methodology takes a total of 18 environmental mechanisms (impact categories) and ultimately aggregates them into one single score. Figure 1 displays global structure of the ReCiPe method.

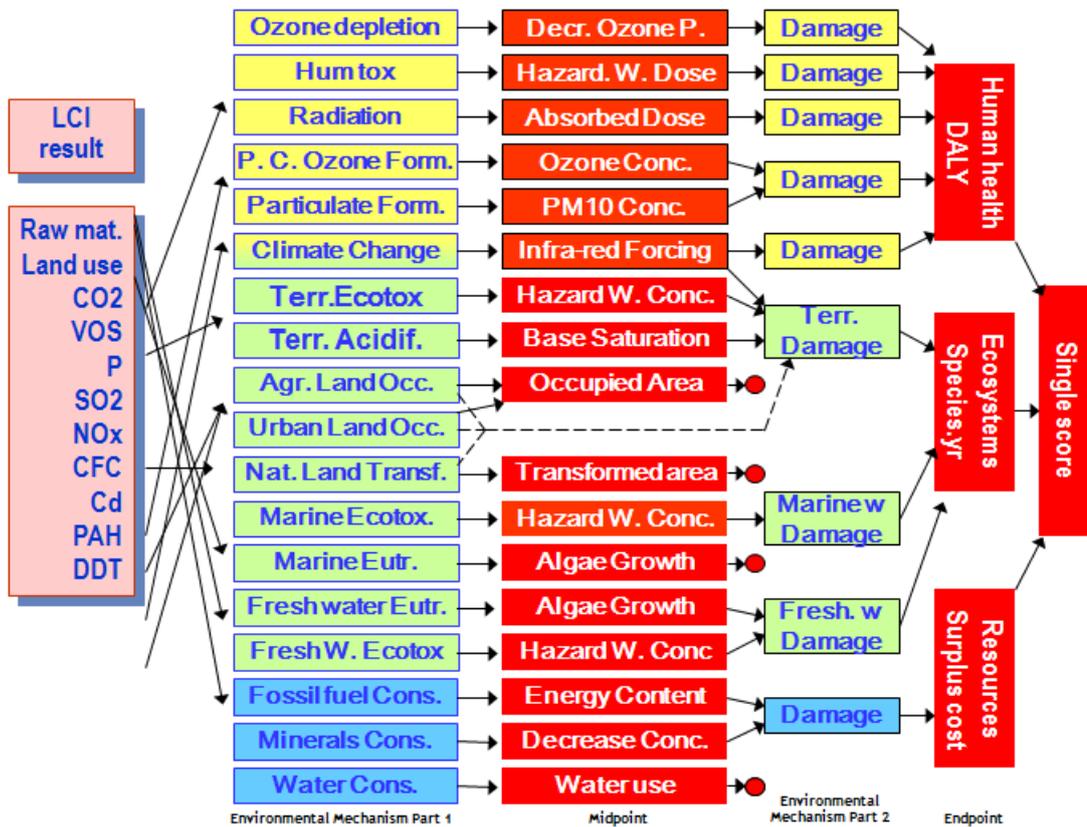


Figure 1 ReCiPe method for determining single score environmental impact (retrieved from www.lcia-recipe.net)

As displayed in Figure 1, the ReCiPe method starts off with 18 environmental mechanisms which correspond to midpoint categories. These midpoint impacts in turn correspond to aggregated environmental mechanisms, which ultimately correspond to three endpoint indicators. These three endpoint indicators are ultimately aggregated into a single score indicator. In the steps taken a move is made from relatively well-defined midpoints to relatively uncertain endpoints and a single score thereafter. I will now discuss what happens in these steps in more detail.

In the first step, environmental impacts corresponding to the environmental mechanisms are converted to IPCC equivalent units (for instance kg of methane is converted into kg CO₂ equivalent). This is a fairly normal step and is done in almost every LCA. From these midpoints, a next conversion step is performed to get to the endpoint indicators. To be able to do this conversion factors are used to change the units and aggregate the different midpoint indicators into 3 endpoint indicators. There are a few things to remark with regard to this step. First of all, not all midpoint indicators correspond to an endpoint indicator. Marine eutrophication and water use are not converted and do not contribute to the endpoint indicators. This is important when interpreting the final single score, as two environmental impact categories, which might be very relevant, are not reflected in the score. Another thing to remark is the conversion of climate change. In the ReCiPe approach climate change is given double significance, as it contributes to both the Human Health and Ecosystems endpoints. From the three endpoints, ultimately a last conversion step is performed to get to an aggregated environmental impact expressed in the Pt unit. Besides each step adding uncertainty, the ReCiPe methodology also has implications

for how normalisation and weighting is dealt with. I will discuss normalisation and weighting in more detail below.

Normalisation

Through normalisation the significance of environmental impact is determined. This is done by comparing environmental impact to the total environmental impact generated in a specific reference region in a specific year. For instance, if a product has an environmental impact of 3 in category X and an environmental impact of 2 in category Y, it may seem as if the product performs worse in category X. But when these impacts are compared to a reference year, it becomes clear that the impact generated in category Y is more significant. Because the total impact for X in the reference year was 1000000, whereas the total impact for Y was only 100. The product then contributes more to environmental problem Y than to environmental problem X.

In the ReCiPe method, normalisation can be applied while going from midpoint to endpoint or going from endpoint to single score. In the studies by CE Delft, also discussed in the report, the researchers have applied normalisation in the latter of the two, meaning that normalisation was performed on the endpoint indicators (Bijleveld & Bergsma, 2015; van de Vreede & Sevenster, 2010). Furthermore, in both studies the researchers have chosen to take Europe 2000 as the reference for normalisation. Mainly the choice for normalising with Europe as a reference system has the most significance. From a scientific point of view choosing the world as the reference system is the most justifiable choice. Choosing a smaller regional system, such as Europe, is often born from political considerations (Sleeswijk, van Oers, Guinée, Struijs, & Huijbregts, 2008).

The environmental impact generated in the European region is not evenly distributed among the different impact categories. There are categories on which the European region makes a relatively large contribution to the total impact generated globally. At the same time, there are also impact categories for which the European region makes a relatively small contribution to total impact globally. For normalisation, this means that impact categories for which the European contribution is relatively large are downplayed, and impact categories for which the European contribution is relatively small gain more emphasis. The effect of this is that land use is given more emphasis in the studies by CE Delft, and as a result makes a significant contribution to the total impact generated by clothing consumption. At the same time, this also means that the relative impact of all different toxicity impact categories, radiation and even climate change is less significant in determining overall impact.

Weighting

Like normalisation, weighting is performed for the endpoint indicator in the studies by CE Delft. For both studies, the researchers chose to apply average weighting on the endpoint indicators. Even though they chose to apply the same weighting principle it seems that this principle has changed over the years. In the appendix of (van de Vreede & Sevenster, 2010) the weighting scores that were used are given; Human Health: 400, Ecosystems: 400, and Resources: 400. Bijleveld & Bergsma (2015) do not give the actual weighting numbers they used, but refer to the spreadsheet of the ReCiPe method. In this spreadsheet, the factors for average weighting are; Human health: 400, Ecosystems: 400, and Resources: 200. When reviewing the ReCiPe spreadsheets' changelog, the weighting factors do not appear to be altered since 2010. This means that either van de Vreede & Sevenster (2010) made an error in reporting the weighting factors in their report, or they made an error in applying the weighting principle in their study. As these weighting principles are likely built into LCA software the first scenario seems more likely.

Appendix B: Methodology

Interview-protocol Facilitators

Information to be gathered during the interview:

Elements that make up alternative form of practice:

Integrating general (established) elements of practice

- o E.g. Style, comfort

Integrating novel elements of practice

- o E.g. sustainability

Structuration in space:

Space as location

- o Places in which alternative form of practice is performed

Space as resource

- o Space needed or taken up for the facilitation of alternative form of practice
- o Or spatial constraints on the way alternative form of practice is facilitated

Space as medium for travel

- o The way elements are transferred from facilitator to consumer/practitioner and vice versa
- o E.g. direct transfer, by co-presence in space (implies practitioner travel), or indirect transfer, through packed travel.

Structuration in time:

Time as timing

- o Moments of time provided for the performance of the alternative form of practice
- o E.g. opening hours, event dates, flexibility of timing

Time as resource

- o Temporal requirements of alternative form of practice as facilitated by facilitator

Practice over time

- o Enabling or setting standards for the recreation of alternative form of practice over time
- o E.g. Seasonal changes, rules, repetition in event planning

Reference questions

o Interviewee introduction

Zou je om te beginnen jezelf willen voorstellen?

- Algemene achtergrond (opleiding etc.)
- Rol binnen de organisatie
- Waarom actief voor de organisatie

1 Organisation introduction

Wat is Bij Priester voor een bedrijf/organisatie?

- Wat is het doel van de organisatie (idealistische waarden, winstoogmerk)
- Activiteiten
- Rol van kleding in de organisatie/ het bedrijf?

2 Facilitated elements of alternative form of practice

Kan je meer vertellen over X?

Waarom zijn jullie X begonnen? / Wat willen jullie met X bereiken?

- Waarom is X een goede manier om dat te bereiken?
- Wat willen jullie voor je klanten betekenen?

Waarom zijn jullie in staat om X uit te voeren?

- Welke kennis of competenties hebben jullie die dit mogelijk maken?

- Hoe verschilt X van een gangbare kledingwinkel?

Wat betekent dit voor de kleding die onderdeel uit maakt van X?

- Waaraan moet kleding voldoen om onderdeel uit te maken van jullie collectie?
- Waarin onderscheid de kleding zich van gangbare kleding?

3 Travel

Hoe brengen jullie de boodschap van X over aan consumenten?

- Is het een boodschap die consumenten vanuit zichzelf al onderschrijven, of moeten jullie ze ook overtuigen?
- In hoeverre kunnen jullie dit online doen?
- Hoe belangrijk is directe communicatie?

Moeten consumenten bepaalde kennis of vaardigheden hebben om op een goede manier aan X deel te nemen?

- Hoe brengen jullie deze kennis en vaardigheden over aan consumenten?

Hoe komt kleding uiteindelijk bij de consument terecht?

- Hoe zorgen jullie ervoor dat bij het overbrengen van kleding de beoogde waardes ook gerealiseerd worden?

4 Location

Waarom hebben jullie je in Y gevestigd?/Waarom hebben jullie een event in Y gepland?

- Wat maakt dit een geschikte locatie voor X?
 - o Klantenkring
 - o Ruimte

- Waar moet een locatie voor X aan voldoen?

5 Spatial requirements

Wat maakt de ruimte geschikt voor X?

- Welke faciliteiten moeten er aanwezig zijn voor X?
- In welke mate worden jullie nu beperkt door de ruimte? o Wat zouden jullie veranderen met meer of minder ruimte?

6 Timing

Wanneer kunnen consumenten bij jullie terecht voor X?

- Waarom hebben jullie voor deze openingstijden/data gekozen?
- Wat maakt dit geschikte tijden voor x? o Is het voor X belangrijk om flexibele tijden te hanteren?

7 Temporal requirements

Hoeveel tijd vraagt X van consumenten?

- Welke handelingen kosten de meeste tijd?
- In welke mate hangt de benodigde tijd van de consumenten zelf af?

8 Temporal rhythm

Hoe zorgen jullie ervoor dat consumenten in de loop der tijd deel blijven nemen aan X?

- Proberen jullie een bepaalde herhaling voor X te bewerkstelligen?
- Passen jullie hiervoor ook het aanbod aan?

Interview-protocol Practitioners

1. Dagelijks leven

Spaces:

- Home
- Work/school
- Leisure:
 - o Sports
 - o Cultural
 - o Social
- Travel

Time:

- Spent/duration
- Repetition
- Scheduling

2. Kledinggebruik

Dagelijkse routine:

- Opstaan
- Nachtkleding uit
- (Douchen)
- Aankleden
 - o Wat wordt er aangedaan
 - o Invloed dagbesteding
 - o Op welke kledingstukken
 - o Verschil in seizoenen
- Deur uit
 - o Aanpassing van binnen naar buiten
- Reizen
- Dagbesteding
- Thuiskomen
- Andere activiteiten

Niet dagelijks:

- Aankoop
- Wegdoen

3. Kledingbibliotheek

- Hoe in aanraking gekomen
- Hoe vaak/regelmatig bezoek
- Beschrijving bezoek
 - o Wat voor kleding wordt uitgezocht
 - o Wordt het gepast
 - o Wanneer wordt het vervolgens gedragen

Appendix C: Practice Analysis

Survey of clothing stores: acquisition of clothing

To get a better idea of the amount and types of clothing entering Dutch consumption a survey of clothing stores was performed. As it would be impossible to get data from every possible store in the Netherlands the data collection focused on physical chains (as could be found on www.detailhandel.info), and a few big web-shops. This resulted in a list of 128 companies with 6458 physical stores in the Netherlands. For each of the companies in the list whether or not they offered clothing for women, men, children and/or babies was assessed. Of these 128 different companies 62 were studied in more detail, as they offered both women's and men's clothing. Of these 62 only 51 allowed for accurate data collection. These 51 can be found in the table below

Website	Name	# Stores
https://www.zalando.nl	Zalando	Online
https://www.wehkamp.nl/	Wehkamp	Online
http://www.zeemanshop.com/	Zeeman	552
http://www.hema.nl/	Hema	530
https://www.shoebymy.nl/	shoebymy	232
http://www.terstal.nl/	terstal	201
http://www.c-and-a.com/nl/nl/shop/index.html	C&A	132
http://www.wefashion.nl/	WE	124
http://www.hm.com/nl/	H&M	121
http://www.esprit.nl/dameskleding	Esprit	111
https://www.coolcat.nl/nl/	Coolcat	109
https://www.jeanscentre.nl/	Jeans Centre	101
https://www.charles-voegele.nl/nl-NL/	Charles Vögele	92
http://www.takko.com/nl/nl/homepage/	Takko	86
http://www.jolamode.nl/	Jola	81
https://open32.nl/	Open32	60
https://www.thesting.com/nl-nl/	The Sting	55
https://www.thestone.nl/	the Stone	41
http://www.tuunte.nl/	tuunte	39
https://www.america-today.com/	America Today	35
http://www.lakeside.nl/	Lakeside	33
https://www.menatwork.nl/	Men At Work	31
https://pauw.com/nl/	Pauw	29
http://www.vanuffelenmode.nl/	van Uffelen	29
http://www.hugoboss.com/nl/home	Hugo Boss	28
http://shop.mango.com/NL	Mango	27
https://www.scotch-soda.com/nl/nl/home	Scotch&Soda	26
https://www.g-star.com/nl_nl	G-star	26
http://www.sissy-boy.com/nl_NL/home	Sissy Boy	26
http://www.mcgregor.nl/nl/home	McGregor	25

http://www.costesfashion.com/	Costes	22
http://www.vandevenfashion.nl/	VandeVen	18
http://www.hiermode.nl/	Hier	18
https://www.leadsjeans.nl/	Leads	16
https://www.cavallaronapoli.com/nl/	Cavallaro	16
http://www.superdry.nl/	Superdry	16
https://www.riverwoods.net/nl_nl/	River Woods	15
http://nl.tommy.com/	Tommy Hilfiger	15
http://www.smitmode.nl/	Smit Mode	14
https://www.kellyjeans.nl/nl/	Kelly	13
http://www.levi.com/NL/nl_NL/	Levi's	13
https://www.steppinout.nl/	Steppin-Out	12
https://www.sakestore.nl/	Sake Store	12
https://www.jensenfamilyshop.nl/	Jensen	12
http://www.pietzoomers.com/	Piet Zoomers	11
https://www.bershka.com/nl/	Bershka	10
http://www.fiftysix.nl/	Fiftysix	10
http://www.monki.com/nl/	Monki	8
https://www.debijenkorf.nl/	de Bijenkorf	7
https://www.houtbrox.nl/	Houtbrox	3
http://www.marksandspencer.eu/nl_NL	Marks & Spencer	2

Women	1st order classification	2nd order classification	3rd order classification		
174663	Upperwear				
139810	Outdoor				
15290	Jackets	Coats	Cloaks		
9333	2661	3199			
Top					
71166	Jumpers	Vests	Sweatshirts	Longsleeves	Tops
19546	3163	2184	2447	24476	
Shirts	Blazers	Blouses	Tunics		
3838	2082	13243	187		
Bottom					
29608	Shorts	Pants	Jeans	Legging	Skirts
1962	9912	11285	331	6118	
Whole body					
23746	Dresses	Jumpsuits	Suits		
23154	542	50			
Underwear					
17736	Underwear				
11471	Bras	Tops	Underpants	Shapewear	
5533	585	4756	597		
Socks					
3454	Socks	Panty's	Tights		
1746	1460	248			
Nightwear					
2500	Pajamas	Night dress	Robes		
1527	633	340			
Other					
311					
Other					
17117	Other				
17117	Swimwear	Sportswear	Loungewear		
4631	12353	133			

Men	1st order classification	2nd order classification	3rd order classification	
91959	Upperwear			
72954	Outdoor			
10204	Jackets	Coats	Cloaks	
1512	7517	1175		
Top				
47390	Jumpers	Vests	Sweatshirts	Longsleeves
13245	1146	2576	2637	
Tanktops	T-shirts	Blazers	Shirts	
44	13857	1808	12077	
Bottom				
14268	Shorts	Pants	Jeans	Jogging
1056	4400	7537	1275	
Whole body				
1092	Suits			
1092				
Underwear				
7458	Underwear			
4041	Shirts	Underpants	Shapewear	
533	3504	4		
Socks				
2380	Socks			
2380				
Nightwear				
1037	Pajamas	Robes		
806	231			
Other				
11547	Other			
11547	Swimwear	Sportswear	Loungewear	
1036	10421	90		

Men's	Women's	Ratio Men/ Women		
Total	91959	174663	0,53	
Upperwear	Total	72954	139810	0,52
Outdoor	10204	15290	0,67	
Tops	47390	71166	0,67	
Bottoms	14268	29608	0,48	
Full body	1092	23746	0,05	
Underwear	Total	7458	17736	0,42
Underwear	4041	11471	0,35	
Socks	2380	3454	0,69	
Nightwear	1037	2500	0,41	
Other	-	311	0	
Other	Total	11547	17117	0,67
Swimwear	1036	4631	0,22	
Sportswear	10421	12353	0,84	
Loungewear	90	133	0,68	

Survey of webforums: clothing to laundry

Topic titles	# entries	First entry	Last entry	Links
Hoelang kan je een kledingstuk ong dragen?	17	16-06-11	21-06-11	https://www.startpagina.nl/
Hoelang draag jij kleren?	93	16-01-04	25-01-04	http://
Hoelang kleren dragen	49	23-03-11	27-03-11	http://forum.girlscene.nl/
Hoeveel dagen draag jij iets	62	11-01-09	11-06-09	http://forum.viva.nl/
Na hoelang te dragen gooien jullie je	39	28-10-15	28-10-15	http://virtualpopstar.com/
Na hoeveel maal dragen wassen jullie	142	20-02-05	03-03-05	http://forum.fok.nl/
Hoelang met een stel kleren	52	25-10-09	28-10-09	https://www.ouders.nl/
Hoelang doe jij met kleding, bedden-goed, pyama etc?	344	29-11-09	14-12-09	http://www.bokt.nl/
Hoelang dragen voordat ze in de was gaan	58	23-06-08	29-06-08	https://fo-
Hoeveel dagen na elkaar dezelfde outfit	350	06-03-12	16-11-14	http://forum.girlscene.nl/
Hoe vaak dragen voor wassen	67	25-03-11	26-03-11	http://forum.fok.nl/
Hoe lang dezelfde kleding	74	26-12-05	29-12-05	http://
Hoe vaak doe jij schone kleren aan	62	01-09-13	02-09-13	http://forum.fok.nl/
Hoe lang hou jij dezelfde kleren aan	56	24-06-02	26-06-02	http://forum.fok.nl/

Survey of webforums: clothing to disposal

Topic title	# of entries	First entry	Last entry	Links
De levenscyclus van je kleding	24	06-04-02	07-04-02	https://forum.scholieren.com/
Moeite met spullen weggooien	32	15-06-07	25-06-07	http://forum.fok.nl/
Opruimen en weggooien, ramp!	22	25-02-05	25-02-05	http://www.bokt.nl/forums/
Wegdoen kleding, kapot/niet kapot	18	21-10-12	22-10-12	http://forum.viva.nl/
Kleding wegdoen	55	05-03-14	12-03-14	http://forum.girlscene.nl/
Wanneer gooi je kleding weg?	21	04-06-02	07-06-02	http://forum.fok.nl/
Wegdoen oude kleding	23	08-02-13	09-02-13	http://forum.viva.nl/
Nieuwe kleding erin, oude kleding eruit?	18	08-09-08	09-09-08	http://forum.viva.nl/
Moeite met kleding wegdoen	19	12-07-11	12-07-11	http://forums.marokko.nl/
De duur van je kleding	51	05-07-02	16-07-02	https://forum.scholieren.com/
Kleding weggooien	36	06-02-15	10-02-15	http://www.zegmaaryes.nl/