



Consumer acceptance of ownerless consumption

Social perspectives on how to
make renting mainstream
in a circular economy

Master thesis
by Thomas Thorin

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Summary

“You think that because you understand “one” that you must therefore understand “two” because one and one make two. But you forget that you must also understand “and.”

— Donella H. Meadows

Circular economy has the unique potential to align commercial actors, policymakers and environmentalists in the aspiring quest to design a restorative and prosperous society where all material streams are continuously cycled and where the notion of waste will only appear in history books. A central proposition of circular economy is that shifting to a model of utility provision where everyday products are rented instead of owned, so-called ownerless consumption, would incentivise producers to design for long-lasting products that are easy to disassemble, such that all materials can be recovered and reused continuously. From a technical point of view, we are not far away from such a reality. But are we and our societies as a whole ready for the radical changes that such a transition would entail?

This thesis takes a deeper look into the social aspects of realising the circular economy by studying how we as consumers generate relationships to products through practical, emotional and social ties and what that means for our acceptance of ownerless consumption.

A comprehensive overview of previous empirical findings lays the foundation for a coherent conceptual framework addressing four different aspects of the consumer-product relationship: personal values that determine broad behavioural patterns, socially shared meanings that are tied to specific products and situations, practical competences to handle a product, and activities that evolve around the use of products.

A questionnaire with 262 respondents from Wageningen University and a total of two and a half hours of focus group interviews with 12 participants were used to test this broad spectrum of factors for three different product types: clothing, consumer electronics and household electronics.

The study shows that consumers do not primarily favour ownership out of an urge for materialistic self-promotion but instead because it is seen as the best way to achieve freedom through a sense of control over one’s everyday life. Most essentially though, this study shows that a multitude of both practical, social and symbolic factors influence how we develop ties to products in our everyday life and the it is the complex nature of these ties rather than the individual factors that determines the acceptance of ownerless consumption.

While exploring novel ways of integrating different scientific fields and methods, this thesis shows that transitioning to a circular economy through ownerless consumption is possible if we start appreciating the importance of studying and understanding the social conditions for such a transitioning.

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Introduction

Decoupling economic growth from resource consumption is the central idea of circular economy and has led to the concept's rapidly growing popularity among international companies, world-leaders and scientists. Besides from its obvious environmental benefits, such decoupling is projected to generate significant economic benefits. If Europe as a whole embarks on a transition to a circular economy, it can improve the resource efficiency to an annual rate of 3%. By 2030, that would lead to a primary resource benefit equal to €600 billion plus €1200 billion in non-resource and externality benefits (EMAF, 2015).

One of the cornerstones of circular economy - and the topic of this thesis - is that products should be shared, leased or rented as services instead of being owned. This is commonly termed *ownerless consumption* and is essential to circularity. If the ownership of the product remains on the hands of the producer instead of the consumer, the producer is incentivised to design for longer product lifetime and to collect and reuse the products after the use-period (Stahel, 2006; EMAF, 2014; 2015).

Already since the 1990s, proponents of ownerless consumption have suggested that it also has several commercial benefits, such as stimulated innovation (Schenkl et. al., 2014), increased competitiveness (Mont, 2002a; Baines et al. 2007) and higher customer satisfaction (Mont, 2002a; Baines et al., 2007). However, in the face of these benefits it appears to be puzzling that ownerless consumption has not been widely adopted by average consumers (Hirschl, 2003; Rexfelt & Hiort af Ornäs 2009; Mylan 2014) since it was first suggested in the 1970's (Reday-Mulvey & Stahel, 1977).

In an attempt to unravel this puzzle, the current thesis studies how consumers generate relationships to products through practical, emotional and social ties and how the quality of this relationship relates to the acceptance of ownerless consumption. By integrating the sparsely available empirical findings into a theoretical framework based on social practice theory and testing the framework using both quantitative and qualitative measures, this thesis intends to bring about a deeper understanding of the potentials and barriers for mainstreaming ownerless consumption in the pursuit of transitioning to a circular economy.

1.1 Problem description

Ownerless consumption is often seen as a direct path to a circular economy where resources are continuously restored instead of being wasted (EMAF, 2015; Lace & Rutqvist, 2015). Hence, in order to unlock the potential of a circular economy, ownerless consumption has to be broadly adopted. Such adoption can currently be observed among companies, for example with Rolls Royce's Power by the Hour concept¹. But the adoption has hitherto been very limited among consumers (Hirschl, 2003; Rexfelt & Hiort af Ornäs 2009). It is widely recognised that the general

¹ <http://www.rolls-royce.com/media/press-releases/yr-2012/121030-the-hour.aspx>

consumer appears to be reluctant to embrace ownerless consumption but the reasons behind this have only been scarcely researched and are thus not fully understood (Mont, 2002a; 2002b; Mont & Plepys, 2003; Tukker & Tischner 2006; Beuren et al. 2013).

Some authors have claimed that consumers, unlike companies, do not comprehend the life-cycle cost of owned products vis-à-vis leased or rented products and thus do not realise the potential savings of ownerless consumption (Mont et al. 2006; Catulli, 2012; Vezzoli et al., 2015). While this economic argument provides part of the explanation, it tends to reduce consumers to merely being companies with reduced processing capacity.

Another branch of literature argues that the slow adoption among consumers is due to social and psychological factors that make consumers favor ownership (Littig, 2000; Hirschl et al. 2003; Beuren et. al. 2013; Tukker, 2015). Littig sparked this approach by arguing for a more inclusive understanding of consumer behaviour:

“Symbolic and social functions of purchase and ownership of goods, their meaning for self-staging and forming of an identity are often not taken into account by the optimistic concepts of non-proprietary consumption” (Littig, 2000, p. 60).

In spite of early insights on symbolic and social functions of ownership provided by Littig (2000) and Hirsch et al. (2003), this perspective has largely been omitted in later research (Rexfelt & Hiort af Ornäs, 2009; Beuren et. al. 2013; Mylan, 2014; Lee et al. 2015). The few studies that have sought to explore the symbolic and social functions of ownership mostly stand alone and - to my knowledge - no attempt has been made to systematically integrate the different findings to analyse their relative importance and interrelations.

1.2 Research aim

The central assumption behind the motivation of this thesis is that ownerless consumption is a viable path to a circular economy. This is, however, only true if ownerless consumption has the potential to challenge ownership as the dominant mode of consumption. Therefore this thesis attempts to study the factors that make consumers attach value to ownership in order to assess the potential of mainstreaming ownerless consumption as a means to transition to a circular economy.

In the search for these factors it is hypothesized that Littig (2000) is correct in her criticism and that products and their use are indeed tightly entangled in social processes where they attain symbolic, social as well as functional value. In order to uncover the hypothesized entanglement between product, consumer and social processes, this thesis focuses on the relationship between the product and the consumer. This focus is inspired by Bardhi and Eckhardt who point out that:

“Two of the major differences between ownership and access entail (1) the nature of the object-self relationship and (2) the rules that govern and regulate this relationship.” (2012, p. 882).

Both of these parameters are used in this thesis and are further unfolded in the conceptual framework below. But since no specific definition of the **object-self relationship** is provided by

Bardhi and Eckhardt it will here be understood as: The practical, social and symbolic relationship between consumer and product.

From an academic perspective, the thesis aims to contribute to the relatively small body of research on consumer acceptance of ownerless consumption. Furthermore, it is the intention to show how the integration of several different scientific findings can contribute to a deeper and more holistic understanding of why ownerless consumption has not yet been massively adopted by consumers.

1.3 Research questions

The overarching research question guiding the research throughout this thesis is the following:

How does (the absence of) ownership influence the object-self relationship of consumers and what does this influence mean for the acceptance of ownerless consumption in the context of innovative, circular economy-oriented product-service systems?

Ownerless consumption is here defined as: The use of a durable good that due to a market transaction is made accessible to, but is not owned by the user.

Where ownerless consumption and ownership-based consumption can be seen as two distinct modes of consumption (Bardhi & Eckhardt, 2012), access and ownership can be seen as the defining configurations of these modes. The research question addresses the reciprocal dynamic between the mode of consumption and the object-self relationship. The underlying assumption of this dynamic is that each mode of consumption has specific social, symbolic and practical implications for the user that have the potential to alter the object-self relationship, which might or might not be acceptable to the consumer. The research question thus aims at understanding not only which external changes can be accepted but also how the internal dynamics of the object-self relationship influences the acceptance.

The thesis focuses on innovative and circular economy-oriented product-service systems. Product-service system (PSS) is the term commonly used in scientific literature to describe commercial offerings based on ownerless consumption (Mont, 2002a; Mont & Plebys, 2003; Baines et. al., 2007; Rexfelt & Hiort af Ornäs, 2009). A PSS that is not novel (e.g. taxis) does not address the central question of consumer acceptance as it has already been widely adopted, and is therefore not relevant. Likewise, PSSs that do not have a potential to facilitate a transition to a circular economy do not satisfy the general aim of this research.

In order to study the complex nature of the object-self relationship in the context of ownerless consumption, the overarching research question has been split up into five sub-questions each highlighting a concrete aspect. Each of the five sub-questions are presented and shortly introduced below. However, as the topics of the sub-questions have largely been specified in an interaction between the available empirical findings and the theoretical framework derived

from social practice theory, these topics will be further elaborated upon in the following chapter.

1. *How does the creation of meaning in the object-self relationship influence consumer acceptance of ownerless consumption?*

In the process of using products, we often attach qualities that go beyond utilitarian and hedonic attributes. We create meaning with the object, for instance, by using it to develop or amplify our personality or by giving it a certain symbolic role. But this process does not solely concern the object itself. Also the concept of owning is subjected to creation of meaning. Bardhi and Eckhardt (2012), for example, note that car ownership for symbolic reasons remains the ideal mode of consumption in contemporary American society. Hence, it is important to understand how the creation of meaning connected to the specific mode of consumption influences the relationship between consumer and product.

2. *How does the product type as part of the object-self relationship influence the consumer acceptance of ownerless consumption?*

The *type of product* offered in the context of ownerless consumption is naturally a part of the object-self relationship and is suggested to have great influence on the degree of acceptance. While for some products we hardly consider a purchase to obtain its function, other products seem like they could never be rented, shared or leased. If you are like most ordinary consumers, you would not buy an airplane if you need to travel. Instead you would pay for the access to the function of the airplane or in other words: a seat. Similarly, few of us would consider renting or sharing underwear. There are many reasons for this difference. Price, durability and function seem to play a role but it appears that also cultural norms as well as personal use-patterns determine which product we consider suitable for ownerless consumption.

3. *How does the existence or absence of competences in the object-self relationship influence consumer acceptance of ownerless consumption?*

Competences are here understood as the skills and knowledge that are developed in the process of using a product and it is therefore another central aspect of the object-self relationship. Competences express the technical and practical integration between product and consumer, which can potentially have a key influence on the willingness to embark on ownerless consumption.

4. *How does the difference between already established performances and those required for ownerless consumption influence the acceptance of ownerless consumption?*

The difference between ownership and ownerless consumption is more than just the location of the ownership. Often, additional factors are affected. These can be aspects of delivery, maintenance, disposal or similar processes. A shift to ownerless consumption can therefore have consequences for whether we are able to carry out everyday activities (performances) in the way we are used to. According to social practice theory, the habitual enactment of daily performances is (further explained in chapter 2.3.1) a central aspect of consumer behaviour and constitutes the process in which the object-self relationship is being continuously shaped. Hence, product offerings that require alterations of these performances can meet great resistance in the market.

5. How do personal values influence the object-self relationship and the consumer acceptance of ownerless consumption?

Research has shown that abstract values or ideals that we individually hold to be important in our lives tend to correspond with the actions we carry out. In particular, values have been shown to influence ethical consumption behaviour as well as the willingness to adopt novel ideas and concepts. It is therefore quite likely that values play a role for the acceptance of ownerless consumption.

The wide range of factors included in the sub-questions enriches the study by allowing different explanations as well as dynamics between these factors. It does, however, also pose two important challenges. Firstly, an attempt to make an exhaustive study of each of the presented factors would be far beyond the practical limits of this study. This challenge is addressed by limiting the focus within each factor to dynamics that have already been proven relevant by previous research.

The second challenge is that the factors originate from different scientific domains and theories. That is not in itself a problem but becomes challenging when the intention is to compare both the importance of these factors and the dynamics between them. Statistical analysis can, of course, provide quantitative measures for importance but these are worth little without a coherent conceptualisation to interpret the metrics. This challenge is therefore addressed by attempting to integrate all the factors into a single theoretical framework. Doing that is by no means perfect as will be discussed in the end. Rather it is a necessary compromise in the pursuit for conceptual integration.

In the following chapter, relevant findings from research on consumer acceptance of ownerless consumption are presented in order to address the first challenge. Furthermore, the theoretical foundation of the research is presented and developed in order to address the second challenge.

Theory

Divided into four parts, this chapter first introduces the central concepts circular economy, ownerless consumption and product-service systems (PSSs) and secondly provides an overview of the findings related to consumer acceptance of PSSs that this thesis builds upon. In the third part it presents the theories that that will be used to structure and interpret the findings and in the fourth and final part, a coherent conceptual framework is developed by combining theoretical concepts and the empirical findings from former research.

2.1 Circular economy and the role of ownerless consumption

Despite of not being the only actor that is promoting and developing the circular economy, the Ellen MacArthur Foundation (EMAF) can, due to their major corporate partners² and influential position³ rightfully be considered its most influential advocate and contributor and EMAF is therefore used throughout this thesis as a main exponent for circular economy. Hence, EMAF defines circular economy as:

“an economy that provides multiple value creation mechanisms which are decoupled from the consumption of finite resources” (EMAF, 2015, p. 23).

This generic definition rightfully portrays the fact that circular economy is derived from a cluster of theoretical concepts unified by an aim of higher resource-efficiency, such as Cradle to cradle (McDonough & Braungart, 2009), biomimicry (Benyus, 1997), performance economy (Reday-Mulvey & Stahel, 1977; 2006), industrial ecology (Lifset & Graedel, 2001) and blue economy (Pauli, 2010)⁴. Through the conceptual and practical development that EMAF has made in recent years, circular economy is however now maturing to a concept that is lifting itself from its schools of thought. Hence, on a more concrete level EMAF describes circular economy as:

“an economy that is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times.”
(EMAF, 2015, p. 46).

This aim is achieved through three main principles (EMAF, 2015, p. 23). The first principle, *“Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows”*, advocates dematerialisation of utility whenever possible, careful and efficient handling of resources, and the development of conditions for restoration of resources, such as biodiversity and soil. The second principle addresses the process-level of circular economy: *“Optimise resource yields by circulating products, components, and materials at the highest utility at all times in both technical and biological cycles”*. This principle describes the need to design for recycling, high material health (McDonough & Braungart, 2009) and to reuse

² Cisco, Google, H&M, Intese Sanpaolo, Kingfisher, Nike, Philips, Renault and Unilever. Source: <https://www.ellenmacarthurfoundation.org/about/global-partners>

³ For example partner and co-publisher with World Economic Forum.

⁴ <http://www.ellenmacarthurfoundation.org/circular-economy/schools-of-thought/>

materials and products in as tight loops or cascades as possible. According to McDonough and Braungart, materials are either 'biological' or 'technological' not according to their chemical composition but according to the intention of the design in which they occur. Thus a biological material is designed to be consumed during the use or in another way become part of the biological metabolism. Technical materials on the other hand are intended by design to be cycled within the technical metabolism through several potential loops (see the butterfly chart in figure 2.1).

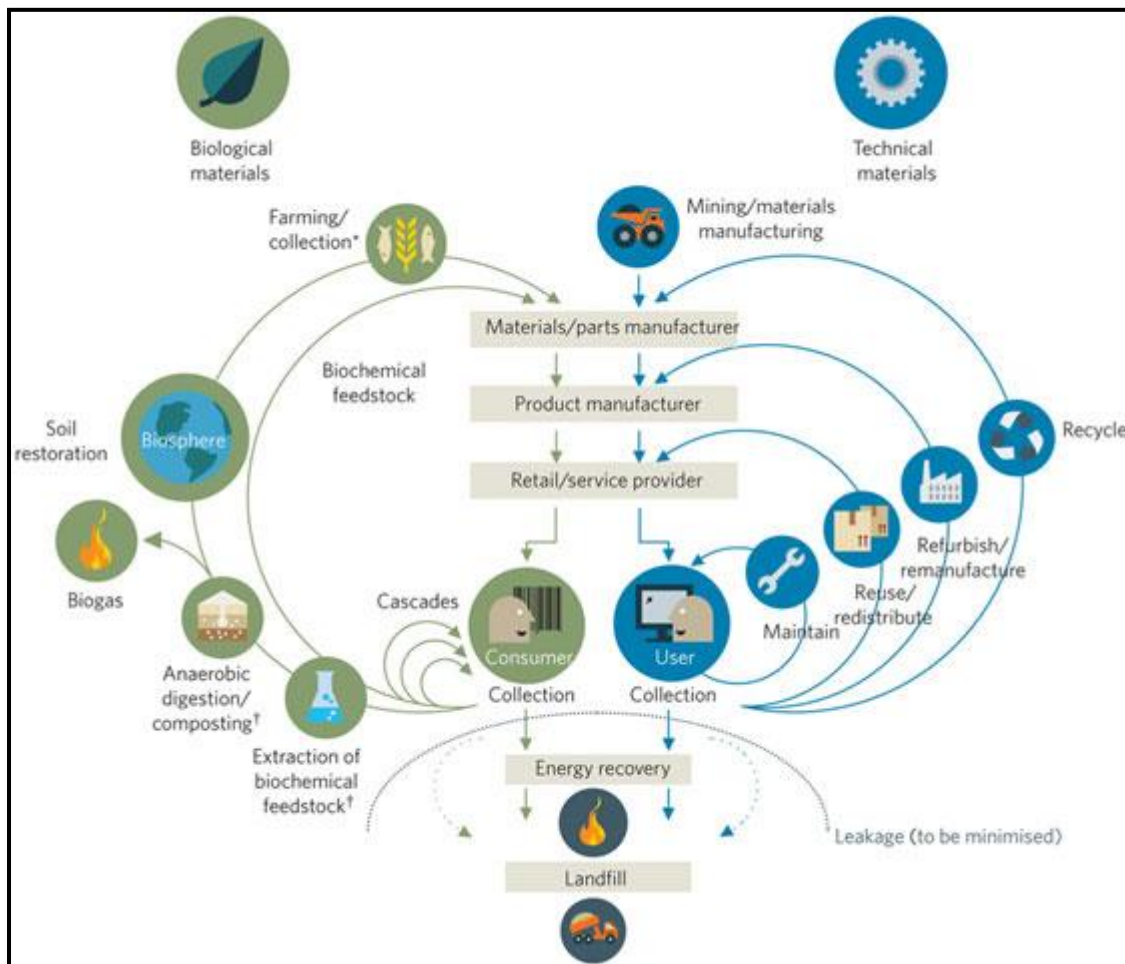


Figure 2.1: The butterfly chart. Source: www.ellenmacarthurfoundation.org.

The third principle, “Foster system effectiveness by revealing and designing out negative externalities”, expresses the systemic level of circular economy and advocates that solutions are not only to be found by eliminating unhealthy materials and inefficient or harmful processes. Flawed systems of mobility, shelter, food, economy and other sectors need to be rethought to secure the environment, economy and human well-being.

2.1.1 Ownerless consumption in a circular economy

The distinction between consumption products and products that provide utility without being consumed was initiated by Walter Stahel (Reday-Mulvey & Stahel, 1977). He suggested a shift from an industrial economy, where economic growth is based on the transaction and consumption of goods, to a performance economy, where consumers pay for the performance of a product instead of paying for the ownership of the product (Stahel, 2006). This idea of letting consumers pay for a performance instead of the ownership of a product gave rise to the concept of *ownerless consumption*. It is a central theme in circular economy because it provides a framework for realising the three principles of circular economy. Ownerless consumption offers a way of dematerialising utility by transforming products into services (principle one). It lets the producer keep ownership of the product and thereby incentivises the producers to design for disassembly and reuse of the materials so they can be looped into the production cycle again after the use period (principle two). Finally, if implemented broadly, business models based on ownerless consumption can alter macro-infrastructures for waste streams in the economy (principle three). Ownerless consumption is thus not only a defining element of circular economy, it is also a framework that can facilitate a transition to a circular economy. Circular economy is inherently a system approach (Meadows & Wright, 2008) and although several companies are ‘transitioning to circular economy’, the circular economy in its wholeness cannot be achieved by any single actor. Rather, as indicated by the principles, radical societal and corporate changes are necessary on a macro level to move towards a circular economy: e.g. new infrastructures for sourcing and utilising waste streams, new consumption patterns, new production policies and potentially a new economic system.

In this light, ownerless consumption cannot be seen merely as ‘just another product on the shelf’. Ownerless consumption itself requires systemic change. It calls for a redesign of the product, it requires take-back systems as well as maintenance service and it changes the cash flow of the producers, just to name a few. Hence, when assessing and explaining the consumer acceptance of ownerless consumption, it is insufficient to use the just-another-product-on-the-shelf approach. The implications of shifting from ownership to access must be understood and studied in a way that (at least to some degree) captures these systemic changes. That is the intention of this thesis and will be brought to a conceptual level in the following

2.1.2 Product-service systems

After having located ownerless consumption in the bigger picture of circular economy it is necessary to also describe how it is studied on a single case-level, typically called PSS. Goedkoop et. al. define a PSS as:

“a marketable set of products and services capable of jointly fulfilling a user’s needs”
(In Tukker, 2015, p. 81)

Several researchers note that the many currently existing definitions do not differ fundamentally from that of Goedkoop (Baines et. al., 2007; Tukker, 2015; Beuren et. al., 2015) and it will therefore be used in the following. A PSS can thus be seen as an offering that is a

hybrid between a pure consumption product and a pure service, where its specific composition can vary along the continuum between these two poles (Baines et al., 2007; figure 2.2).



Figure 2.2: Continuum between pure tangible products and pure intangible services. Source: <http://www.spreeproject.com/a-glance-at-servicizing/>

PSSs are often divided into three different categories (Beuren et al., 2013):

- (1) *Product-oriented PSSs*, where products are sold with additional services, as, for example, repair services or buy-back services. These offerings can be placed the furthest to the left on the continuum between product component and service component (Fig. 2.2), and compared to the two other categories, they often entail the smallest change for both consumers and producers.
- (2) *Use-oriented PSSs*, where the access to a products is sold. While this category will often entail additional services similar to those in the first category, the main classifying trait of use-oriented product-service systems is that the ownership is no longer transferred to the user but remains with the provider and the user thus only pays for the access.
- (3) *Result-oriented PSSs*, where the customer pays for a guarantee of certain functions or results without any predetermined product. This could be laundry service, cleaning service or cloud-based digital services. This category entails the highest degree of servitization and is from a theoretical point of view expected to have the biggest environmental benefits (Tukker & Tischner, 2006; Yang et. al. 2009) as “*all material products and consumables used to deliver the result now become cost factors, creating an incentive to minimize their use*” (Tukker, 2015). Ownerless consumption as it is defined for this thesis in chapter 1.3 only occurs in *use-oriented PSSs*, whereas in *product-oriented PSSs*, the consumer still owns the product and in *result-oriented PSSs*, the product is dematerialised. It can further be derived from the description above that no *use-oriented PSS* will violate the definition of ownerless consumption and *use-oriented PSSs* can therefore be considered commercial offerings based on ownerless consumption. The further use of the term *PSSs* will therefore refer specifically to the *use-oriented category*.

2.2 Overview: Consumer acceptance of product-service systems

In order to derive the central concepts from empirical findings that will help defining the scope of the thesis, we here turn to an overview of available studies concerning consumer acceptance of PSSs⁵.

⁵ The findings in the literature are in the following clustered into distinct categories to create structure and consistency. The process of clustering sometimes required that findings had to be placed in conceptual categories in which the authors have not originally placed them. This can arguably lead to simplifications of the findings. But

The selection of literature is mainly focused on PSSs including synonymous terms, such as Access-Based Consumption (Bardhi & Eckhardt, 2012; Catulli, 2012; 2013), Sustainable Product-Service System (SPSS or S.PSS) (Mylan, 2014; Ceschin, 2014; Tukker, 2015; Vezzoli et al., 2015) and eco-efficient services (Meijkamp, 1998; Littig, 2000; Halme et al., 2007). The selection is narrowed down by excluding studies addressing consumer acceptance from a corporate-design perspective (e.g. Barquet et al., 2013; Pezzotta et al., 2014; Schmidt et al., 2015; Lee et al., 2015; Santamaria et al., 2015) as well as studies considering adoption in business-to-business instead of business-to-consumer offerings (e.g. Halme et al., 2007; Anttonen et al., 2013; Schenkl et al., 2014). The presented body of literature is not exhaustive as the field is not clearly defined and relevant studies might therefore be available outside the scope of this selection. There were also a few potentially relevant studies that were not accessible (Schrader, 1999; Meijkamp, 2000; Wong, 2004). From this selection twenty papers remained of which eight are based on literature research and therefore provide no or little empirical data. The remaining twelve are based on empirical studies and provide the strongest contribution in the following (shown in table 2.1).

Table 2.1: List of empirical studies used in the overview.

Author	Year of publication	Theme
Meijkamp	1998	Car sharing services in the Netherlands
Littig	2000	Willingness to rent household product in Vienna
Mont	2002b	Barriers and opportunities for Swedish companies
Hirschl et al.	2003	Ski and laundry services
Halme et al.	2006	Social, environmental and economic sustainability of home services
Rexfelt & Hiort af Ornäs	2009	Consumer responses to hypothetical PSSs
Bardhi & Eckhardt	2012	User profiles of car sharing users
Catulli	2012	Car sharing and baby nursery products
Catulli et al.	2013	Consumer responses to renting baby nursery products
Mylan	2014	Social practices around energy efficient lighting and low temperature laundry
Piscicelli et al.	2014	Personal values of users of British sharing platform
Armstrong et al.	2015	Consumer responses to rental-schemes for clothing

2.2.1 User responses to ownerless consumption

The included studies (Fig. 2.1) generally researched the consumer acceptance of ownerless consumption in one of two ways. Either they presented a group of potential customers with one or more imaginary access-based offerings (Rexfelt & Hiort af Ornäs, 2009; Catulli, 2012; Catulli et al., 2013; Armstrong et al., 2015) or they performed so-called ex post facto studies in which users of already existing PSSs were studied (Meijkamp, 1998; Littig, 2000; Mont, 2002b; Hirschl

whenever clustering is questionable, the arguments are presented and the categories can thus easily be traced back to the original findings.

et al. 2003; Halme et al., 2006; Bardhi & Eckhardt, 2012; Mylan, 2014; Piscicelli et al., 2015). In both cases, the studies were concerned with how users respond to ownerless consumption as well as how this response is determined by personal characteristics.

Responses to ownerless consumption that were observed and caused by a shift from ownership to access can be grouped into three categories, i.e. responses related to (1) feelings of freedom or uncertainty caused by changes in the physical or functional environment, (2) concerns for identity creation and status in the social environment and (3) a feeling of disgust from knowing that others have used the product (contagion). These three categories will be further described in the following.

Uncertainty and feeling of freedom

Through three consecutive focus group interviews, Rexfelt and Hiort af Ornäs (2009) presented realistic PSS offerings to participants and recorded their responses. The research showed that potential consumers experienced a restraining feeling of uncertainty about how such offerings would potentially change their everyday activities or not fulfill functional needs. The findings were later replicated for different products (Catulli, 2012).

This uncertainty appears to resemble the other side of the coin of what Littig (2000) found to be a sense of freedom connected to ownership. She showed that many customers favored ownership because it gave them a feeling of freedom. It was, in other words, not a constant need for the product that was determining the urge for ownership but rather their feeling of freedom derived from being able to use it limitlessly. Confronted with the 'threat' of losing this freedom, the participants of Rexfelt and Hiort af Ornäs' study experienced an uncertainty about how ownerless consumption would affect their everyday life, and this feeling of uncertainty constituted a barrier for acceptance (2009; Catulli, 2012).

However, it has also been indicated that ownerless consumption can have the opposite effect on consumers. In some instances, ownerless consumption could enhance a feeling of freedom, for example, by giving the possibility to temporarily experiment with a product before deciding to keep it (Rexfelt & Hiort af Ornäs, 2009; Armstrong et al., 2015). It is not clear how big this potential is, but so far it does not seem to outweigh the perceived loss of freedom in the eye of the consumer (Rexfelt & Hiort af Ornäs, 2009).

Identity and social status

Physical possessions are typically accumulated through life-time of a consumer and some products serve to portray the personality of the consumer. Some possessions can thus be considered an extension of the self (Belk, 1988).

These products that display personality can also be used to recognition in a social context, i.e. social status. Researchers have therefore studied whether such personal objects can still serve as extensions of the self, if they are not owned by the consumer. It was found that most American users of the car rental scheme provided by Zipcar were concerned that they would appear insufficient in front of peers when using a rental car instead of owning and they

generally identified very little with the car (Bardhi & Eckhardt, 2012). Similar attitudes were encountered when studying responses to made-up maternity equipment services, such as rented baby prams (Catulli, 2012; Catulli et al., 2013). The interviewed mothers did not want to appear incompetent or in lack of caring by displaying a used baby pram. Responses to made-up PSSs for clothing in Finland similarly found that consumers were concerned with the public stigma of using second-hand products as well as their ability to display their identity (Armstrong et al., 2015).

This concern also seemed to overrule any positive responses of being delighted about displaying environmental consciousness. Only few of the interviewed Zipcar-users felt that the environmentally conscious and smart brand of Zipcar benefited their public appearance (Bardhi & Eckhardt, 2012) and only a single participant out of 30 expressed a positive effect on social status derived from renting a baby pram instead of owning it (Catulli, 2013).

Nonetheless, Bardhi and Eckhardt assert that a social change might be underway as contemporary identity is becoming more plastic and thus calls for a more flexible use of physical assets in the process of constant identity creation (2012, p. 895). Such changes could have the potential to flip around current stigmas and create social support for ownerless consumption, though it has yet to be shown that such a shift is actually happening.

Finally, it is worth considering whether there is a conceptual distinction between the creation of personal identity through the use of objects on one hand and the concern for social status on the other. Arguably they are closely linked but the creation of identity might be seen as a more internal process whereas the feeling of social status is derived from the recognition among peers. This distinction is not explicit in the empirical studies but the more theoretical work by Belk (1988) that it is indeed two concepts. Whether the concern for identity creation and social status can meaningfully be seen as distinct concepts will be tested in the following.

Contagion and virginity

The concept of *contagion* arrives from a relation (or the absence of the same) between multiple users of the same physical product. In some studies of PSSs, participants expressed anxiousness about the fact that the product had been used by another person - regardless of the rigor of cleaning and maintaining it (Catulli, 2013). Bardhi and Eckhardt (2012, p. 888) found this phenomenon and noted that: "*Contagion refers to disgust that consumers feel when they are aware that an object has been physically touched by someone else.*"

The opposite of contagion can be termed *virginity*, which denotes the certainty that the product is completely unused. The obsession with product virginity has sparked a flourishing genre of YouTube videos called 'unboxing' and producers put strong emphasis on developing enticing packaging that makes the satisfaction of unboxing an important hedonic feature of the consumption experience.

Both contagion and virginity are, as mentioned, concerned with the (lack of) relationship between users. While the feature of virginity will only rarely be present in ownerless consumption, the user-to-user relationship could potentially prompt a positive feeling of connectedness with other users. This feeling of connectedness was indicated in Armstrong et

al.'s study where respondents found e.g. clothing swapping interesting mostly due to social and experiential factors (2015).

Continua of responses

Each of the three responses that were discussed above, i.e. feeling of freedom, social status, and virginity, also has a counterpart and is thus demarcating a continuum (figure 2.3). Each of the continua range from an attractive pole to an unattractive one. Although the research presented above primarily connects ownerless consumption to the unattractive one and ownership to the attractive response pole, the studies also indicate that it can indeed be the other way around. For the first two responses, freedom and social status, ownerless consumption is not intrinsically connected to one of the poles and thus has the potential to create a feeling of freedom or provide social status just as ownership predominantly does. For the last continuum, virginity, ownerless consumption is tied to left pole, because it entails a sequential use of a given product. But again, for this response it is indicated that ownerless consumption can potentially be considered equally attractive if the framing of the response is changed from product virginity to user connectedness. Each of these three response continua are integrated in the following and tested empirically.

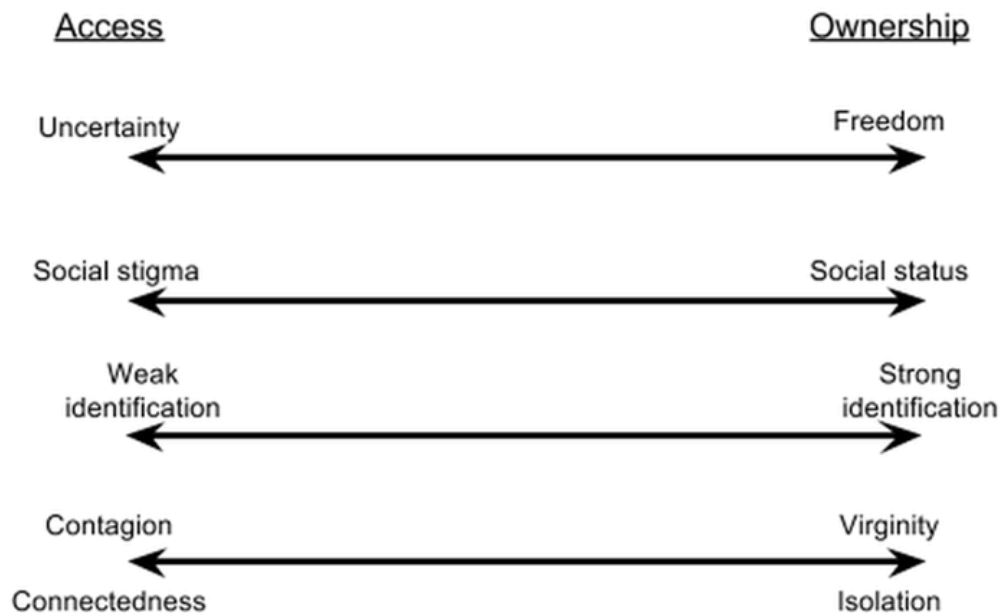


Figure: 2.3: Perception continua for three different responses to ownerless consumption.

2.2.2. Product types matter

Several studies observe that the acceptance of ownerless consumption tend to vary with the specific product type (Littig, 2000; Bardhi & Eckhardt, 2012; Rexfelt & Hiort af Ornäs, 2009). Some of the suggested reasons for this variation are: general interest in the product type (Rexfelt & Hiort af Ornäs, 2009), differences in symbolic value (Armstrong et. al., 2015),

differences in use patterns and frequency of use (Littig, 2000; Hirschl et al., 2003) and differing cultural interpretations of product types (Bardhi & Eckhardt, 2012).

It seems natural that different product types entail different responses to ownerless consumption - recall the comparison between airplanes and underwear above. However, it is by no means obvious how this works. It is impossible to study the relevance of product type exhaustively but the distinction will be included in the following, which will hopefully give some insightful indications.

2.2.3 Social practices and ownerless consumption

Social practices can be understood as established patterns of actions that form a routinized behaviour such as exercising, working, preparing food or more culturally distinct behaviours, such as skateboarding or geocaching. Further explanation follow in next chapter.

Attention to practices in the literature has been relatively sparse and not consistently focused around social practice theory. Results from the early study by Hirschl et al. (2003) can be interpreted in the light of social practices, as respondents expressed a reluctance to alternate already established behavioral patterns in spite of clear economic incentives to choose a service-based alternative.

One of the key findings of Rexfelt and Hiort af Ornäs (2009) is that the respondents are worried that they cannot, when renting a product, maintain the activities that they are currently appreciating in their everyday. This partly relates to the uncertainty presented above but more fundamentally seems to be connected to practices and a desire to maintain current practices. Mylan (2014) specifically applies social practice theory to the study of PSSs and consumer acceptance. She studies the uptake of two different innovative sustainable technologies in the UK. Arguably these technologies are not strictly PSSs (Mylan, 2014, p. 14) but as Mylan herself uses the result to discuss the implication for PSSs, it becomes relevant in the current context. She offers three insights from the case studies. First, that PSSs should be seen as transformations of practices rather than just a way to meet fixed consumer needs. Second, that practices that are tightly bound to certain symbolic meanings or very specific competences are more difficult to change and, thirdly, that practices that are necessary for and thus imbedded in other bigger practices can be more difficult to change than those that are rather isolated (Mylan, 2014, p. 19). These insights will be used in the development of the theoretical framework below.

Although PSSs can be seen as hampering for established practices, Bardhi and Eckhardt also investigated how car renting can enable the users to pick up new practices that were not possible before (2012, p. 890). Hence, ownerless consumption can potentially both be empowering and hampering in terms of social practices, which will also be studied further in this thesis.

2.2.4 Values influencing acceptance of ownerless consumption

Values are personal beliefs or convictions that guide the opinions and behavior of human beings. These values are not connected to specific contexts or topics but transcend situations. Examples of values can be liberty, justice, security. See chapter 2.3.2 for further elaboration. The relevance of values for the acceptance of ownerless consumption has also been acknowledged in several studies (Littig, 2000; Hirschl et al., 2003; Tukker & Tischner, 2006; Rexfelt & Hiort af Ornäs, 2009). Littig, for example, emphasises the importance of a change in values as part of a 'revolution of sufficiency' that alters the fundamental lifestyle and needs of consumers towards a more dematerialised approach where utility is favored over ownership (2000, p. 56f).

In spite of the broad recognition of the relevance of values, only few studies have measured the empirical evidence for this relation. In their qualitative study, Bardhi and Eckhardt (2012) assess the importance of cultural values by studying whether Zipcar users are examples of such a revolution of sufficiency. They conclude, however, that the values among the Zipcar users still generally favor ownership.

Piscicelli et al. (2014) provide the only other empirical study of the relation between ownerless consumption and values. In a study of the UK-based online marketplace Ecomondo, where users borrow objects from each other, Piscicelli et al. showed that Ecomondo users compared to the general population scored higher in values that relate to an openness to change and lower in values related to conservation. Furthermore, they showed that values that were related to altruistic and environmental concerns were not significantly different from the general public. This indicates that openness to Ecomondo as an innovation was more important for the general acceptance than an appreciation of Ecomondo as a mean to 'be green' which was nonetheless reported as the most frequently stated reason among the participants themselves (32%). Hence, it appears that there is a clear theoretical expectation about the relevance of values that has yet to be further consolidated empirically. Piscicelli et al.'s findings indicate that environmental and altruistic values are not the main drivers for accepting ownerless consumption - even though some user might prefer to think of themselves as environmentally motivated. Rather it is the propensity to adopt novelties that is most relevant. However, as will be shown below, altruistic and environmental values have consistently been proven relevant in other domains of 'green consumerism' and the expected relevance of these values must be tested further.

2.3 Theories and concepts

Many of the findings that are outlined above are derived from a relatively small set of empirical studies. As these studies have been explorative, they have provided rich data showing a broad array of factors that are potentially relevant for the consumer acceptance of ownerless consumption. In this part, the theories that provide the theoretical foundation will be presented, and subsequently synthesised with the findings above to create a framework that

allows for the intended research. A special focus lies on social practice theory as it forms the theoretical foundation of the theoretical framework presented in 2.4.

2.3.1 Social practice theory

In social practice theory, the main object of attention is not actors or structures but instead social practices (Reckwitz, 2002; Shove et al. 2012). In this perspective, human beings feature mainly as the carriers of social practices (Shove et al., 2012). Social practices thus have an enduring existence between and across the actual act of performing the practices (Shove et al. 2012). Reckwitz defines **social practices** in the following way:

“A ‘practice’ (Praktik) is a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge.”

(2002, p. 249)

This often cited and elaborate definition gives a good initial description of the nature of social practices by allowing it to be called ‘a routinized type of behaviour’ - which it is on a superficial level. However, social practices are indeed more than routinized behaviour (Shove et al., 2012). So for this thesis, the more recent and elegant conceptualisation by Shove et al. (2012) is used. The fundamental nature of **social practices** is here described by the following two propositions:

“The first [proposition] is that social practices consist of elements that are integrated when practices are enacted. The second is that practices emerge, persist and disappear as links between their defining elements are made and broken.”

(2012, p. 21, bracket added).

Shove et al. here reduce the types of elements that constitute a social practice to three: materials, competences and meanings. Material refers to things, technologies, the body itself, infrastructures and other physical entities. *Competence* is know-how, skills and technique and meaning encompasses values, aspirations, ideas and symbolic meanings (Shove et al., 2012, pp. 14, 22-24; see figure 2.4).

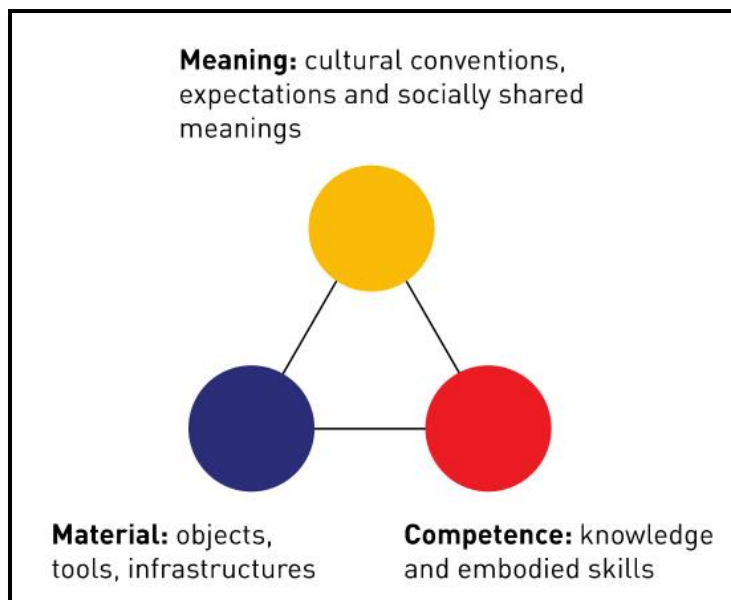


Figure 2.4: Elements of social practices. Source: Piscicelli et al. 2015.

Although social practices are to be considered things in themselves, it is through the continuous enactment by human beings that social practices are reproduced. Shove et al. distinguish between ‘practices as entities’, which is the abstract concept described above, and ‘practices as performance’ which is *the doing* or of a practice (Shove et al. 2012). An example of a practice as an entity is skateboarding. Skateboarding entails a certain pattern of behaviour and the concept exists independent of single moments of performing it. However, if everyone stopped doing skateboarding as performance, skateboarding as an entity would cease to exist.

This is also the reason that the practices are termed *social*. It is because of the social importance attached to distinct meanings, competences and materials within each practice that these are adopted, distributed and abandoned across time. Take the example of skateboarding again: The practice of skateboarding receives its distinct nature through the fact that certain objects (materials), cultural symbols (meanings) and skills (competences) are considered important in the social context of performing this practice and it spreads as this constellation of elements is replicated elsewhere by new members who enroll in the practice.

Change and stability in social practices

The source of change and stability in society is according to social practice theory to be found in the elements of social practices and the ways these are linked to each other. Shove et al. argue that: “(...) *stability is the emergent and always provisional outcome of successively faithful reproductions of practice.*” (2012, p. 13). This means that stability is the default of a social practice. However, every enactment of a social practice is like a heartbeat in the life of a practice and it always contains the potential for change. This change can come about through the use of, for example, novel technology, new symbolic meanings or knowledge. As new

elements are adopted into a social practice, the other elements typically adapt and the social practice shifts to a new equilibrium.

Take as an example the social practice of climbing. Historically, climbing was a part of mountaineering - something only a few daredevils would pursue for the sake of adventure and honour. Through the middle of the 20th century two technologies revolutionised the practice: climbing shoes with rubber soles made it much easier to stand on small edges and flexible nylon robes made it safe to fall off the rock. These technologies (materials) were adopted into the practice and new competences were needed to apply the new technologies. As climbing became less hazardous, new symbolic meanings evolved around it. In the end of the 20th and beginning of the 21st century, the practice of climbing developed into a commercial sport and is increasingly considered to be a healthy and safe form of exercise with an emphasis on nature experiences. Due to changes in the materials, new competences were needed and new meanings evolved around it to form a new equilibrium for the practice. This also led to a massive increase in the enrollment into the practice as the elements, forming the threshold for entry, changed.

Social practices and consumption

The dynamics between change and stability of social practices are relevant for understanding consumption and consumer acceptance towards innovation. In this field, Warde (2005) made an important contribution to the understanding of consumption by applying social practice theory. He defines **consumption** as:

“(...) a process whereby agents engage in appropriation and appreciation, whether for utilitarian, expressive or contemplative purposes, of goods, services, performances, information or ambience, whether purchased or not, over which the agent has some degree of discretion.” (Warde, 2005, p. 137).

Three things are of special importance here. Firstly, consumption is considered a process and not a single action of market transaction. This adds importance to the temporal dimension of consumption. Secondly, the emphasis on appropriation and appreciation shows that consumption entails not just the exhaustion or use of a product. Instead consumption is a process of acquiring competences as well as creating meanings around the object, which in turn is how the consumer derives value from the product. This also means that: *“consumption is not itself a practice but is, rather, a moment in almost every practice”* (Warde, 2005, p. 137). In other words, we rarely consume for the sake of consumption itself but rather in the process of carrying out different social practices. The third aspect that stands out from Warde’s definition is that it is inclusive in terms of both the object and mode of consumption. All three aspects are of particular relevance for the connection between the object-self relationship and social practices in this study.

The focus on the process of consumption instead of just a single market transaction is fruitful because it better captures the broad systemic implication of ownerless consumption. A shift from ownership to access does not necessarily entail changes in the product itself but typically in the conditions of provision and use: delivery, use period, use conditions, disposal etc. These

are changes that influence the way our lives revolve around the products in our everyday, in other words: they influence the object-self relationship. With the attention to appropriation and appreciation, social practice theory captures exactly the creation and continuous development of the object-self relationship. Finally, it is convenient that Warde himself almost implies the relevance of ownerless consumption with the words “*whether purchased or not, over which the agent has some degree of discretion.*”.

Spaargaren’s model of consumption practices

As one of the central contributors to the development of social practice theory, Spaargaren (2003) has provided an alternative view on social practices in the domain of sustainable consumption.

Where Shove et al.’s description of social practices seems quite emancipated from the duality of ‘actor’ and ‘structure’, Spaargaren (2003) places practices as a bridge between the two⁶.

Spaargaren still emphasises social practices as the relevant center of attention but leaves room for two additional concepts: ‘lifestyle’ and ‘system of provision’, see figure 2.5.

In explaining **lifestyle**, Spaargaren refers to Giddens by stating:

“The lifestyle of an individual human agent is defined by Giddens as the set of social practices that an individual embraces, together with the storytelling that goes along with it. (2003, p. 689)

According to Spaargaren, lifestyle can thus be seen as the narratives, we develop about ourselves in order to create a symbolic coherence between the diverse set of practices that we engage in. One might, for example, create the narrative that he or she is an ‘outdoor person’ in order to symbolically bundle different practices such as climbing, hiking and biking into a coherent narrative about him or herself. On one hand lifestyle can thus qualify or disqualify certain practices as more or less fitting to the given lifestyle. Social practices on the other hand can also call for a retelling of the stories that form the lifestyle as new practices are adopted or current ones change.

The system of provision largely encompasses what Shove et al. refer to as infrastructures. It is the structural circumstances that determine how, where and when material products can be made available and consumed by consumers. The specific use of Spaargaren’s (2005) model is presented and discussed in part 2.4.

⁶ Shove et al., following Giddens, do also see social practices as a middle point between structures and actors but reject the need for these in their theory.

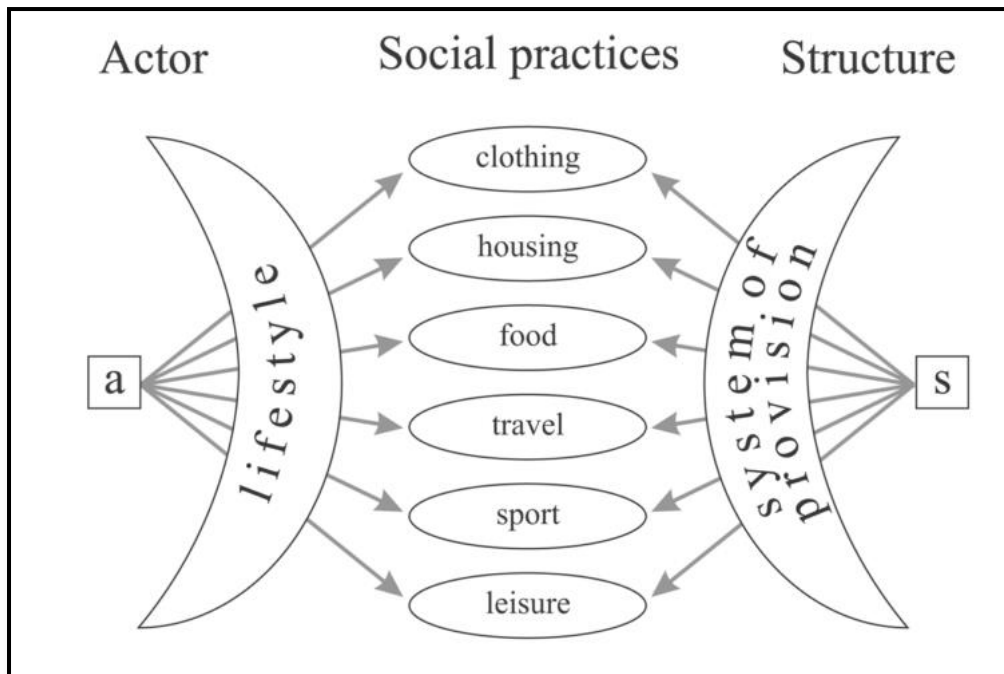


Figure 2.5: *The social practices model. Source: Spaargaren, 2003.*

2.3.2 Schwartz' value theory

Schwartz' value theory belongs in the field of social psychology and attitude-behaviour theory. More specifically, it focuses on the relation between the human mind and human actions. Schwartz, who is a leading researcher in the field, defines **values** as:

"(...) desirable, trans-situational goals, varying in importance, that serves as guiding principles in people's lives." (2006, p. 1).

Based on the findings of Rokeach (1973), Schwartz has developed a set of ten motivational values that have proven to be a valid way to describe value dispositions of humans across different cultures (Schwartz, 1992; Schwartz & Sagiv, 1995; Schwartz, 2006).

The ten motivational values are shown to cluster together in a two-dimensional circular space, called a circumplex (Schwartz, 1992; figure 2.6). The values in the circumplex are ordered according to two axes. One axis spans between 'Conservation' and 'Openness to change' and describes the acceptance of newness. The second axis concerns how focused a person is on own needs and desires (Self-Enhancement) vis-à-vis those of other living beings and the environment (Self-Transcendence). The motivational values are related to each other such that adjacent values tend to correlate positively and opposite values correlate negatively. If, for example, Self-direction is seen as important for someone, it will normally follow that also Stimulation and Universalism are of importance, whereas Security as well as Power will tend to be of less importance. Values located orthogonally to each other do not generally correlate. This means that humans will never weight all values equally high but instead tend to have emphasis on a certain area in the circumplex, which corresponds to a specific numerical value on each of the two axes. This emphasis will in the following be termed 'value disposition'.

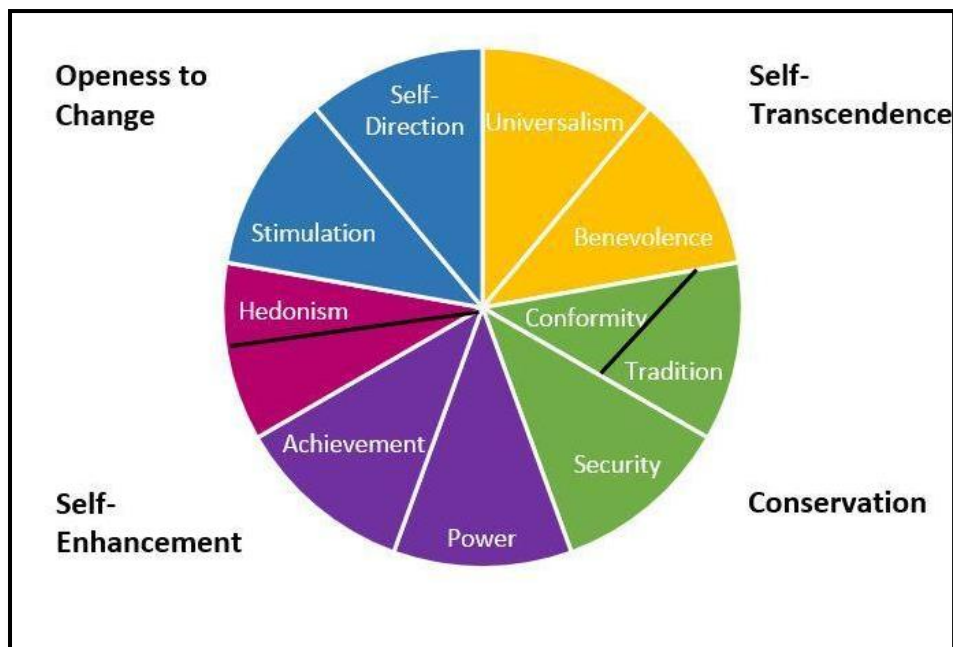


Figure 2.6: Illustration of Schwartz' circumplex with the ten motivational values.
 Source: https://en.wikipedia.org/wiki/Theory_of_Basic_Human_Values

Values and consumption

According to Schwartz' own definition as well as the general understanding, values do not determine very specific preferences. Values will most likely not influence whether you, for example, prefer a striped or a dotted shirt. Instead values have been shown to influence more general preferences in consumption. The distinction between self-enhancement and self-transcendence has been shown to be important for whether consumers are concerned about the natural environment and the wellbeing of others in their consumption choices (Thøgersen & Ölander, 2002; Pepper et al. 2009). Further supporting this, is that a distinction between egoistic, altruistic and biocentric motives in consumption choices have been shown to be strongly correlated with corresponding value dispositions (Schultz, 2001; Clark et al., 2003). The other axis between openness to change and conservation has been connected with consumer innovativeness in several studies. Consumer innovativeness denotes the willingness to adopt novelties in the market. Value dispositions are included in metrics to measure consumer innovativeness (Steenkamp et al., 1999; Vandecasteele & Geuens, 2010) and they have among others been used to explain adoption of internet-based services (Hartman et al., 2010; Bagchi et al., 2015).

2.4 Conceptual framework

This thesis essentially aims to assess the complex nature of the object-self relationship and how it is influenced by the mode of consumption. In order to conceptually enable this, the theoretical framework uses social practice theory to unfold the nature of the objects-self relationship and further distinguishes two relevant concepts external to the object-self

relationship. The development of the conceptual framework entails a pragmatic use of the theories, which will be critically discussed in chapter five.

The sub-questions that help to develop and direct the main research question, are formulated in coordination with the development of the conceptual framework. Throughout this part, there are therefore references to the sub-questions. To ease the reading, the sub-questions are listed in table 2.2 below.

Table 2.2: List of research questions

	<i>How does ownership or the absence of ownership influence the object-self relationship of consumers and what does this influence mean for the acceptance of ownerless consumption in the context of innovative circular economy-oriented product-service systems?</i>
SQ 1	<i>How does the creation of meaning in the object-self relationship influence consumer acceptance of ownerless consumption?</i>
SQ 2	<i>How does the product type influence the object-self relationship and thus the consumer acceptance?</i>
SQ 3	<i>How does the existence or absence of competences in the object-self relationship influence consumer acceptance of ownerless consumption?</i>
SQ 4	<i>How does the difference between current social practices and those required for ownerless consumption influence the acceptance of ownerless consumption?</i>
SQ 5	<i>How do personal values influence the object-self relationship and the acceptance of ownerless consumption?</i>

2.4.1 The object-self relationship

The concept of an *object-self relationship* is not established in the literature but suggested by Bardhi and Eckhardt (2012) as a conceptual tool to study the differences between access and ownership. It obtains a central role in this thesis as it allows for the study of the social, symbolic and practical ties between the product and the consumer. Bardhi and Eckhardt suggest that the object-self relationship is often *stronger* when an object is owned rather than accessed. They do not specify fully what determines the strength of an object-self relationship but suggests that for example the temporality of access as well as symbolic functions of ownership are factors. Using social practice theory, the object-self relationship can be seen as residing and developing in the center of social practices that involve consumption of physical objects. Recall that Warde (2005) considers consumption a process of appropriation and appreciation. This process evolves and persists through the linking of competences, material (e.g. the object) and meanings. The object-self relationship is therefore in the context of social practice theory seen as: The state at

any given time of the ever-evolving process of appropriation and appreciation of a product that is involved in one or more social practices.

Mylan contributes to this understanding with her concluding insights (c.f. Chapter 2.2.3), stating that when the links between elements of practices are strong, the practice is more persistent and therefore less receptive to a change in the mode of consumption. She further argues, that for products that are involved in several practices, a shift to ownerless consumption is similarly less likely to be accepted. Hence, based on Mylan it can be further derived that the object-self relationship is stronger when different elements of social practices are more closely integrated into this process of appropriation and appreciation - either because one consumption practice becomes more established or because the product is being used in multiple practices. As the object-self relationship becomes stronger, the act of shifting from one mode of consumption to another becomes more demanding and thus less likely to be accepted. Although this is the general theoretical expectation about the link between the object-self relationship and the acceptance of ownerless consumption, it might not always be that simple and this thesis will also look for more fine-grained nuances.

2.4.2 The elements of social practices

While the object-self relationship is central to this research, it is also difficult to investigate - both conceptually and empirically. Therefore it is helpful to address the elements that constitute the social practices according to Shove et al. (2012), meaning, competence and material, as a way to encompass the nature of the object-self relationship. The relevance of these three elements is in turn addressed by sub-question one to three.

The literature overview discussed four different continua of responses that consumers express when confronted with different PSSs. These were: a feeling of uncertainty vis-à-vis a feeling of freedom, a concern for social status or stigma, a concern for the creation of identity and a feeling of used products being contaminated through the touch of others or oppositely feeling connected with other users through the sequential use of the product. Although strictly speaking, these findings are to be considered specific feelings and concerns rather than constructions of meaning, they are arguably manifestations of the underlying meanings that are connected the specific mode of consumption. There is, as it was argued in the overview, no inherent connection between e.g. ownership and freedom and it is therefore due to a social construction of meaning that the respondents in the studies were able to express these normative perspectives on ownerless consumption. Therefore, the four continua of responses are used as expressions of different underlying meanings in the conceptual framework. This is clearly a reduction of the plurality that meaning represents but for the purpose of this research, such a narrow focus is necessary. The relevance of meaning is addressed by the first sub-question.

The second relevant factor that was outlined above was the product type, which is only component that is used to represent material in the conceptual framework. Although it is a rough reduction, it is meaningful in this context to give a strong attention to the object (i.e.

product) and thus omit some of the many other aspects of materials. This aspect is addressed by the second sub-question.

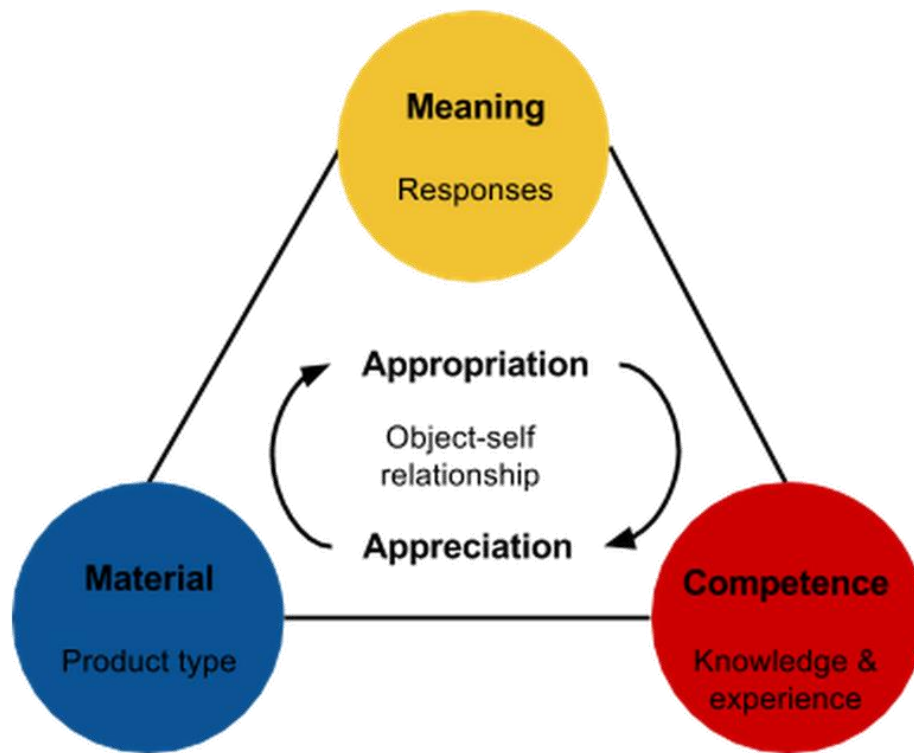


Figure 2.7: Conceptual component of the object-self relationship used for this research.

In the literature overview, factors that can be classified as either material or meaning were identified. Indications that competence plays a role for the acceptance of ownerless consumption is not prominent in the literature but was expressed by Mylan (2014). However, as the competences to use a certain object is an essential element of the object-self relationship, it is likely that competence can indeed be a relevant factor as well. Therefore, competences are also considered as a way to encompass the object-self relationship and is addressed by the third sub-question. Notably, this factor is the part of the conceptual framework that has the weakest foundation in the literature. However, the inclusion of this concept is motivated by its relevance for exploring and understanding the object-self relationship in the context of social practices. The inclusion of competences as the third elements that is used to unfold that nature of the object-self relationship, concludes this part about the conceptual components that are seen as part of the object-self relationship. See figure 2.4 for an illustration of this.

2.4.3 Performances and the system of provision

The description of social practices used above, corresponds to the concept of practices-as-entities. As noted in chapter 2.3.1, practices can also be seen as performances, i.e. *the doing* of the practice. This second perspective emphasises the performances of a practices rather than its elements and such a perspective is valuable in the study of ownerless consumption because the

shift from ownership to access can have extensive implications for whether and how consumption performances can be carried out.

Bardhi and Eckhardt address this aspect with the second parameter that they use to distinguish between ownership and access: *“the rules that govern and regulate this relationship [the object-self relationship].”* With this concept, they refer to the practical conditions of infrastructure that are often differing between PSSs and ownership-based offerings. This could be aspects of delivery, maintenance, disposal or similar processes. Accordingly, the (dis)ability of the practical infrastructure of provision to support performances of already adopted consumer practices, influences the process of appropriation and appreciation within these practices and thereby the ease of shifting from one practice to another. For Shove et al. structures of infrastructure are an integrated part of the practices themselves and these structures can therefore not be seen as something external to the process of appropriation and appreciation. However, since the intention in this thesis is to conceptually separate the object-self relationship and the external rules that influence with the purpose of studying these separately, it is essential to conceptually make room for such a distinction. Spaargaren’s (2003) separation between the social practices and the system of provision therefore better accommodates this purpose. The system of provision, although consisting of practices itself, is seen as a structure external to the consumption practices. It defines the practical infrastructure of material provision for the consumption practices and thereby influences them through structural conditions. In this sense, the system of provision encompasses the structural differences between access and ownership and is in the following used to denote all infrastructural processes concerning acquisition (e.g. physical stores and delivery), use (e.g. repair or exchange services) and disposal (e.g. recollection services). How differences in the system of provision, arising from a change in the mode of consumption, influence the process of appropriation and appreciation through social practices is illustrated in figure 2.5 and addressed in the fourth sub-question.

2.4.4 Meanings and values

Piscicelli et al. suggest that values can be seen as proxies for meaning and state that they intend to explore:

“(...) the possibility for personal values, located within the individual, to act upon the ‘meaning’ element (i.e. the bundle of cultural conventions, social norms, collective assumptions and expectations) of practices, thus contributing to (or hindering) the acceptance, adoption and diffusion of more or less sustainable practices and patterns of consumption.” (2014, p. 24).

It appears that in this perspective, values are seen somewhat as proxies for meaning but also as something external to meaning that acts upon it. While the conceptual integration of values and meaning is relevant for this research, the dual role of values appears conceptually contradictory. This can be better overcome by the use of Spaargaren’s model (2003) than with Shove et al.’s triangular model. Shove et al. (2012) fully recognise the existence of different kinds of meanings but do not conceptually distinguish between them in their model. Spaargaren on the other hand

makes a distinction between meanings that resides inside and is immediately relevant for the practice and meanings that transcends individual practices and bind different practices together in meaningful narratives. This second kind is what he calls lifestyle. Hence, with the use of Spaargaren's theory, values can be seen as a central aspect of lifestyle. Values thus remain a concept that is trans-situational and external to the individual practices while still contributing to the creation and change of meanings. Therefore, the concept of lifestyle from Spaargaren (2003) is used to make room for values in the conceptual framework. Values can be expected to influence the acceptance of ownerless consumption either directly, indirectly through the creation of meaning or both. This factor is addressed by the fifth and final sub-question.

2.4.5 Acceptance and demand

Two additional factors that have not yet been conceptualised will play a role in the thesis research. The first factor is the acceptance of ownerless consumption, which obviously is essential for the research, and the second is the *demand* for a given product type. Acceptance of ownerless consumption can of course be seen as an abstract isolated concept and will methodologically be treated as such. But in the context of the framework it is more meaningful to consider it a kind of meaning that resides in the object-self relationship. Hence, when this thesis addresses how the object-self relationship *influences* the acceptance, the conceptual understanding is that the object-self relationship can have certain configurations that allow for the development of acceptance of ownerless consumption as a kind of meaning in the object-self relationship. Demand for a given product is a factor that is included for methodological reasons explained below but it does also have a conceptual interpretation. It can be seen as the appreciation of one or more practices involving that specific product. Such an appreciation either stems from wanting to enroll in a practice that requires that product or from already being enrolled but wanting to 'upgrade' to a product that holds higher symbolic and/or functional value within the practice.

2.4.6 Final framework

Spaargaren's model (2003) thus provides two conceptual elements that are external to the consumption practices: lifestyle and system of provision. However, it is still Shove et al.'s (2012) theory that is used for understanding and studying the elements of social practices that encompass the state of appreciation and appropriation in the object-self relationship. What is attempted by this constellation is to use the theory of Shove et al. in order to unfold the object-self relationship, while simultaneously recognising that some elements reside more meaningfully outside of the object-self relationship and therefore in this framework outside of the practices as well (see the Fig. 2.5 for an illustration of this).

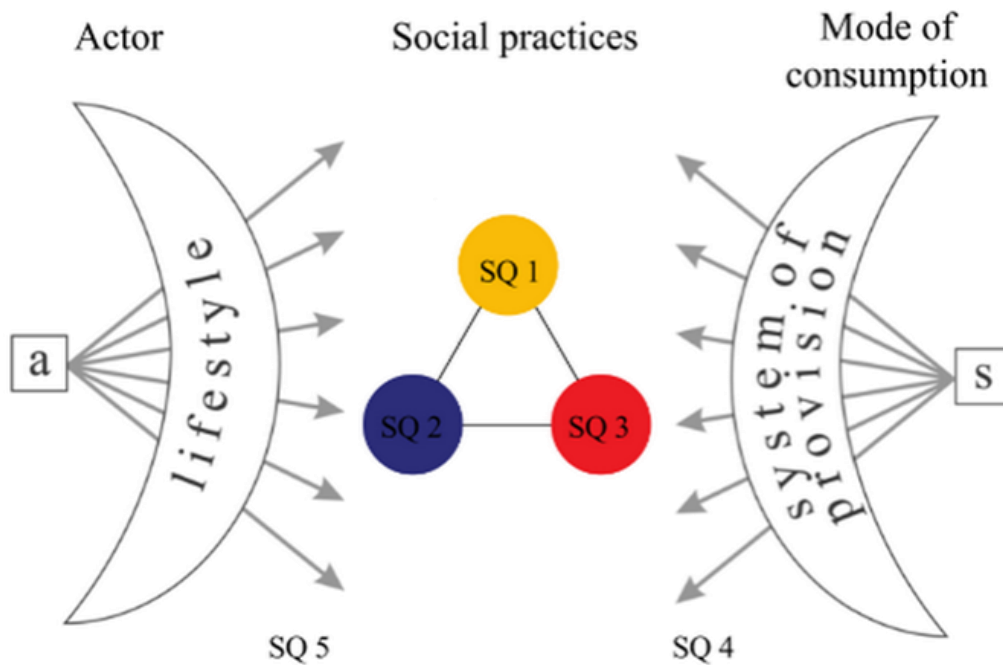


Figure 2.8: Integration of Shove et al. and Spaargaren with demarcations of sub-questions (source: Spaargaren, 2003, and Piscicelli et al., 2014). **Note:** “SQ” Abbreviates: Sub-question.

The main research question of this study addresses the dynamic between the mode of consumption and the object-self relationship and further what this dynamic means for the acceptance of ownerless consumption. Hence, there are two main factors in this study: mode of consumption and the object-self relationship. The mode of consumption is a factor external to the object-self relationship and that alters the system of provision (see figure 2.8). The first three sub-questions seek to unfold the object-self relationship by investigating the three elements of practices-as-entities: competences, materials and meanings. The fourth sub-question studies practices-as-performances and questions how the interaction between performances and the system of provision influences the acceptance of ownerless consumption. Finally, the fifth sub-question addresses values as a second external factor that can potentially influence the acceptance of ownerless consumption directly or indirectly through the creation of meanings within the object-self relationship.

Methods

In this chapter the methodological process and choices are explained. That includes first a description of the operationalisation of the concepts described above. Second, a presentation of the research population and sampling method. Third, a description of the research design and data collection and fourth, an account of the data preparation prior to the analysis. The study of this thesis is based on a questionnaire as well as a qualitative study performed with focus group interviews and these two methods will be presented in parallel. The questionnaire survey was carried out first and the questions were made to test the elements of the conceptual framework, presented above. The purpose of the quantitative study was to systematically test the relevance of the different factors and to study potential dynamics between these. The focus group interviews followed the quantitative study and serves as a methodological triangulation to ensure a high validity of the results. The qualitative analysis further offers a deeper and more nuanced understanding of the findings from the statistical analysis.

3.1 Operationalisation

For the qualitative study, the concepts as they are described above are used directly to develop the interview guide for the focus groups, which is a topic that is covered in chapter 3.3. The following operationalisation concerns only the questionnaire. This chapter also only presents the operationalisation of concepts from the conceptual framework. A few additional variables will be introduced in the Research design chapter below. The object-self relationship is not operationalised as an entity in itself. Based on the arguments in 2.4.1, the object-self relationship is instead assessed via the three elements of social practices: meanings, competences and materials. Only few of the question formulations from the questionnaire are presented below. See appendix 1 with the full questionnaire for all the question formulations.

3.1.1 Mode of consumption

Mode of consumption is a key element in this research as it encompasses the distinction between access and ownership. The mode of consumption is not measured in the survey but rather manipulated as a condition. Three different products are presented to the respondents (see 3.1.3) and these can either be bought or rented. With this setup the physical product remains the same regardless of the mode of consumption. Often when developing products for PSS, it is favorable to redesign the product and thus offer a physically different product (McDonough & Braungart, 2009; Lacy & Rutqvist, 2015). But by allowing the physical product to remain the same, the survey can create a more focused operationalisations of access and ownership that are solely based on aspects of the system of provision. The respondents are given a short explanation of what it entails to rent and buy (see table 3.1) along with a picture of the relevant product. During the questionnaire, the respondents are asked to imagine that they are either renting or owning one of the three specific products.

Table 3.1: Text in questionnaire presenting the differences between renting and buying.

If you rent the [product]:	If you buy the [product]:
You pay a monthly rent that is automatically transferred from your banking account.	You pay the full price up front and you will then own the [product].
If the [product] breaks or if you want a new model, you can always exchange it.	It comes with a two-year warranty as all other products.
When you don't need the [product] anymore, you can send it back and thereby end the contract.	When you don't need the [product] anymore, you can sell or dispose it.

Note: [product] is inserted instead of the relevant product type name.

The explanations are kept generic and short in order to be able to use the same text across different product types. Each explanation contains three sentences that present the circumstances for acquisition, exchange and disposal.

The price of renting and buying is not available on the offerings. The reason for this is that it would be close to impossible to estimate a balanced price for renting and owning that would not bias the preference towards one mode of consumption or the other.

3.1.2 Consumer acceptance of ownerless consumption

For this study, it is the acceptance of the PSS vis-à-vis the ownership-based offering and not the acceptance of the product itself, that is relevant. However, the actual need for, and interest in the product can potentially influence how the consumer responds to the specific offering. If for example, the respondent already owns a good espresso machine, even hypothetical questions about his or her interest in renting another machine can seem trivial and lead to biased responses. Therefore, the respondents are asked about their interest and need for the presented product prior to the assessment of acceptance.

Consumer acceptance of ownerless consumption is, as outlined above, not studied much and especially not through questionnaires. Hence, there is no standard for how to measure the acceptance of ownerless consumption. To address this challenge, the questionnaire probes for the consumer acceptance through three different measures.

The first measure asked respondents whether they agree or disagree (5-point Likert scale) with the following statement: “It is important for me to own the [product] instead of renting it.”. ‘[product]’ is placed instead of the actual product type.

The second measure asked respondents to indicate whether they prefer to rent or to buy the product on a scale that ranges from “I strongly prefer to rent the [product]” through “I prefer to rent the [product]”, “Neutral”, “I prefer to buy the [product]” to “I strongly prefer to buy the

[product]”. In the last measure, the respondents were asked to indicate how much they would pay respectively per month for renting and in total for buying the product. The idea being that preferences for either buying or renting would manifest themselves in the price indications. Thereby, a ratio given by buying price divided by renting price would serve as a measure for the preference for buying (high values). The actual value of the product is not assumed to matter as the individually imagined product value will serve as a reference for both price indications. Furthermore, a renting period was set to 24 months to avoid price indications for only a single month of use, which could be expected to be slightly higher.

3.1.3 Values

Several different question batteries have been developed based on Schwartz’ original value survey called Schwartz’ Value Survey. The question battery chosen for this questionnaire is the one used for the European Social Survey (ESS) (Schwartz, 2003). This set of 21 statements is used because it is significantly shorter than many other similar sets while still yielding valid results (Schwartz, 2003). Furthermore, the ESS is a cross-national survey that has been performed in all of Europe every year since 2001, which also makes it a well-tested measure with big amounts of available data for comparisons.

3.1.4 Material - product type

The product type is a variable that is extrinsic to the respondent and it is therefore manipulated in order to create variation. The survey consists of three distinct questionnaires, each presenting the respondent with only one of three products as an experimental stimulus (see more in 3.2). Each of the three product types is presented with a picture of the product (see figure 3.1 and 3.2). All images are edited so no logos or brand names are visible and the original sources of the images are given in the figure descriptions. This is done to avoid copyright violations⁷.

Having only three different products does not allow for a very fine-grained understanding of the relevance of product types but since every new product type requires a new questionnaire with sufficient respondents to yield significant results, it is naturally limited how many different product types can be included. The product types are chosen based on two criteria. First, that the product type has a recognised potential for being part of a technical metabolism in a circular economy. Second criterion is that the three products types can be expected to differ in the nature of the object-self relationship with the consumer.

⁷ As described in email by Ilona E. de Hooge, Assistant Professor at Marketing and Consumer Behaviour, Wageningen University.

The three products types are:

1. **Sweater made in polyester**

Circular potential: Polyester is a group of polymers that among others include polyethylene terephthalate (PET), which is one of the most commonly used polymers. Both EMAF (2015; 2016) and the European Commission (2015) stress the importance of improving the management of plastic waste streams in Europe.

Object-self relationship: *Clothing plays an important role in portraying identity (Armstrong et al., 2015).*



Figure 3.1: Images of sweaters used in the questionnaire. Set for women above and set for men below⁸.

2. **Tablet**

Circular potential: The waste produced from consumer electronics (E-waste), holds a big potential for recovering rare metals (Lacy & Rutqvist, 2015) and EU is developing legislation to improve the circulation of electronics (European Commission, 2015).

Object-self relationship: Electronic devices have become an integral instrument in carrying out many everyday practices. How important electronic devices are for portraying identity however is not clear but the assumption in this study is that it is lower than clothing and higher than an electronic kitchen device.

⁸ Source: all images are from <https://www.zalando.nl> except the upper third from left which is from <http://www.fjallraven.com>.

3. Home espresso machine

Circular potential: Although not necessarily among the most impactful product types, electronic devices for domestic use have been one of the earliest product types that were studied in the context of PSS (Brezet et al., 2001; Halme et al., 2006).

Object-self relationship: A kitchen device such as an espresso machine is expected to play the least important role both in term of practices and identity creation, as the use of it is more sporadic.



Figure 3.2: Image of tablet and coffee machine used in questionnaire⁹.

For sweaters, the product is differentiated to fit the gender and the respondents are given a choice between four different sweaters. This is done to increase the likelihood that respondents can relate to the product offering, which in turn is based on the assumption that clothing preferences are more influenced by 'personal taste' than consumer electronics and household electronics.

3.1.5 Meanings

Differing kinds of meanings related to ownerless consumption have mainly been studied qualitatively and inductively. So in order to create reliable measures, a reflective index consisting of 4 items is used to measure the relevance of each of the four kinds of meaning. The four items in each index consist of statements that are rated on a five point Likert-scale according to how much the respondent agrees with the statement.

The single statements were developed such that each index of four statements (items) has respectively two items related to owning the product and two about renting the product. Furthermore, within these pairs, there is always one statement that expresses a negative attitude about the respective mode of consumption and one expressing a positive attitude. See the four statements that measure each of the four continua in table 3.2 below.

⁹ Image source: Tablet: <http://www.hitechricambi.com/tablet/apple/ipad-4.html>. Coffee machine: <http://www.amazon.de/Saeco-HD8761-Kaffeefullautomat-klassischer-Milchaufsch%C3%A4umer/dp/B00BCQIAA8>

Table 3.2: Statements that make up the reflective indices measuring the four conceptualized continua.

Index		Positive	Negative
Contagion/Connectedness vs. Virginity/Isolation	Owning	<i>I feel good because others have not used it before me.</i>	<i>I feel more isolated from other users.</i>
	Renting	<i>I feel positively connected to other users.</i>	<i>I feel uncomfortable about others having used it before me.</i>
Social status vs. Social stigma	Owning	<i>I feel more prestigious with it.</i>	<i>I feel more old-fashioned among my friends.</i>
	Renting	<i>I feel more trendy and smart towards others.</i>	<i>I feel nervous that others might think worse of me.</i>
Uncertainty vs. Freedom	Owning	<i>I feel more free to use it exactly how I want.</i>	<i>I feel more restricted.</i>
	Renting	<i>I feel more free and flexible.</i>	<i>I feel uncertain about how I am allowed to use it.</i>
Creation of personal identity	Owning	<i>I can express my character better.</i>	<i>I feel that it doesn't express as much who I really am.</i>
	Renting	<i>I can better express my personality with it.</i>	<i>I cannot use it to show who I really am.</i>

The construction of the statements is based on the citations and explanations from the relevant literature and the consistent use of both negative and positive statements for both renting and buying is used to avoid any normative biases.

3.1.6 Competences

Competences are operationalised with two statements concerning respectively: the experience that the respondent has with using the relevant product type and the general knowledge the respondent has about the specific product type, see table 3.3. Knowledge is considered a central aspect of competence (Reckwitz, 2002; Shove et al., 2012). Experience on the other hand is not as clearly a part of the theoretical construct. However as practical skills can be difficult to measure in a survey, self-declared experience is used as a proxy for skills, which is in turn an integral part of competence (Reckwitz, 2002; Shove et al., 2012).

The two statements concerning the relevant product type are rated on a five point Likert-scale according to how much the respondent agrees with the statement.

The reason for not measuring competence objectively with factual questions about the product type is mostly pragmatic. The self-assessment is expected to be valid enough and since the questionnaire is already composed of many elements, it is important to keep the amount of single questions down.

Table 3.3: The six statements used to measure two elements of competence (knowledge and experience) for the three different products: tablet; sweater; and coffee machine.

	Knowledge	Experience
Tablet	<i>I have much knowledge about tablets or similar products.</i>	<i>I have much experience with using a tablet or similar products.</i>
Sweater	<i>I have much knowledge about clothing.</i>	<i>I have much experience with choosing and combining clothing.</i>
Coffee machine	<i>I have much knowledge about coffee machines and coffee.</i>	<i>I have much experience with using a coffee machine like this.</i>

3.2 Research population and sampling

The samples for the interviews and for the survey have been drawn among students at Wageningen University in the Netherlands. It was necessary to limit the scope of the research because it is beyond the financial means of this research to draw a sample from the full Dutch or European population. Groups of university students at other Dutch universities were contacted but it was not possible to make an agreement about distributing the questionnaire. Furthermore, if the thesis would have studied a population broader than university students, it would bring a range of demographic and socioeconomic variables into play, such as income, education level, age and profession. These factors have been shown by Hirschl et al. (2003) to be relevant for acceptance of ownerless consumption but they are not in the centre of attention for this study. Hence, by limiting the study to university students, these factors are kept close to constant, and need not be included in the analysis. Furthermore, the three product types have been chosen with university students as the target group.

3.2.1 Sampling: Questionnaire

The questionnaire was distributed through various channels. This was necessary to get a sufficiently high amount of respondents for the analysis. The channels were: private network of friends and acquaintances; lectures that were visited in order to hand out questionnaires; and second parties that helped distributing the questionnaire at Wageningen University (table 3.4). For the first two channels, the questionnaire was filled in online using a web-based software called Qualtrics¹⁰, which is licensed, by Wageningen University. When visiting lectures the questionnaire was mostly distributed in a printed format.

Within the personal network, the questionnaire was distributed via Qualtrics to 62 potential respondents of which 41 responded. The distribution through second parties came from two separate sources. One was an email sent out by a study advisor to all bachelors in Bedrijfs- en

¹⁰ www.qualtrics.com

Consumentenwetenschapp (Business and Consumer Science) as well as all master students in the program: Management, Economics and Consumer Studies. The other source of second party distribution was the student association for environmental scientists, Aktief Slip¹¹ that added a link to my questionnaire in their newsletter. 67 respondents were acquired through these two channels. The last channel provided the majority of the respondents. This channel was lectures that were visited with the consent of the lecturer. Here, printed questionnaires were handed out in the break or sometimes during class. For one class the respondents were asked to fill in the questionnaire online instead of using printed questionnaires. 32 of the class members did that. In total, seven lectures were visited which yielded 154 respondents. To stimulate participation, all respondents were offered a chance to win one of three vouchers, each with a value of €20.

Table 3.4: Questionnaire respondents grouped according to sampling channel. Frequencies and percentages of total are shown in table.

	Amount	Percentage	Questionnaire format
Private network	41	15.6 %	Online
Second party distribution	67	25.6 %	Online
Lectures	154*	58.8 %	Printed/Online

Note: * 32 of these respondents answered the questionnaire online. N=262.

The sample counts 262 valid respondents of which 62.2% are females. 60.3% of the respondents are Dutch students, whereas the remaining 39.7% are of different non-Dutch nationalities. The mean age is 23.8. The distribution of product frames is close to equal with the slight difference caused by the randomization procedure - see table 3.5.

Table 3.5: Distribution of product frames

	Frequency	Percent
Tablet	91	34.7%
Sweater	92	35.1%
Coffee machine	79	30.2%
Total	262	100%

¹¹ <http://www.aktiefslip.nl/>

3.2.2 Sampling: Focus group interviews

The participants for the focus group interviews were recruited from the survey respondents. All respondents were in the end of the questionnaire introduced to the option of participating in focus group interviews and asked whether they would be interested in receiving more information about this option. At the time of recruitment 115 respondents had answered either 'Yes' or 'Maybe' to this question. All these participants received an email on March 23 (see appendix 2).

Four focus group interviews were arranged between Tuesday the 29th of March and Friday the 1st of April. All participants received a confirmation email with extra details and my phone number. 19 participants signed up for the interviews but only 12 actually showed up (table 3.6). All participants that cancelled except two contacted me either shortly before or after the interview and explained their absence. A virus that was indeed common around the university at that time hit three participants and two had to urgently do school work. Hence it does not seem that participants have systematically been nervous or discomforted about the interviews.

Table 3.6: Overview of participants registered for the focus group interview, cancellations and final number of participants.

Group	Date	Participants registered	Cancellations on the day	Actual number of participants	Females/ Males
1	29.03.2016	4	2	2	1/1
2	30.03.2016	6	2	4	3/1
3	01.04.2016	7	3	4	2/2
4	01.04.2016	2	0	2	2/0

Seven of the participants were personal acquaintances but that does also not appear to have caused disharmony in the groups since all participants expressed that the interview was comfortable and interesting. The groups were generally mixed with both males and females and only group one did not have different nationalities in the group. Also, the group members did not know each other closely. The diversity and unfamiliarity of the group members meant that no formation of sub-groups appeared in the interview and a range of opinions were presented in each group, which ensured data-rich interviews (David & Sutton, 2004).

3.3 Research design: Questionnaire

The questionnaire typically took five to fifteen minutes to fill in and consisted only of closed questions (except from the comment field in the end). Before it was distributed, it was reviewed several times by two external reviewers and then piloted on 16 respondents outside of the population (friends and relatives located in Denmark). The pilot indicated that the statements used to assess the four hypothesised continua of meaning were reasonably reliable. It further showed an extraordinarily high preference for owning. In the pilot, no information was given

about the conditions for owning and renting and it was concluded that a neutral introduction to the idea of renting these products was needed for the respondents to be able to actually consider it as a real option. Hence, the introduction shown in table 3.1 above was included in the final version of the questionnaire.

3.3.1 Overall structure

As mentioned in 3.1.3 the variance in the product type was manipulated rather than measured. So for each questionnaire only one of the three products was presented to the respondent and the product type was used as a 'frame' within which most of the other elements of the questionnaire were presented. This means that for the measurement of e.g. consumer acceptance, competence and meaning, the respondent was asked to answer specifically concerning the product type that he or she was confronted with. Only the measurement of values and a few formal measurements were unrelated to the product type. The distribution of product types was randomised. Qualtrics randomised the digital questionnaires and the physical ones were shuffled before being handed out to the respondents.

3.3.2 Chronology

The questionnaire was introduced with a briefing that shortly explained the purpose of the research, the procedure of the questionnaire, the option of winning a voucher, the confidentiality policy as well as contact information. Then a short section asked the respondent to indicate his or her gender and whether he or she is from the Netherlands or from outside the Netherlands. After the introductory part, a cluster of elements that relate to the product type began. Naturally it was introduced with the picture of the relevant product type (as shown in chapter 3.1.3) along with the explanation of the conditions for respectively renting and buying the product (see table 3.1). After that, a battery of statements measured competences (knowledge and experience), need and interest in the specific product as described in chapter 3.1.1, as well as acceptance of ownerless consumption.

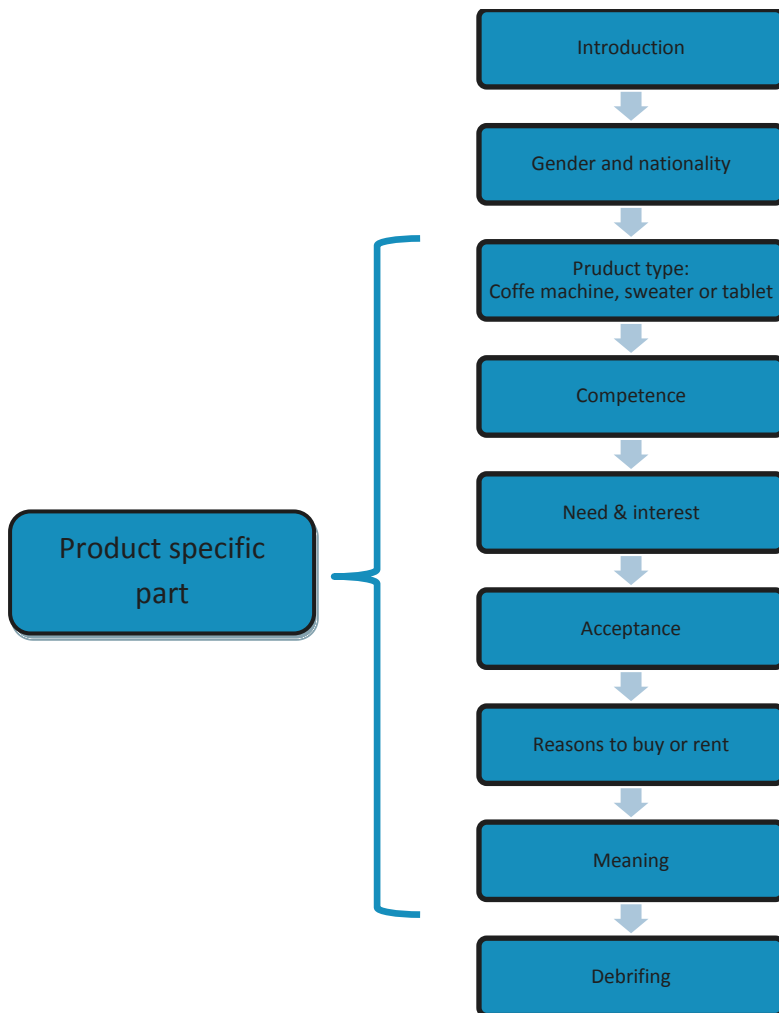


Figure 3.3: Diagram showing the chronology of the questionnaire.

After the measurement of acceptance, the respondents were presented with two batteries with randomised statements measuring the importance of the four different kinds of meanings for respectively owning and renting. These two batteries were the last elements that were conditioned by the product frame. After that, the respondents were presented with the ESS value survey. The order of these statements was already given by Schwarz (2009) and was therefore not randomised. In the end there was a small block with the option for respondents to leave an email address in order to participate in the lottery for the three vouchers as well and the option to express interest in participating in the focus group interview and to leave comments. Finally the questionnaire was ended with the following message:

*“That was it. Thank you very much for your participation!
 Your responses have been saved and all data will remain confidential.
 If you have any questions or inquiries please contact me on: thomas.thorin@wur.nl”*

3.4 Research design: Focus group interviews

All focus group interviews were carried out at Wageningen University, which was the natural environment for all participants. Interviews were held in a small group room that was reserved for the purpose and allowed for privacy. The sessions were recorded with a digital voice recorder and the I wrote notes during interviews, while also functioning as a moderator. All interviews started with a short introduction where I introduced myself, thanked the participants for their participation and introduced the general purpose of the study. The participants were also reminded that the session would be recorded and told that no identifying information would be available in any published material. Subsequently, each participant was asked to shortly present him or herself and his or her motivation for participating in the interview and the procedure and rules for the interview were explained (See interview guide, appendix 3). The participant were given printed pictures of two of the three products and were asked to use the two different product types as reference points for comparisons in the discussion when relevant , see table 3.7.

Table 3.7: Overview of the four groups used for focus group interviews.

Group	Number of participants	Products types	Duration of conversation
1	2	Sweater & tablet	31 min
2	4	Sweater & tablet	50 min
3	4	Sweater & coffee machine	47 min
4	2	Coffee machine & tablet	26 min

The interviews were structured according to a topic list in the interview guide (appendix 3) but the individual interviews developed differently depending on the dynamics in the group. For all of the groups it was necessary at some points to steer the conversation or clarify a topic. However, it was always the aim to interfere and thus ‘influence’ as little as possible (David & Sutton, 2004). In the end, all respondents were asked whether they had any further remarks or questions and whether there was anything about the procedure that they found to be wrong or uncomfortable. All participants expressed that the session had been interesting and comfortable. The fact that all group members felt comfortable in spite of expressing quite differing opinions during the interviews indicates that the validity of the data is generally good and that the participants have not felt compelled to please the researcher or other group members which would have led to bias (David & Sutton, 2004).

3.5 Data preparation

This chapter describes the handling of the collected data prior to finding and presenting the results. That includes: the transcription of interview recordings; the coding and cleaning of data; the construction of quantitative variables representing the theoretical concepts; and the process of analysing the qualitative data. The specific methods used in the quantitative analysis will be presented along with the result in the following main chapter.

3.5.1 Quantitative data preparation

After the data collection, the digital entries collected with Qualtrics were downloaded and opened with IBM SPSS for data handling and analysis. The downloaded data was recoded to fit the structure of the data and make it ready for further preparation. The three different product groups were treated as three separate blocs of questions in Qualtrics, which meant that the each question related to the product type (e.g. about willingness to rent the product) appeared in the data as three different variables. While these questions are essentially different from each other, it is easier to collapse the three into one variable and then account for the difference statistically by including the product type as a variable. Therefore all questions in the product blocs were collapsed to single variables and a variable representing the product type was created. This procedure can be seen in the data SPSS syntax (appendix 4). After this procedure, the structure was used as a framework for entering the responses from the printed questionnaires. This was done manually in spreadsheets and all variables were subsequently tested for values outside the range. Outlying values were revisited in the relevant questionnaire and corrected.

3.5.2 Constructing quantitative variables

With all 262 entries in the same format in SPSS, the conceptual variables were constructed. The variables for competences was measured both through experience with the product type and knowledge of the product type. These two measures were tested for internal consistency using Cronbach's Alpha and scored 0.789, which is considered a fine score for internal consistency¹². These two measures were therefore summed to create one variable called 'Competences'. As mentioned above, the interest in and practical need for the specific product were also assessed and these two measures were similarly tested for internal consistency with the intention of creating a single variable that represents demand for the product. These two measures scored a Cronbach's Alpha of 0.700, which exactly meets the requirements. It can be argued that this construct is formative rather than reflexive, which means that internal consistency is not necessary. It is however reasonable to expect these two specific measures to correlate and the Cronbach's Alpha score thus indicates that the measure is reliable. These were therefore similarly summed to one measure: Demand.

¹² In this study, scores above 0.7 are considered acceptable. Based on: <http://www.ats.ucla.edu/stat/spss/faq/alpha.html>

The preference for renting vis-à-vis owning was measured with two questions as well as by asking for price preference for both modes of consumption. For the preference price for renting per month, six respondents had entered a value above €150. All other respondents had entered values at €40 and below. This was taken as an indication that these respondents had entered their price preference for the full renting period of 24 months and these values were therefore divided by 24. The ratio of price preferences was constructed by dividing the preference price for owning with the preference price for renting, so high values would indicate a general preference for owning. When testing these three measures for internal consistency they scored only 0.130. But when taking out the ratio measure, the two remaining variables scored 0.714 together which is acceptable. It seems therefore, that ratio is not a reliable measure of the acceptance of renting. This is in itself an interesting finding as it indicates that consumers are not capable of comparing prices between renting and buying in a way that is in accordance with their actual preference. This supports the claim, presented in the introduction, that consumers are indeed not able to meaningfully compare prices across the two modes of consumption (Mont et al. 2006; Catulli, 2012; Vezzoli et al., 2015). Hence, the measured ratio must be expected to be rather arbitrary and consumer acceptance of renting is therefore only measured by the two correlated variables that are summed and coded such that they indicate acceptance of renting: Acceptance.

During the process of typing in the responses from the printed questionnaires a bias in the responses concerning the four different kinds of meanings was discovered. Some respondents had responded 'Strongly disagree' to two statements that were constructed to be logically opposites. An example for identity creation when owning is: "[When I own the product,] I feel that it does not express as much who I really am." and "[When I own the product,] I can express my character better.". The only case where these two statements can logically get the same response is when the respondent considers the idea or concept to not be applicable for his or her life. Responding 'Strongly disagree' is intended to indicate that the respondent in fact thinks the complete opposite of what is stated in the questionnaire. However it seems that the construction of these measures has confused some respondents and led them to answer 'Strongly disagree' when they really intended to answer 'Neither agree nor disagree', which is the neutral category. This tendency creates a reliability bias in the questionnaire because the same attitude is not indicated in the same way across respondents. In order to correct for this bias, all answers that were the same in the logically opposite pairs were coded to 'Neither agree nor disagree'. The proportion of responses that were recoded ranged from 25% for social status when owning to 7.7% for feeling of freedom when owning. The further development of the meaning variables will be presented in the following chapter, Results, as their occurrence in the data in itself is a relevant result.

The variable representing the product type is on nominal scale level because the three categories cannot be ordered. This scale level allows for analysis of variance (ANOVA) methods but it cannot be included in multiple regression analyses. Therefore it was necessary to convert it to dummy-variables (Agresti & Finlay, 2009, pp. 416). The product type, tablet, was used as reference category and two dummy-variables are constructed to represent respectively the

sweater (called: Sweater) and the coffee machine (called: Coffee machine). The interpretation of these dummy-variables will be elaborated further as they appear in the results in next chapter. Finally, the 21 variables measuring values were analysed with smallest space analysis to test if they clustered spatially in the expected order. This was done with the Proxcal analysis in SPSS, using ordinal proximity transformation and Euclidian distance measures as well as Z-score transformation according to prescriptions by Schwartz (2012).

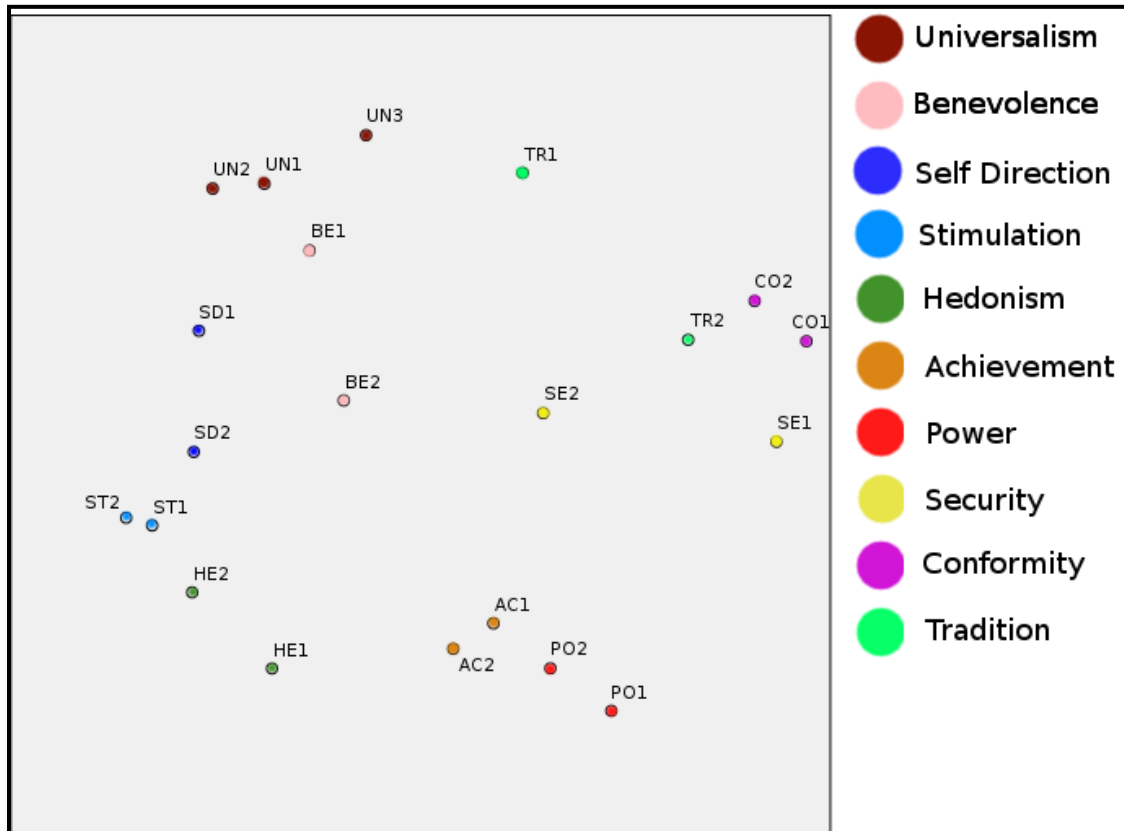


Figure 3.4: Plot of single value variables in smallest space analysis.

Note: SPSS, Proxcal analysis with ordinal proximity transformation, Euclidian distance measures and Z-score transformation.

The clusters representing the ten motivational values can be visually distinguished according to the method described by Schwartz (1992; figure 3.4). However, conformity seems to be placed more peripherally than tradition, which is not in line with the expectation. However, the values generally cluster nicely and the method has been proven to be valid for European respondents (Schwartz, 2003). The 21 single values are therefore combined into the ten motivational values by taking the mean of the two to three items representing the respective values. The score of each value is furthermore centered on the average score for all 21 variables within each case. This procedure is prescribed by Schwartz (2003) and is done to correct for individual differences in the use of the scale range. This correction is not applicable to other measures in the questionnaire as it assumes, as described in chapter 2.3.2, that respondents cannot have high

preferences for all values but instead that a zero-sum relationship exists between the total set of values.

Table 3.8: Overview of variables used in quantitative analysis.

Variable name	Interpretation	Explanation
Acceptance	Acceptance of ownerless consumption	Positive values show preference for renting the given product and negative values preference for owning
Openness to change	Willingness to adopt novelties	Positive values show a high score on values that are related to openness to change whereas negative values show a high score on values that relate to conservation
Self-transcendence	Concern for other living beings and the environment	Positive values show a high score on values that are related to self-transcendence whereas negative values show a high score on values that relate to self-enhancement
Sweater	The product type being a sweater.	The value '1' indicates that the product type is the sweater and '0' that it is one of the other two product types
Coffee machine	The product type being the coffee machine.	The value '1' indicates that the product type is the coffee machine and '0' that it is one of the other two product types
Competences	Competences to use the given product type	Average score of self-expressed knowledge and experience concerning a specific product
Demand	Demand for the given product type	Average score of self-expressed need for and interest in the specific product
Freedom*	Feeling of freedom when owning	Positive values indicate feeling of freedom when owning and negative values indicate feeling of freedom when renting
Status*	Feeling of status when owning	Positive values indicate feeling of status when owning and negative values indicate feeling of status when renting
Identity*	Feeling of expressing identity better when owning	Positive values indicate feeling of expressing identity better when owning and negative values the same for renting
Virginity*	Feeling of disgust from using a product that has already been used	Positive values indicate a feeling of disgust from using a product that has already been used and negative values indicate a feeling of connectedness with other users

Note: *. The variable will be established in chapter 4.1.

These ten values are then further condensed to the two axes, Openness to change versus Conservation and Self-transcendence versus Self-enhancement. It is the effect of these two axes on the object-self relationship and the acceptance of ownerless consumption for which theoretical expectations have been outlined and only these two variables will therefore appear in the analysis. The variables are directed such that positive values indicate respectively Openness to change and Self-transcendence and the variables will be named as such. This resulted in the list of variables shown in table 3.8 above.

3.5.3 Transcription and analysis of qualitative data

The recordings of the four focus group interviews were transcribed manually with the use of an online software tool called Wreally Transcribe¹³. The text was made as information rich as possible, so repetitions, (“but, but, but he, but he thinks...”), hesitation sounds (“Eh, Ehm, Err, Etc.), incorrect grammar and reactions were all included in the text. As the main focus of this research is to test and understand already defined concepts, the text was primarily coded deductively with closed codes that represented the respective theoretical concepts. The closed conceptual codes and their connotation are displayed in table 3.9 below. The connotations of the codes were developed in a dynamic process between the data and the theory.

During the coding, some parts were coded as ‘other’, indicating that it was relevant but not applicable for the predefined codes. These text pieces were subsequently further categorised into different factors that helped to draw the complete picture. After having exhaustively coded the text, using the software Altas.ti, all coded quotations were imported into spreadsheets to further structure the data. Here displays were made for each of the predefined codes and the differences within each of the conceptual codes (those in table 3.9) were outlined with new more detailed codes. Four to around twelve detailed codes were made within each of the conceptual topics and each quotation was linked with the relevant product type, if any. This made it possible to reveal patterns in the qualitative data. All the coded quotations can be seen in appendix 5.

¹³ <https://transcribe.wreally.com/>

Table 3.9: Overview of closed codes used in qualitative analysis
The frequency of the code is shown in parentheses.

Freedom (51)

- Feeling of empowered freedom to control, regulate and change a product.
- Feeling of uncertainty about how one is allowed to use the product.
- Feeling of convenience through the absence of disturbing or uncomfortable activities.

Performances (41)

- Activities that are carried out as part of using the product (practices-as-performances).
- Distinctions between everyday activities and occasional activities.

Virginity (30)

- Discomfort about other users having used the product earlier caused by a concern for hygiene, functional condition or intimacy.
- Discomfort about other users using the product subsequently.
- Feeling of connectedness with other users.

Identity (24)

- Feeling of identification with or through an object.
Desire for a product to be personal and unique.

Self-transcendence (19)

- Concern for the natural environment, sustainability and other living beings (self-transcendence)
- Interest in sensual stimulation and self-promoting activities (self-enhancement)

Competences (18)

- Ability to transform, repair or maintain a product.
- Knowledge and expertise about a specific product type.

Openness to change (5)

- Willingness to experiment and try out novel products and activities (openness to change).
- Hesitance to experiment and try out novel products and activities (conservation).

Status (4)

- Feeling of social status derived from either owning or renting a product.
- Concern for public appearance related to the mode of consumption.

Note: Also explicit absence of the outlined features was coded accordingly.

Results

The quantitative and qualitative results presented in this chapter lay the foundation for identifying relevant factors contributing to consumer acceptance of ownerless consumption. For this, we will first zoom in on each of the five factors that were addressed by the sub-questions, i.e. meanings, product type, competences, performances and values, by subsequently presenting both quantitative and qualitative results regarding their validity and interconnectedness. Finally, the results concerning the influence on acceptance of ownerless consumption generated by each of the five factors will be presented in the sixth part.

4.1 Meanings

Recall, that the variables intended to measure the four kinds of meanings, i.e. freedom, status, identity creation and product virginity, were constructed such that for each kind there are two pairs of logically opposite statements: one pair about owning the product and one pair about renting the product (see table 3.2). If the assumed bipolar nature is true, the positive statement about owning the product will be negatively correlated with its positive counterpart concerning renting and vice versa for the negative statement.

To test for this relationship, each of the four sets of items, i.e. one for each of the four kinds of meaning, were analysed by means of factor analysis. This method was chosen instead of Cronbach's Alpha because it - in addition to testing reliability - has the potential to reveal more complex and multi-layered patterns. The specific method used to find the factors was principal component extraction only factors with Eigenvalues above one were extracted.

4.1.1 Freedom and uncertainty

The four statements (items) about feeling free or uncertain were tested with factor analysis, which delivered a single factor with Eigenvalue above one (1.732). It loads relatively high on all items and explains 43.3% of the total variance in the four items (see table 4.1). Hence, the idea of freedom being related to the distinction between access and ownership resonates with the respondents and the used items are quite reliable for a cognitive measure as this.

The factor loadings exhibit the expected pattern. Respondents that feel freer when owning a product also feel less free when renting it. The factor indicates that the opposite is also true: respondents that feel freer when renting, feel more restricted when owning. However, that is a statistically less certain conclusion, as the distribution of responses are generally skewed in favour of ownership (see table 4.2), which leaves less responses in the categories favouring renting. The factor does, however, appear to be reliable as the Eigenvalue is relatively high and the relative amount of responses in the neutral middle category (Neither agree nor disagree) is low, indicating that most respondents were able to form an opinion concerning these items.

Table 4.1: Factor analysis of items measuring a feeling of freedom or uncertainty. Eigenvalue and loadings are shown in the table. One factor was extracted with principal component extraction and it explains 43.3% of the variance in the four items.

Frame	Statement in questionnaire	Factor loading
Owning	<i>I feel more free to use it exactly how I want.</i>	0.651
	<i>I feel more restricted.</i>	-0.511
Renting	<i>I feel more free and flexible.</i>	-0.731
	<i>I feel uncertain about how I am allowed to use it.</i>	0.717
Eigenvalue		1.732

Table 4.2: Mean values for the four items that measure the feeling of freedom. The table shows percentage of responses in the neutral middle category: 'Neither agree nor disagree' as well as mean values and standard deviations in brackets. The scale ranges from 'Strongly disagree' (1) to 'Strongly agree' (5).

Frame	Statement in questionnaire	Responses in neutral category	Mean
Owning	<i>I feel more free to use it exactly how I want.</i>	14.5%	4.00 (0.86)
	<i>I feel more restricted.</i>	15.3%	1.95 (0.90)
Renting	<i>I feel more free and flexible.</i>	40.5%	2.68 (1.03)
	<i>I feel uncertain about how I am allowed to use it.</i>	16.4%	3.12 (1.17)

The results of the qualitative analysis support the finding that the idea of freedom connected to ownership is recognisable. Not only was it the most frequent code in the analysis, it was also frequently brought up when participants talked about what was most important for them in the choice between access and ownership. The results suggest that the participants experienced two somewhat different kinds of freedom for renting and buying.

The feeling of freedom related to ownership seems to be a sense of control over one's life. Participants expressed ownership as an absence of the limitation and complicated administrative procedures following from renting. The feeling of not being able to do whatever one wants with a product was by many seen as a disempowering and unreliable situation. Four respondents even expressed that they preferred it to be their own responsibility to deal with a dysfunctional or broken product.

"[...] if you own, if you buy something, it is an investment that you make and it is finished. There will not be any more costs in the future. Unless it breaks and you have to fix it. But that's your own risk or responsibility but it is not like somebody gonna charge you or hold you accountable for, for whatever you do with this item. Cause it is entirely my own responsibility, my own choice also. And I feel like if I rent it, I am constrained in that."
(Interview 3)

Renting, however, was often considered complicated and bureaucratic and, as the quotation above shows, financial control through ownership was also an important aspect of the feeling of control. Several participants expressed a concern about their entire disposable income being eaten up by monthly expenses when renting several products.

The freedom that was related to renting on the other hand can best be expressed as a feeling of flexibility. This flexibility was expressed through three different aspects: freedom from responsibility, option to change, and the opportunity to pick up new activities. The freedom from responsibility was often expressed in conjunction with complex products, such as consumer electronics. Some participants found it liberating to avoid responsibility of dealing with a broken electronic device and thus found it attractive to be able to simply exchange it. The option to change was connected to the issue of products becoming obsolete: either electronic devices becoming outdated due to technological development or clothing becoming old-fashioned or not matching the taste of the user anymore.

That last way that renting could provide flexibility was through the opportunity to take up new activities. This was often addressed in the context of sports activities or occasional activities (e.g. during holidays). A general observation on difference between control and flexibility is that participants often expressed their urge for control in general terms, whereas flexibility was typically linked to specific product types and specific circumstances.

4.1.2 Social status and stigma

When testing for internal consistency of the four items representing status, two factors with Eigenvalues above one were extracted. When studying the loading of the two factors, however, the negative statement for owning, *“I feel more old-fashioned among my friends”*, stands out in the analysis. It loads relatively low on the first factor (0.32) and extraordinary high on the second (0.865; see table 4.3) indicating that the second factor was extracted solely in order to account for the variance on this item.

Table 4.3: Factor analysis of items measuring feeling of social status or social stigma. Eigenvalues and loadings are shown in the table. Two factors were extracted with principal component extraction and they explain respectively 35% and 28.8% of the variance in the four items.

Frame	Statement in questionnaire	Factor loading	
		Factor 1	Factor 2
Owning	<i>I feel more prestigious with it.</i>	0.513	-0.431
	<i>I feel more old-fashioned among my friends.</i>	0.32	0.865
Renting	<i>I feel more trendy and smart towards others.</i>	-0.566	0.415
	<i>I feel nervous that others might think worse of me.</i>	0.845	0.211
<i>Eigenvalue</i>		<i>1.399</i>	<i>1.151</i>

It seems that the statement used is too extreme for the respondents to recognise it as meaningful. Suggesting that it is old-fashion to own a product is probably too radical, as it is indeed the main and most accepted mode of consumption. This indicates that the statement for the item is not measuring what it is intended to measure and is thus not valid. Therefore it is excluded from the index and another factor analysis is run for the remaining three items.

Table 4.4: Factor analysis of items measuring feeling of social status or social stigma. Eigenvalue and loadings are shown in the table. One factor was extracted with principal component extraction in second run after omitting one invalid item. The factor explains 45.8% of the variance in the three items.

Frame	Statement in questionnaire	Factor loading
		Factor 1
Owning	<i>I feel more prestigious with it.</i>	0.593
Renting	<i>I feel more trendy and smart towards others.</i>	-0.653
	<i>I feel nervous that others might think worse of me.</i>	0.773
<i>Eigenvalue</i>		<i>1.374</i>

With the new factor analysis testing the three remaining items, only one factor was extracted explaining 45.8% of the variance (Table 4.4). This increase of 10.8 percentage points compared to factor one in the previous analysis confirms that the three items indeed have a stronger internal consistency and thus are a more reliable measure of the concept of social status. The factor loadings suggest that the expected bipolar pattern is present but relatively weak as indicated by the low Eigenvalue. Also, the means and standard deviations for the three remaining items provide a clearer understanding of the actual pattern. A majority of the responses to the two positive statements about feeling either prestigious or trendy and smart fall in the neutral middle category, 'Neither agree nor disagree' (57.3% and 56.5%). This indicates that respondents were generally not able to recognise this feeling of social status for either mode of consumption. The negative statement on renting, however, is strongly opposed, which could further indicate that most respondents did not recognise this feeling. This is also supported by the qualitative analysis that found only one example of renting being seen as stigmatising and similarly only one clear example of a participant who could imagine renting as something that gives status. Most participants in the focus group interviews, could not recognise it as a big concern. Hence, both the qualitative and quantitative analysis verify the existence of status as a kind of meaning that can be relevant but they also both show that the concern for status derived from a specific mode of consumption is not particularly common.

Table 4.5: Mean values for the three items measuring feeling of status. The table shows percentage of responses in in the neutral middle category: ‘Neither agree nor disagree’ as well as mean values and standard deviations in brackets. The scale ranges from ‘Strongly disagree’ (1) to ‘Strongly agree’ (5).

Frame	Statement in questionnaire	Responses in neutral category	Mean
Owning	<i>I feel more prestigious with it.</i>	57.3%	3.16 (0.79)
Renting	<i>I feel more trendy and smart towards others.</i>	56.5%	2.83 (0.83)
	<i>I feel nervous that others might think worse of me.</i>	17.9%	1.94 (0.93)

4.1.3 Identity creation

Identity creation through products was included in this study to test whether it can be accounted for statistically and whether it is a variable distinct from the feeling of social status derived from ownership. The factor analysis shows a somewhat opaque pattern. Three factors were extracted and explain respectively 33.5%, 31.6% and 25.5% of the variance. The first and strongest factor does show the expected pattern in the factor loadings but its Eigenvalue is only marginally higher than the second factor (Table 4.6).

Table 4.6: Factor analysis of items measuring concern for identity creation. Eigenvalues and loadings are shown in the table. Three factors were extracted with principal component extraction and they explain respectively 33.5%, 31.6% and 25.5% of the variance in the four items.

Frame	Statement in questionnaire	Factor loading		
		Factor 1	Factor 2	Factor 3
Owning	<i>I can express my character better.</i>	0.53	-0.513	0.613
	<i>I feel that it doesn't express as much who I really am.</i>	-0.409	0.764	0.386
Renting	<i>I can better express my personality with it.</i>	-0.675	-0.309	0.602
	<i>I cannot use it to show who I really am.</i>	0.661	0.568	0.362
<i>Eigenvalue</i>		<i>1.341</i>	<i>1.265</i>	<i>1.018</i>

The second factor seems to account for a tendency in the responses to react differently to negative and positive statements. Note that most of the other items use the two polar states for the continua of the meaning (e.g. feeling of freedom and feeling of uncertainty) whereas all

statements for this concept concern the ability to display one’s personality, which leads to the statements being formulated either negatively or positively to differentiate them.

When looking at the frequency distributions for the four items, it is also clear that the positive statements receive a big amount of responses in the neutral middle category (Owning: 59.2%, renting: 63%), whereas the negative statements are skewed to the right.

Table 4.7: Mean values for the three items measuring identity creation.

The table shows percentage of responses in in the neutral middle category: ‘Neither agree nor disagree’ as well as mean values and standard deviations in brackets. The scale ranges from ‘Strongly disagree’ (1) to ‘Strongly agree’ (5).

Frame	Statement in questionnaire	Responses in	
		neutral category	Mean
Owning	<i>I can express my character better.</i>	59.2%	2.97 (0.82)
	<i>I feel that it doesn't express as much who I really am.</i>	34.4%	2.43 (1.02)
Renting	<i>I can better express my personality with it.</i>	63.0%	2.73 (0.83)
	<i>I cannot use it to show who I really am.</i>	26.0%	2.38 (1.02)

Although it is valuable to be able to explain the second factor, what remains is that the items used to account for the relevant concept, do not measure it well and further, that several other patterns seem to be present in the data. This indicates a low reliability of the index.

The qualitative analysis, however, strongly suggests that identification through products is a part of the social reality of the participants. Close to all participants expressed identification with some kind of product. Interestingly, only some participants considered ownership a necessity for the creation of identity through a given product though. For this kind of meaning there was a clear distinction in the qualitative analysis between different product groups. Clothing was most commonly seen as something related to identity - either by directly expressing a personality or by representing personal history and thus carrying sentimental value. But a piece of consumer electronics, such as a tablet, could for some also be highly personal and identifying:

“But mine is different because I... I have different applications, I have different, eh, pictures, err, as the background. Then it's kind of a unique thing that show you my, ehh, personality.”
(Interview 4)

It seemed that participants who did not consider a piece of consumer electronic personal also generally saw them as functional objects. Those who felt identified through consumer electronics tended to see them as something more than just their function. To them it was more of a material object that could be personalised through software and pieces of data (c.f.

quotation above). The coffee machine was generally not seen as something personal but was considered mostly a functional object. The participants generally verified the relevance of measuring the feeling of identity creation while owning or accessing. This indicates that the statements used for the quantitative measure are not reliable enough or potentially that identity creation in general can be difficult to detect quantitatively. The participants in the focus groups furthermore seemed to distinguish between status and the creation of identity. Statistically, the two measures are co-varying quite a bit (Cronbach's Alpha: 0.763) but that is to be expected and they do not appear to be identical. It is therefore justified to also distinguish between the two factors in the current study.

4.1.4 Virginity and contagion

The four items for measuring a feeling of contagion show a pattern similar to the one seen for social status - albeit stronger. Again two factors were extracted and the second factors is almost only accounting for the second item, which also seems to be the reason for its low Eigenvalue (Table 4.8). Looking at the wording of the second item, it seems that once again it is too extreme. Few respondents have been able to identify with the idea of being more isolated simply because of buying instead of renting. Therefore, this item was excluded from the analysis and table 4.9 below shows the factor analysis for the remaining three items.

Table 4.8: Factor analysis of items measuring feeling of contagion or social connectedness. Eigenvalues and loadings are shown in the table. Two factors were extracted with principal component extraction and they explain respectively 46.3% and 26.1% of the variance in the four items.

Frame	Statement in questionnaire	Factor loading	
		Factor 1	Factor 2
Owning	<i>I feel good because others have not used it before me.</i>	0.794	-0.013
	<i>I feel more isolated from other users.</i>	-0.203	0.958
Renting	<i>I feel positively connected to other users.</i>	-0.702	0.106
	<i>I feel uncomfortable about others having used it before me.</i>	0.829	0.337
Eigenvalue		1.851	1.043

With the three remaining items, the analysis extracted only one factor with an Eigenvalue of 1.833 explaining 61.1% of the variance. This indicates a very strong internal consistency and a high reliability of the variable.

For this variable there is again a trend in favour of ownership. However, the last item has a more centered and broader distribution of the responses indicating that this item is capturing a broader spectrum of attitudes both favouring and disfavouring ownerless consumption.

Table 4.9: Factor analysis of items measuring feeling of contagion or social connectedness. Eigenvalue and loadings are shown in the table. One factor was extracted with principal component extraction in second run after omitting one invalid item. The factor explains 61.1% of the variance in the three items.

Frame	Statement in questionnaire	Factor loading
		Factor 1
Owning	<i>I feel good because others have not used it before me.</i>	0.788
Renting	<i>I feel positively connected to other users.</i>	-0.693
	<i>I feel uncomfortable about others having used it before me.</i>	0.855
Eigenvalue		1.833

Table 4.10: Mean values for the three items measuring feeling of contagion or social connectedness. The table shows percentage of responses in in the neutral middle category: 'Neither agree nor disagree' as well as mean values and standard deviations in brackets. The scale ranges from 'Strongly disagree' (1) to 'Strongly agree' (5).

Frame	Statement in questionnaire	Responses in neutral category	Mean
Owning	<i>I feel good because others have not used it before me.</i>	36.6%	3.50 (0.96)
Renting	<i>I feel positively connected to other users.</i>	48.5%	2.60 (0.88)
	<i>I feel uncomfortable about others having used it before me.</i>	14.9%	3.01 (1.28)

In the focus groups, the concern for contagion (or preference for virginity) was often expressed as an important and immediate concern about renting. The qualitative analysis further suggests that the concern for contagion can be divided into four more specific concerns: caretaking, hygiene, intimacy and data security. Several participants expressed doubts about whether other users would take proper care of the product. This aspect of concern for contagion seemed to be mostly related to kitchen devices or consumer electronics. The concern for hygiene was prevalent for kitchen devices but also for clothing. Some respondents also expressed clothing as something very close to the body, which made them feel a discomfort that they could often not clearly express.

"It's too close to my body. Yeah, you see... I don't know, it's even, even stronger than this, than the coffee machine. Something eat. Cause, ehm, I got the feeling that if I eat something, it's finished when I throw it,

swallow it. And if I'm wearing a clothes that I feel uncomfortable with, but I'm feeling it all the way when I'm wearing it. And it's stronger.”
(Interview 4)

It is left to interpretation to define this concern but it seems to be a discomfort about a feeling of bodily intimacy through the sequential use of clothing. For both hygiene and intimacy it was also revealing that the participants reported that these concerns disappeared for people that they trust, like friends, family or members of a sports team.

The last occurring aspect of contagion relates to whether stored data on an electronic device would be properly erased before a new user receives it. Although this interpretation of contagion does not correspond with the definition by Bardhi and Eckhardt (2012), who focus on the contaminating touch of another user, it has clear resemblance with the concept. It concerns the relation between two users and it stems from a lack of trust – both in the other user and the thoroughness of the cleaning procedures by the provider. Moreover, the participants often expressed this concern in conjunction with the other forms of concerns for contagion and thus seemed to link them.

The assumption that there could be a framing of the continuum that focuses on social connectedness instead of contagion and virginity is not supported by the qualitative analysis. Social connectedness with other users did not seem to be appealing. No one brought it up himself or herself and when prompted, the participants seemed mesmerized about the idea of connecting with other users. They expressed that such connectedness is more meaningful in the context of non-commercial sharing schemes or through internet fora that are independent from the producer. The idea of user connectedness should however not be completely ruled out, as the item with the statement, “[When renting the product:] *I feel positively connected to other users*” did have 16.3% of respondents answering either ‘Agree’ or ‘Strongly agree’.

4.1.5 Forming measures for meaning

Based on the individual findings presented above, it can be concluded that it is indeed possible to statistically account for the four different kinds of meaning as they were defined in the conceptual framework. That said, there were clear differences between the reliability of the statistical measures and the qualitative analysis interestingly suggested that further nuances are to be found for some of the concepts. In the following analysis, the extracted factors (for identity creation, only the first factor) will be used as variables to account for the four different kinds of meanings. The variables will in the following be referred to as: Freedom, Virginity, Status and Identity. Factors are used instead of simply summarising the items because it allows for some items that appear to be more valid to weight stronger in representation of the concept. This is possible because the index is reflective.

4.2 Product type

To assess whether some product types tend to generate stronger object-self relationships, the correlation between product types, meanings and competences were analysed. A one-way ANOVA showing means and their 95% confidence intervals was used to look for differences in the importance of the different kinds of meanings between different product types. In this case it does not make sense to assess whether a deviation is significantly different from zero because all values are contingent on the product group. Hence, there is no independent total average for the sample but only a spectrum defined by the product types used. Therefore, what must be assessed is whether the mean values are significantly different from each other.

Table 4.11 shows how the mean of one of the four kinds of meanings deviates for the three different product groups. Generally the sweater seems to be the product that carries the most meanings and the coffee machine the least but the picture is not completely clear cut. For both Freedom and Virginité, the sweater has a significantly higher value than the two other product types, as the confidence interval does not contain any of the two other mean values. This shows that respondents who were presented with the sweater experienced freedom through ownership and product virginité as significantly more important than respondents who were presented with the tablet or the coffee machine. Respondents presented with the sweater also considered identity through ownership more important but in this case it cannot be significantly distinguished from the tablet that also deviates positively. Oppositely, the coffee machine seems to be relatively less important for identity creation through ownership. However, as this variable (Identity) is less reliable and the grouped sample distributions for this variable were not entirely normal, the big difference between coffee machine vis-à-vis tablet and sweater must be interpreted conservatively. Interestingly, none of the products deviate significantly from the others when it comes to Status. In the same manner it was tested whether respondents expressed a higher degree of competence for some product types rather than others. In this case it is clear that the coffee machine was the object that the respondents had the least familiarity with.

Many of the qualitative results concerning the relation between product type and the different meanings have been presented above and are generally aligned with the statistical findings in table 4.11. In the focus group interviews, participants often expressed that: 'It really depends on the product'. This does indeed seem to be true as all respondents exhibited different preferences concerning different products. However, these preferences were not consistent from participant to participant. Indeed some participants expressed completely opposite preferences for the same products. One pair was astonished to realise that one felt closely related to a tablet and would not dream of renting it, whereas the other didn't care much for electronics and was quite willing to rent a tablet. Hence, it seems that although, all participants made sharp personal distinctions between product types and although some general patterns can be found, it seems that no product that is intrinsically worse suited for ownerless consumption.

Table 4.11: Means for Freedom, Status, Identity and Virginity divided on three different product types. One-way ANOVA was used to find means, standard deviation in brackets and 95% confidence intervals.

	Product type	Mean	95% Confidence Interval for Mean	
			Lower Bound	Upper Bound
Freedom	Tablet	-0.23 (1.00)	-0.44	-0.02
	<i>Sweater</i>	<i>0.32 (0.94)</i>	<i>0.13</i>	<i>0.52</i>
	Coffee machine	-0.12 (0.98)	-0.34	0.11
Status	Tablet	-0.08 (0.94)	-0.28	0.12
	<i>Sweater</i>	<i>0.04 (1.07)</i>	<i>-0.18</i>	<i>0.27</i>
	Coffee machine	0.04 (0.99)	-0.12	0.12
Identity	Tablet	0.35 (1.00)	0.14	0.56
	<i>Sweater</i>	<i>0.34 (0.74)</i>	<i>0.18</i>	<i>0.49</i>
	<i>Coffee machine</i>	<i>-0.80 (0.91)</i>	<i>-1.00</i>	<i>-0.59</i>
Virginity	Tablet	-0.10 (0.99)	-0.30	0.11
	<i>Sweater</i>	<i>0.25 (1.05)</i>	<i>0.03</i>	<i>0.47</i>
	Coffee machine	-0.18 (0.90)	-0.38	0.03

Note: Products types for which the mean is significantly different are written in italic.

Table 4.12: Means of Competence divided on three different product types. One-way ANOVA was used to find means, standard deviation in brackets and 95% confidence intervals.

	Mean	95% Confidence Interval for Mean	
		Lower Bound	Upper Bound
Tablet	0.35 (1.00)	0.14	0.56
<i>Sweater</i>	<i>0.34 (0.74)</i>	<i>0.18</i>	<i>0.49</i>
<i>Coffee machine</i>	<i>-0.80 (0.91)</i>	<i>-1.00</i>	<i>-0.59</i>

Note: Products types for which the mean is significantly different are written in italic.

4.3 Competences

Based on the conceptual framework, we would expect that in the process of developing competences for a product, a consumer would develop different kinds of meanings as well. To see if this is the case for the four kinds of meaning included in this study, the correlation between those and the measure for competence was analysed.

Since it is not theoretically possible to justify that only one influences the other and not vice versa, a regression analysis is not possible because it would suffer from endogeneity. In order to solve this issue, a dichotomous variable for competences was made. It holds only two values, 'Low' and 'High' corresponding to respectively below and above average on the original

Competence variable. This allows for an independent sample t-test of the difference between the means for the four different kinds of meanings.

Table 4.13 shows the differences in means between high and low value of competences for the four different kinds of meanings. Interestingly, it is only for Virginité that the mean value is significantly different. Respondents with high degree of competences were more concerned about the virginité of product than those with low degree of competences.

Table 4.13: Differences in mean of Freedom, Status, Identity and Virginité for high and low level of competences. Independent samples T-test is used to find group means, difference in means and significance levels.

	Competence	Mean	Difference in mean
Freedom	Low	-0.083	0.182
	High	0.099	
Status	Low	0.014	-0.031
	High	-0.017	
Identity	Low	-0.087	0.191
	High	0.104	
Virginité	Low	-0.164	0.359**
	High	0.196	

Note: *: $P < 0.05$, **: $P < 0.01$, ***: $P < 0.001$. $N_{Virginité} = 257$; $N_{Status} = 258$; $N_{Identity} = 256$; $N_{Freedom} = 256$.

That the concern for virginité is connected to the development of competences for a product is strongly supported by the qualitative analysis. Virginité and Competences were in fact the second most co-occurring pair of codes. When talking about product types for which participants had developed above average competences, they typically expressed concerns about others using the product either before or simultaneously. Participants did not trust that others would clean and maintain the product according to their own high standards.

The qualitative analysis did, however, suggest additional potential connections that are not shown in the statistical results. Two participants, for instance, expressed that through the process of trying to repair an electronic device, they had become more attached to it and identified more with it, which also made them want to own the product.

Participants with low degree of competences for a specific product type also seemed to be more inclined to prefer the flexibility of renting because it would free them from the responsibilities of maintenance, repairing and disposal. Oppositely, participants with high degree of competences for a product seemed to prefer to own it as they were themselves able to maintain or reuse it.

“Old clothing. We first use them to paint the walls and that kind of things. After that we use them as towels to clean things and if they are really really worn down, they can go otherwise to the garbage or use them to make a fire with or whatever.

(...)

For these kind of things [referring to the tablet], if the lifespan is done, you cannot do anything with it. It's just, eh, dead piece of electronics. It should be better to return it.”

(Interview 1)

The statistical results, a bit surprisingly, only show that the development of competences is correlated with a strong wish for product virginity, which is also supported by the qualitative analysis. However, the qualitative data suggest that other patterns might be present but these cannot be verified in this thesis.

4.4 Performances

Performances are seen as the *doing* of practices and are included in order to assess how the alignment between already established performances and the practical conditions of renting influences the acceptance of ownerless consumption. Performances have not been studied quantitatively in this thesis and all results are therefore based on the qualitative data drawn from the focus group interviews.

Interestingly, Performances' was the second most frequent code counting up to 39 quotations in the analysis. It was clear that the participants were concerned about the alignment between their current performances and the ones they would have to adopt when renting a product. This concern was expressed both for purchasing, using and for terminating the use of products. First, for purchases, three of the respondents clearly expressed that the performance of shopping functioned for them as a pleasant and exciting activity that cannot easily be replaced in the context of ownerless consumption, which was commonly associated with online stores. Going to a physical store also served other purposes. Some participants highlighted it as more convenient as it can be done on the way home from work or school, while others expressed that going to a physical store guarantees a personal and trustful relation. Ownerless consumption can theoretically also be provided through a physical store as some participants suggested but it was commonly understood that such a niche offering cannot easily provide the same physical accessibility and abundance of choices.

Second, in the context of using the products, three participants expressed that some of their everyday activities made it more suitable to buy second hand clothing or take over clothing from others. This could be due to very intense and damaging usage or cozy and relaxed usage at home. Third, for the end of use, some participants expressed that they were concerned about the procedures for exchanging or delivering back the product and how these would fit into their everyday life. They were also very concerned with the reliance on the service provider and what that would mean for their feeling of freedom and independence.

All respondents made a distinction between everyday products and products that are only needed occasionally. Most considered ownerless consumption primarily relevant for occasional

performances, such as vacations, sports activities as well as parties and celebrations. When explaining the reasons behind this distinction the participants were often concerned with the feeling of freedom. The codes Freedom and Performances were by far the most co-occurring pair. About every fourth quotation that was coded as either Performance or Freedom did also contain the other. For everyday performances the participants generally wanted control and reliability (the kind of freedom connected frequently with ownership) and for occasional performances, the kind of flexibility that was associated with ownerless consumption was more requested. Based on the restricted amount of qualitative data it is not possible to say how much the free execution of everyday performances mean to the acceptance of ownerless consumption but the analysis indicates that it is quite important and the strong link to Freedom can also provide a further indication in chapter 4.6, where the influence of Freedom is quantitatively assessed.

4.5 Values

When analysing the correlation between values and the different kinds of meanings, it is possible to use regression analysis as values are theoretically expected to influence meanings rather than meanings influencing values. Note that social practice theory assumes that if such a things as values were to exist externally to social practices, they would also over time be influenced by the practices and the two concepts would thus exhibit a degree of mutual influence. This is not a problem for the statistical model as long as the influence that meanings can potentially have on values is seen as a long-term process, whereas values can influence the more short-term development of meanings. In the following regression analyses, the effect of Openness to change and Self-transcendence on each of the four kinds of meanings was tested. Furthermore, the product variable is included as two dummy-variables, Sweater and Coffee machine, leaving the 'Tablet' category as the reference category. The effect of the product types on meanings has already been analysed but they are included here to test for interaction between the product type and values. This is done by using cross-product terms, which are variables made from multiplying the two component variables for which interaction is tested. Since in this case two times two variables were tested for interaction, four cross-product terms were constructed (Table 4.14).

Table 4.14: Overview of cross-product terms used to test for interaction between values and product type for the effect on meaning.

	Sweater	Coffee machine
Self-transcendence	TransxSweater	TransxCoffee
Openness to change	OpenxSweater	OpenxCoffee

Generally, the results show relatively weak correlations between values and meanings considering the suggestion of Piscicelli et al's (2015) that personal values will influence the

adoption and formation of socially shared meanings. Only for Status did both value-variables show a significant effect and no effects were found for both Freedom and Identity. Only the results for the correlations with Status are therefore displayed with a table below. The findings regarding the three other kinds of meaning are reported in the text and all correlations are depicted in figure 4.1.

The results for Status are shown in table 4.15 below where the analysis is ordered as a block recursive analysis testing two models sequentially. Hence, the table shows first the bivariate correlations between each of the included variables and Status (dependent variable), then a reduced model and in the last column, the full model. Model one includes only the value variables, whereas model two includes the dummy variables for product type and cross-product terms to test for interaction. Based on the theoretical expectation that the effect of values is placed causally behind that of the product type, this structure analyses whether values have unique direct effects on Status and whether it has indirect effects through interaction with the product group. Hence, if significant effects in model one decrease or disappear in model two, it shows that the effect is influencing through one or more of the variables included in model two. Standardised coefficients are used in order to provide better comparability among the variables.

Table 4.15: The effect of values on Status with product type as potential interacting variable. Bivariate correlations and block recursive analysis (OLS) are used to derive standardised coefficients and adjusted R². The constants are shown in unstandardised coefficients.

	Bivariate correlations	Model 1	Model 2
Constant		0.469	0.134
Openness to change	-0.233***	-0.251***	-0.246*
Self-transcendence	-0.194**	-0.215***	-0.009
Coffee machine	0.028		0.178
Sweater	0.032		0.283*
OpenxSweater			-0.016
OpenxCoffee			0.034
TransxSweater			-0.3*
TransxCoffee			-0.193
R ² adj.		0.093	0.101

Note: *: $P < 0.05$, **: $P < 0.01$, ***: $P < 0.001$. $N = 254$.

Openness to change has a direct negative effect on Status, showing that a high degree of openness to change makes you less inclined to get a feeling of social status from owning a product rather than renting it. The positive coefficient for Sweater in model two shows that for a neutral value disposition, the importance of Status will be 0.283 standard deviations higher when the product is a Sweater rather than one of the two other products. Self-transcendence

shows a significant negative effect on Status in model one but this effect completely disappears in model two when the interactive effect of product types is included into the model. Instead, model two shows a significant interaction between the product type being sweater and Self-transcendence. This means that for the tablet and coffee machine, the effect of Self-transcendence is non-existing but for the Sweater, respondents with a strong concern for other beings and the environment will consider ownership less important for status. For the analysis of Freedom there is a tendency to heteroskedasticity in the data, which makes it necessary to increase the requirement for significance. As no coefficients were significant with P-values ≤ 0.01 , the results cannot be considered conclusive and are not reported. For Identity, there are no results to report for the effect of values. This means that for both Freedom and Identity, the data shows no correlation with the value disposition of the respondent. For Virginity, Self-transcendence shows a significant effect ($P \leq 0.001$) with an unstandardised coefficient of -0.355 in an analysis similar to what is shown above. This indicates that caring more about other human beings as well as the environment (high Self-transcendence) makes it less important for respondents that the product is untouched by others and similarly more likely that the respondents experiences a positive feeling of connectedness with other users when renting. No other factors or cross-product terms were significant in the analysis.

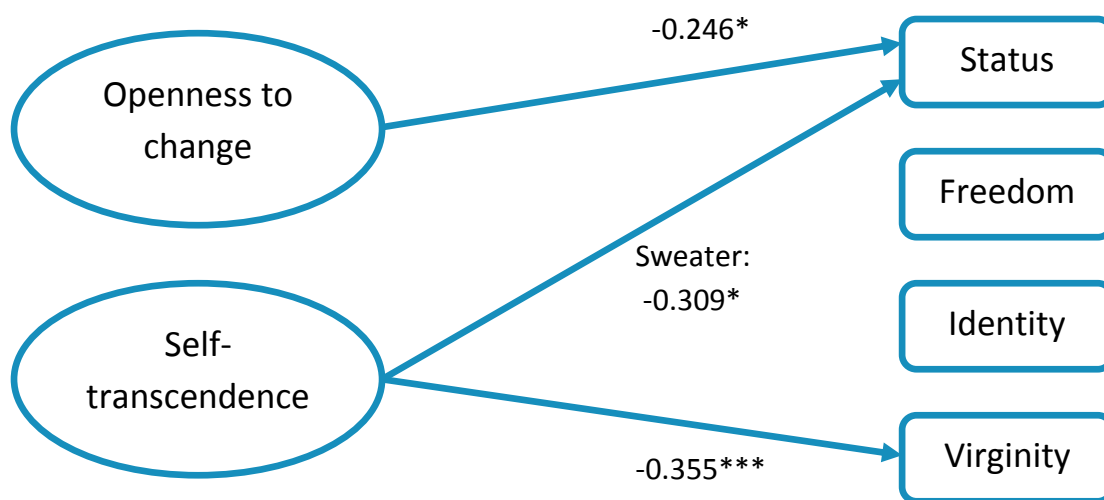


Figure 4.1: Effect of Openness to change and Self-transcendence on the creation of meaning. Based on block recursive regression analysis and showing unstandardised coefficients and significance levels. *: $P < 0.05$, **: $P < 0.01$, ***: $P < 0.001$. $N = 254$.

Figure 4.1 sums up the statistically significant effects of Openness to change and Self-transcendence. It stands out that values do not seem to influence Freedom and Identity. As noted earlier, the reliability of Identity is not particularly high making it more difficult to detect tendencies if they actually were to exist in the population. However, no effects can be verified for these two variables.

The qualitative analysis was generally not geared towards determining the effect of values but it did offer insights into how participants used different value-based position in their arguments

when talking about ownerless consumption. For the continuum between self-transcendence and self-enhancement, some participants explicitly connected ownerless consumption with sustainability and expressed a motivation to engage in it due to this. Others oppositely perceived ownerless consumption as more wasteful because it was associated with switching to the newest products all the time and not caring about maintaining the products. Similarly, some expressed a hedonic pleasure from shopping products and owning them whereas others saw the option of renting as a mean to consume even more and hence get more hedonic pleasure. There was thus not a clear consensus among the participants on whether ownerless consumption was to be associated with self-transcending or self-enhancing concerns. For the distinction between openness to change and conservation, it was different. Most participants considered ownerless consumption for everyday products a novelty and some argued that they did not appreciate to be the first to try out new things. Other participants seemed to be open for novelties but none expressed that as an argument for engaging in ownerless consumption. Based on the qualitative analysis it therefore appears that ownerless consumption is not unequivocally seen as either more or less resource-intensive, which means that both self-transcendence and self-enhancement can potentially be motivations for engaging in ownerless consumption. For the other value-axis, however, the picture is quite clear. Ownerless consumption for everyday product is generally seen as a novelty and it seems to appeal less to conservative participants.

4.6 Analysis of Acceptance

Finally, the focus turns to the statistical analysis concerning the effects of all the different factors previously discussed on the acceptance of ownerless consumption. The results presented here are based on a block recursive analysis similar to the one presented in chapter 4.5 containing the analysis of the effect of values on Status. In this analysis, two models are also tested separately and all the bivariate correlation coefficients are again shown in first column. Model one includes the value disposition (Openness to change and Self-transcendence) and the product type, represented with the two dummy-variables. The second model introduces all the factors that are measured within a given product frame, i.e.: Competences, Demand (for the product), Freedom, Status, Virginity and Identity. The results are shown below in table 4.16. Note that alongside the factors that have henceforth been analysed, Demand is included due to the assumption that it can influence the acceptance.

When looking at the bivariate correlation coefficients, it appears that most factors are significantly correlated with acceptance of renting. The exceptions are Self-transcendence and Coffee machine. That Coffee machine is insignificant shows that the acceptance of the coffee machine is not significantly different from the reference category: the tablet. Hence, the sweater stands out as the product type that is significantly less accepted than the two others. That Self-transcendence does not have an effect is theoretically somewhat surprising but corresponds with the qualitative findings above (chapter 4.5).

Table 4.16: The effects of various factors on acceptance of renting.

Bivariate and block recursive regression analysis (OLS) is used and standardised coefficients and adjusted R^2 are shown. The constants are shown in unstandardised coefficients.

	Bivariate correlations	Model 1	Model 2
Constant		-0.10	0.32
Openness to change	0.17 **	0.17**	0.07
Self-transcendence	0.03	0.08	0.07
Sweater	-0.29***	-0.29***	-0.11
Coffee machine	0.09	0.08	-0.03
Competences	-0.35***		-0.17**
Demand	-0.37***		-0.20***
Freedom	-0.48***		-0.38***
Status	-0.25***		-0.11
Virginity	-0.33***		-0.08
Identity	-0.15*		0.03
R^2 adj.		0.132	0.381

Note: *, $P < 0.05$, **, $P < 0.01$, ***, $P < 0.001$. $N = 249$. Sweater and Coffee Machine are dummy variables. Tablet is the reference product frame.

In model one, the correlation coefficients of the four variables are roughly similar to those from the bivariate analyses and so are the significance levels. From model one to model two the percentage that is explained by the model (R^2 adj.) increases from 13.2% to 38.1%, which shows that the four kinds of meanings, Competences and Demand notably improve the explanatory power of the model. However, only few of the variables actually show a significant effect in model two. The variables that maintain a unique significant effect are Demand, Competences and Freedom.

The fact that Virginity and Status go from being highly significant in the bivariate analyses to not at all is noteworthy and can be interpreted in two different ways. The most straightforward interpretation of this is that even though Virginity and Status are negatively correlated with Acceptance, there is no statistical evidence that they have an effect on the acceptance of ownerless consumption because Freedom can always account for the same variation in Acceptance plus some more that Virginity and Status cannot account for. This also appears by testing the model without Freedom, which leads to both Virginity and Status showing significant negative effects. Hence, based on the statistical evidence, the feeling of freedom through ownership is the only kind of meaning that can be shown to have an effect on the acceptance of ownerless consumption.

It is, however, peculiar that Virginity and Status seem to consistently account for the same variation in the dependent variable as Freedom because that is exactly the pattern that would be expected based on social practice theory and the concept of the object-self relationship: different kinds of meaning link together and increase the strength of the object-self

relationship, which then has an effect on the acceptance of ownerless consumption. Hence, an alternative interpretation is that Virginité and Status do have an effect on Acceptance but always in conjunction with Freedom.

Freedom thus remains the only kind of meaning for which some respondents are less or not at all influenced by either Status or Virginité. In this interpretation, there seems to be a hierarchy in the importance of these kinds of meaning. Freedom is the only kind of meaning that has an effect even when the others don't (or a stronger effect). Virginité and Status each exhibit an effect on Acceptance independent of each other but seemingly always in conjunction with Freedom. Identity clearly has the weakest effect and can be regarded as the least important. This pattern also suggests a different and more collateral kind of causality than what is normally assumed for statistical analysis where emphasis is on finding the unique effect of each individual factor. Regression analysis is made to mathematically isolate the unique effect of each independent variable but in this case the variables appear to work together. However interesting, this also means that it cannot be statistically justified that Status, Virginité and Identity have any effect at all. It might as well just be Freedom that is making the whole difference. Therefore, this alternative interpretation of the statistical results must rely on the support from the qualitative analysis as well as the theoretical understanding. Which interpretation of these findings should be used will be discussed in the next chapter.

In model two, Competences is negatively correlated, which shows that developing competences for a certain product makes you more interested in owning the product, which was also what the qualitative data indicated in chapter 4.3. Freedom is the strongest variable with an effect of -0.38 standard deviations on Acceptance per standard deviation in Freedom. That Freedom is the strongest variable is similarly in line with the qualitative findings in 4.1.1. A feeling of freedom derived from ownership thus makes you less likely to rent a product. Demand also shows a significant negative effect on Acceptance in model three. This finding shows that when the question of acquiring a specific product is more salient, buying is the more likely option. It can therefore seem that respondents liked the concept of ownerless consumption - in theory. But when confronted with an offer that was actually relevant to their life, they preferred to buy. Interestingly, Openness to change and Sweater become insignificant in model two, which shows that their effect is not direct but instead working through the variables included in model two. Freedom was shown in chapter 4.2 to be more important for the sweater compared to the two other product types and the sweater is furthermore the most demanded product type. Freedom and Demand can thus account for the fact that the sweater is seemingly less interesting to rent. For Openness to change it is not possible to trace its indirect effect to a single or two intermediary variables. Instead it seems to be slightly co-varying with several of the meaning variables.

The model also tested for interaction between product type and the four kinds of meanings as well as Competences and the four kinds of meanings. The assumption behind this was that some kinds of meaning might have a bigger effect on the acceptance for some products than for others and that some meanings might weight higher when combined with a high degree of

competences. However, none of these assumptions could be verified as all cross-product terms were insignificant.

The analysis of how and whether the different factors influence the acceptance of ownerless consumption displays remarkable results. When testing the different factors individually (bivariate), almost all of them seem to influence the acceptance of ownerless consumption, which is what could be anticipated since these concepts have already been proven relevant by earlier qualitative studies. When they are tested together, however, only three out of ten variables, Competences, Demand and Freedom, appear to have a significant effect on the acceptance of ownerless consumption. This is an intriguing finding that will be discussed further in the next chapter.

Discussion

Before turning to the central discussion of the results, the soundness of both the theoretical framework and methods is discussed in order to determine the validity and generalisability of the findings. Subsequently, all five sub-questions that were posed in this study will be answered based on a discussion of the findings and in the end, the scope is turned further outwards in an attempt to discuss how the results can contribute to the research field of ownerless consumption as well as to the efforts to transition to a circular economy.

5.1 Theoretical validity

The theoretical framework used in this thesis has been developed in a rather pragmatic fashion clearly calling for a discussion of the soundness of its theoretical foundation. Therefore, this chapter discusses whether the results can rightfully be interpreted in the context of social practices.

The use of social practice theory in the conceptual framework is criticisable mainly on three points. Firstly, as part of developing the conceptual framework, the two theories on social practices by Spaargaren (2003) and Shove et al. (2012) were conceptually dissected and put together in spite of each being self-contained and well-functioning theories. The second point is that the complexity and diversity of concepts: material, meaning and competence, are radically reduced in the way they are used in this thesis. The third criticism is that these concepts are then primarily studied in a quantitative manner, which in its nature is reductionistic and thus violates the emphasis on deeper understanding in social practice theory. All these three critical points will be further elaborated on in the following.

Picking theoretical concepts here and there in order to merge them together in a new fashion is always a questionable, albeit sometimes necessary, endeavour. The reasoning behind doing it in this thesis is twofold. The current aim was to bring together different empirical findings and study them alongside each other. Social practice theory was chosen because the available findings indicated its relevance. Due to the priority given to the integration of the empirical findings, the theory was adjusted to accommodate these accordingly.

Furthermore, the conceptual restructuring is not as fundamental as it might seem. The concept of lifestyle and values, which are used here do already reside in meaning and system of provision is similar to what Shove et al. call infrastructures, which is part of material. Hence, the conceptual framework of this thesis does therefore not, for example, assume that values exist completely isolated from other kinds of meanings in the social reality. Rather, the distinction provided by *lifestyle* and *system of provision* was made to isolate them as conceptual clusters in order to make the further operationalisation and analysis of these concepts more comprehensible.

The second critical point concerns the substantial reduction of the theoretical concepts, is closely related to the third point and these are addressed together in the following. This

criticism can fruitfully be seen in the context of the methodological dualism between *verstehen* (understanding) and *erklären* (explaining) (Bransen, 2001). In that context, the thesis represents a step towards *erklären* compared to the nature of social practice theory as well as the mostly qualitative studies that have been used to extract the relevant concepts for the research of this thesis. That step is taken in recognition of the understanding that these studies have provided and in an attempt to bring about new insights by searching for more explanatory knowledge about these social phenomena. These two perspectives need not be conflicting however. The reason for also performing focus group interviews was indeed to bring more understanding to the findings, which proved to be invaluable. So although the concepts of social practice theory are reduced in the quantitative part of the study, they are again unfolded in the results section when being related to the qualitative analysis. Furthermore, social practice theory is a rather strong theory, capable of producing distinct predictions about the social reality, such as the linking of elements in the construction of practices and the emphasis on practices as whole entities rather than its subparts being the causes of change and stability. Although social practices can hardly be discovered and understood through statistical means, these predictions can be quantitatively tested, which has been the approach of this thesis. The focus has not been on defining and understanding the specific practices in which the respondents use the different product types. Instead, this thesis studied the importance given to the different specific elements of social practices and the strength of the links between these in order to encompass the strength of the object-self relationship. This leads to the final argument, namely that the entity subjected to attention in this thesis is not social practices per se but the practical, social and symbolic relationship between product and consumer: the object-self relationship. Since, social practice theory lays the conceptual foundation that allows for the study of the object-self relationship, it is important to adhere to the fundamentals of social practice theory, but it is similarly important to use it in the way that best serves the novel purpose of this thesis. As will be argued below, this study supports the relevance of social practice theory as a way to better understand and explain consumer behaviour in different modes of consumption. Although the theory has been adjusted, it has only been done to the extent necessary to fulfill the research aim. The conceptual framework is arguably still fundamentally aligned with social practice theory as it is explained by Shove et al. (2012). It is therefore not only legitimate but also highly fruitful and novel to interpret the result of this thesis in the light of social practice theory as a means to assess the importance of the object-self relationship.

5.2 Methodological validity and generalisability

The research of this thesis was confronted with two main challenges that have led to different methodological deficits. The first challenge was that the questionnaire attempted to assess several theoretical concepts for which there are no current quantitative measures. Therefore, both its reliability and validity was difficult to assess prior to the data collection itself and somewhat uncertain even afterwards.

The second challenge was the limited resources that were allocated to the thesis project. This had a determining influence on the data collection for the two analyses. A limited amount of time and funds made it difficult to obtain large samples for both the questionnaire and the interviews and to take any samples from outside of Wageningen University. More importantly, the limited resources meant that the sampling method for the questionnaire respondents was not random, as statistical analysis requires. These methodological challenges are discussed below and a conclusion on the general validity and generalisability is offered in the end.

5.2.1 Development of new variables

The challenge caused by lacking precedence for the used quantitative measures was met in three different ways. First, in order to assure internal validity, the statements in the questionnaire were formulated according to the expressions that were reported from the relevant empirical studies. Second, the concepts were measured with composite variables consisting of several single variables, e.g. the use of four items for each kind of meaning, which improved the reliability. Thirdly, the reliability was tested statistically after data collection and variables that seemed to not be reliable were reassessed.

In spite of these methodological precautions, a few variables turned out to be less sound. Identity, which showed low statistical reliability in spite of being relatively prevalent in the qualitative analysis, is the best example of a variable suffering from the first methodological challenge. That said, it is important to also see these methodological shortfalls as findings in themselves. This thesis has merely initiated the attempt to more systematically and holistically study the factors that make consumers attach value to ownership and other studies will hopefully develop stronger measures based on these insights.

Therefore, to critically assess the methods and simultaneously suggest potential future improvements, the two most critical aspects in the process of variable construction are discussed below: firstly, the product frames and, secondly, the construction of variables to measure the four kinds of meanings.

The three product types that were used in this thesis received a strongly varying degree of interest among the questionnaire respondents and interviewees. Many participants could hardly relate to the idea of using the big coffee machine regardless of the mode of consumption. Similarly, the focus group interviews indicated that tablets are losing their functional niche as phones are getting faster and bigger and laptops are getting lighter and more agile. Hence, it seemed that these two product types, the coffee machine and the tablet, were not considered highly relevant for the participants. To gain as rich data as possible for future studies, it is probably more relevant to study mobile phones as well as laptops and to study more generic household electronics such as dishwashers or laundry machines.

Regarding the measurement of meanings, it would be valuable in future studies to abandon the idea of bipolar continua for the variables and to further improve the statements used to measure them. Since this study set out to test the assumption about a bipolar structure, it was necessary to connect the four different kinds of meanings with the respective modes of

consumption, e.g. *“When renting the [product]: I feel uncertain about how I am allowed to use it.* If instead a more generic concern for respectively status, freedom, identity and product virginity is measured, it might be easier to measure the concept quantitatively because the respondent has to juggle fewer aspects in his or her mind when answering and the use of unipolar measures would open up for other relevant statistical analyses.

5.2.2 Sampling bias

As a result of the priority to attain as high a number of participants as possible, it was not possible to take random samples from the population. As statistical methods assume a random sample (Agresti & Finlay, 2009), the procedure used in this study risks to cause a sampling bias. This risk stems from two distinct sources. First, the specific groups of students that have been approached either digitally or physically and asked to participate are not completely random and can therefore not be expected to fully represent the population of students at Wageningen University. Instead there seems to be an overweight of social science students. Unfortunately, the respondents were not asked to indicate their study programme so it is not possible to clearly determine how the distribution looks. However, most of the classes visited were on social scientific topics and although these are in theory open to every student, they mostly contain students from social science. Since Wageningen University as a whole has more students in life science than in social science, the sample is not representative of the population. Second, within each group of students that have been asked to participate via the online questionnaire there has been a volunteering bias such that only those who agreed, did actually participate. For the students that filled in printed questionnaires during a lecture or in the break of a lecture (122 respondents), the volunteering bias is not relevant, however. The response rate in the classrooms was consistently high (never below 90 %).

Since the volunteering bias is only present for the part of the sample that was digitally collected, the effect of this bias can be assessed by running the analysis for each part separately. This split-test shows that the volunteering bias does indeed influence the results. The mean acceptance for respondents that answered digitally is about 10% higher than respondents that filled in printed questionnaires, which is a significant difference ($P = 0.01$). Besides from the volunteering bias, this difference can also be caused by the specific recipient groups being different - respondents from personal network do, for example, constitute a big part of the group that received a digital version. When looking at the split-test for the analysis of factors that influence acceptance of ownerless consumption, it appears that the results within the two groups are mostly similar to the results presented in 4.6. The biggest difference is that Demand seems to not be significant for the group that received digital questionnaires. Hence, the results for the group that received printed versions are resemble the general findings the most, which is good as this group has no volunteering bias. The split-test therefore on one hand shows that the final results are not heavily influenced by the volunteering bias and on the other, that biases that generate non-random sampling can potentially have a noteworthy effect on the results.

Although the samples could ideally have been bigger, the sizes were sufficient to gain relevant result from both the qualitative and the quantitative analysis. The sampling bias for the questionnaire is an issue that must be taken seriously but it is not an uncommon challenge in social science and is no reason to discard the findings. The attention should primarily be given to the more significant results ($P \leq 0.01$) - especially when they are supported in the results of both analyses.

5.2.3 Limited population

The issue presented above concerned the ability to infer the results to the general population from which the sample is taken. In this case the population is students at Wageningen University. However, restricting the conclusions of this thesis solely to this group would hardly fulfill the aim of this thesis and this part therefore discusses whether the conclusions can be generalised beyond the boundaries of campus. The question is therefore essentially: How do the students at Wageningen University differ from the rest of the Dutch population and what does that mean for the generalisability? As mentioned above, the students are different from the general population of The Netherlands on several demographic and socioeconomic parameters and many of these parameters are likely to correlate with the acceptance of ownerless consumption (Hirschl et al., 2003).

Using university students for studies in social sciences and especially in consumer studies is, however, by no means uncommon (Peterson, 2001). The reasoning behind this is that although university students might differ from the general population on specific parameters, they still have in-group variance and most importantly, they still exhibit the same fundamental social and behavioural patterns as everyone else. That means that this study cannot generalise descriptive statistics, such as the average acceptance of ownerless consumption. However, the deeper patterns involving the object-self relationship that have been detected can be generalised to a broader population, as these are fundamental insights about how we interact with products in the context of ownerless consumption.

5.2.4 Concluding on validity and generalisability

This thesis has set out to quantitatively measure concepts that have not hitherto been quantified and carried out a data collection that suffers from common albeit relevant shortcomings. Most of the variables used have nonetheless turned out to be quite strong and the two analyses of this thesis show the same results in most cases. Although the samples are not fully representing the general public, it is reasonable to generalise and draw conclusions on the patterns that are most significant in the two analyses as university students have been proven to be reasonably valid as subjects for social science research (Peterson, 2001). After having established the generalisability of this study, conclusions on the research sub-question will now be drawn based on the results.

5.3 The plurality and importance of meanings

This study outlined four different consumer responses that were extracted from the literature on consumer acceptance of PSSs and conceptualised as different kinds of meaning that develop and persist in the object-self relationship. The importance of meanings was addressed by the first sub-question:

How does the creation of meaning in the object-self relationship influence consumer acceptance of ownerless consumption?

The study was able to verify the existence of all four kinds of meaning. Based on the factor analyses it appears that virginity and freedom was particularly recognisable to the respondents. Factors representing status and identity were also found but these were less reliable. This in itself is an important finding because these responses have, to my knowledge, not yet been found together in a single study and none of them have before been measured quantitatively. The lower reliability of especially Identity and Status shows that more can be done in the pursuit of measuring these concepts quantitatively. But showing that it is possible opens for new ways of studying the acceptance of PSSs and ownerless consumption in general.

The conceptualisation of the four kinds of meaning assumed these to have a bipolar nature, such that a person feeling free when owning would feel equally unfree when renting and similarly for the other kinds of meanings. This assumption was to some degree supported by the factor analyses that generally showed an opposite relation between the items concerned with renting and those concerned with owning. This support was, however, in no way conclusive and the qualitative analysis did in fact challenge the idea of bipolar continua. For Freedom, for example, it seemed that there were not two poles but rather two independent unipolar perceptions of freedom: A feeling of flexibility and a feeling of control or certainty. Flexibility was often related to ownerless consumption and control often to ownership but this was not fixed and the participants did not seem to consider these concerns to be mutually excluding. Virginity also turned out to come in four different shapes: concern for hygiene, concern for caretaking; concern for bodily intimacy and concern for data privacy. These different concerns are in some regards similar but appeared to be relevant under quite different circumstances. Therefore, the idea of different meanings being structured on a bipolar continuum is dismissed in favour of a more pluralistic view on the creation of meanings when owning or accessing. That leads to an answer to the first part of the sub-question concerning the creation of meanings in the object-self relationship: there are indeed several different kinds of meanings that are influenced by the mode of consumption and although they might seem conceptually similar, they can exhibit different dynamics in the object-self relationship and must at best be measured and understood separately.

There are, however, two different interpretations of the data outlined in chapter 4.6 regarding the connection between meanings and the acceptance of ownerless consumption. Either freedom was the only kind of meaning that actually has a real effect on the acceptance of

ownerless consumption or, in an alternative interpretation, freedom is simply the strongest kind of meaning that most often work in conjunction with especially virginity and status.

Completely abandoning one or the other is not possible based on the evidence provided here. It is, however, highly interesting that the statistical data indicate the kind of pattern that social practice theory would predict and since this alternative interpretation is also supported by the qualitative analysis where the different kinds of meanings regularly co-occurred, the second interpretation is cautiously used in the following.

Hence, it seemed that all four kinds of meaning had a negative correlation with the acceptance of ownerless consumption. So if you feel freer or feel that you gain more status etc. when owning a product, you are also less likely to want to rent the same product. That is what we would expect. The feeling of being better able to display one's identity when owning (or renting) had the smallest correlation with acceptance of ownerless consumption and this finding should in the light of the methodological discussion above not be considered certain. The feeling of being free when owning (or renting) on the other hand had the strongest correlation. This was also supported by qualitative study where freedom was generally recognised as important and where identity was often connected to products but not necessarily to the mode of consumption. That Status, Virginity and Freedom tend to explain the same variance in the acceptance of ownerless consumption is an intriguing finding. It indicates that the respondents did not generally have isolated concerns, say for status, that would then independently explain the attitude to ownerless consumption.

It can therefore be answered regarding the influence on consumer acceptance of ownerless consumption that the concern for identity creation played a small role and was never relevant by itself. The concern for respectively status and virginity could play a role independently of each other but always in conjunction with freedom. Most importantly, the feeling of freedom derived from ownership was therefore the only kind of meaning that could influence acceptance of ownerless consumption without another kind of meaning being equally influential at the same time.

5.4 The indirect effect of product types

The second sub-question addressed the role of different product types being part of the object-self relationship and asked:

How does the product type as part of the object-self relationship influence the consumer acceptance of ownerless consumption?

It is a common assumption in the literature that the product type has a big influence on the acceptance of ownerless consumption (Littig, 2000; Hirschl et al., 2003; Armstrong et al., 2015). The results presented in this study suggest, however, that it is not the product per se but the meanings and competences that it is associated with - or in other words, the object-self relationship - that determines the acceptance of ownerless consumption.

The analysis in chapter 4.2 shows that the importance of meanings differ between the product types with the sweater leading to greater importance of freedom through ownership and product virginity and the coffee machine to relatively lower ability to display identity through the ownership of the machine. Further, the analysis in chapter 4.6 shows that ownerless consumption is less accepted in the case of the sweater than for the other two product types. But when accounting for the effect of demand for the product and the feeling of freedom through ownership, the sweater is not more or less attractive to rent than the other products. Indeed some of the interview participants had stronger relationships with their kitchen blender than with most clothing and were willing to rent clothing but not a blender.

Therefore as an answer to the sub-question, this study indicates that a sweater, and probably other kinds of clothing as well, are not intrinsically worse suited for ownerless consumption. Rather, it is the way that the product is socially and symbolically interpreted in the object-self relationship that is the source of acceptance or dismissal. It is, however, not clear from the results of this thesis whether some product types, such as clothing, have intrinsic features that tend to promote a stronger object-self relationship.

Positioning the object-self relationship as the source of acceptance rather than the product itself, is an important distinction that can potentially have big implications for ownerless consumption as a path to a circular economy. Some items might promote stronger object-self relationships that in turn reduce the acceptance of ownerless consumption. But in the end it depends on how this product interplays with competences, meanings and other materials in the object-self relationship and that leaves a way for altering this relationship in favour of ownerless consumption.

5.5. Competences, a new perspective

The attempt to measure and study competences was primarily motivated by a theoretical expectation based on social practice theory. Here competences take a central role along with meanings and materials. Mylan (2014) does mention competences in the context of acceptance for PSSs but bases her conclusions on two cases that cannot be considered PSSs. Much remains therefore to be understood about the role of competences. This was addressed by the third sub-question of this study:

How does the existence or absence of competences in the object-self relationship influence consumer acceptance of ownerless consumption?

Competences turned out to be strongly correlated with the concern for virginity of the product. This was also supported by the qualitative analysis where the codes, Virginity and Competences, had the second highest co-occurrence and where especially the concern for caretaking and hygiene seemed to be connected with a certain degree of competences. The qualitative analysis did also suggest that competences could potentially be connected with a concern for freedom such that, for instance, better competences to repair and maintain a product would decrease

the need for flexibility (exchange, services etc.). This connection could, however, not be statistically verified. What the statistical analysis did show was that competences have a negative effect on the acceptance of ownerless consumption. In other words, having knowledge about a product type and experience with using it, makes you more likely to want to own it. To offer an answer to the sub-question: Having the competence for the use of a specific product corresponds with a concern for the product having been used by others and generally leads to a lower acceptance of ownerless consumption. The qualitative analysis suggests even more complex dynamics between the development of competences in the objects-self relationship and the acceptance of ownerless consumption but these have not been statistically verified in the study. It is nonetheless an important and novel finding that competences that are developed in the process of appropriation and appreciation of products, actually have a significant effect on the willingness to engage in ownerless consumption. This again underscores the value of studying the adoption of PSSs with the use of social practice theory and calls for future studies in the field to include competences for an enhanced understanding.

5.6. Everyday performances and the system of provision

Shove et al. (2012) present practices as complex constellations of competences, meanings and materials. The roles of these three elements were addressed by the former three sub-questions. But - as mentioned earlier - practices can also be seen as the mere activities they entail, so called practices-as-performances. The relevance of this approach was supported by Rexfelt and Hiort af Ornäs (2009) who put a strong emphasis on the role of everyday activities in understanding the acceptance of ownerless consumption. This aspect is therefore seen to with the fourth sub-question:

How does the difference between already established performances and those required for ownerless consumption influence the acceptance of ownerless consumption?

The current thesis revealed several habitual performances that are connected to the current ownership-based system of provision and seem to hinder the adoption of ownerless consumption. Among these were performances involving shopping in local physical stores with broad assortments and performances that relied on completely wearing out products. Furthermore, there was a hesitance among the participants to change performances in order to adapt to a system of provision supporting to ownerless consumption. Participants, for example, expressed reluctance to engage in the process of exchanging or handing back products. Ownerless consumption cannot currently offer the same abundance of consumption choices, the same hedonic shopping experience or the same support for diverse functional uses. But these hindrances are mostly related to ownerless consumption being a niche concept compared with the predominant mode of consumption and the system of provision supporting ownerless consumption is as a consequence thereof still underdeveloped. There is nothing intrinsic to ownerless consumption that will not allow physical stores, a wide range of choices and support

for various patterns of usage, but it is a structural challenge favouring the incumbent mode of consumption.

The most clear finding was that the participants make a distinction between everyday performances and occasional performances. They furthermore expressed a demand for control and reliability for the products used in everyday performances and oppositely wanted flexibility and limited responsibility for products that are integrated in occasional performances. This cognitive linkage between performances and freedom and the strong importance of the feeling of freedom shown in chapter 4.6, leads to an answer to the sub-question: It is indeed crucial for the acceptance of ownerless consumption that it supports the free exercise of already established performances.

Currently, access does often entail more administration and more reliance on the provider compared to ownership, which is a hampering factors. Maybe more importantly though, the impression from most academic literature and commercial offers is that the dominant sales arguments highlight the flexibility and limited responsibility of ownerless consumption. But in order for ownerless consumption to actually start competing with ownership-based consumption for everyday products, it seem that emphasis must be shifted towards certainty, reliability and consumer control - both in practical and symbolic terms.

5.7 Early adopters and green consumers

Values were included in the study based on an expectation that they play an important role for the acceptance of ownerless consumption (Littig, 2000; Hirschl et al., 2003; Tukker & Tischner, 2006; Rexfelt & Hiort af Ornäs, 2009). Piscicelli et al. (2015) suggest values can influence the creation of meanings and a considerable body of literature has established the relevance of value dispositions for broader patterns in consumer behaviour, which indicates that values could also have a direct influence on the acceptance of ownerless consumption. Schwartz' theory of motivational values was used to develop two variables, Openness to change and Self-transcendence, that together encompass a two-dimensional space of value dispositions to test the potential effects of values and thus answer the following sub-question:

How do personal values influence the object-self relationship and the consumer acceptance of ownerless consumption?

Openness to change proved to be negatively correlated with the feeling of status derived from ownership indicating that respondents who are more open to adopt to novelties find it less important to own products in order to gain social status from peers. These early adopters might even get a feeling of status from renting.

Also self-transcendence, a concern for the wellbeing of others and the environment, had a significant negative correlation with the feeling of deriving status from ownership. But this effect was only present for the sweater. Noteworthy, in the whole study, this was the only recorded instance of an inactive effect. The concern for the virginity of a product was negatively

correlated with Self-transcendence, thus showing that respondents who care more for others, are also less concerned with other people having used the product before.

The results on how values influence the acceptance of ownerless consumption supported the findings by Piscicelli, which showed that openness to change is more important for acceptance than self-transcendence. In fact, this study showed that self-transcendence has no effect on the acceptance of ownerless consumption. This indicates that ownerless consumption is not seen as a form of ethical or 'green' consumption (c.f. Chapter 2.3.2), which was also supported by the qualitative analysis, where some participants even saw it as more environmentally harming. Instead, ownerless consumption is considered a novelty that appeals more to early adopters who are generally open to changes in their life.

To answer the sub-question, values do have an influence on the creation of meanings attached to the mode of consumption in the object-self relationship but the influence might differ from product type to product type. Furthermore, only openness to change has a positive indirect effect on the acceptance of ownerless consumption, which shows that it is still considered a novelty to access everyday products. Lastly, the lacking connection of self-transcendence with ownerless consumption shows that this mode of consumption has a still untapped market potential as a 'greener' way of consuming, which will be further discussed below.

5.8 Academic and societal implications

The central argument that will carry the discussion of the academic and societal implications of the current findings, is that Littig was right in arguing that the social and symbolic aspects of consumer behaviour are essential to the study and promotion of ownerless consumption.

Moreover, as it has been shown how ownerless consumption can potentially play a central role in facilitating a transition to a circular economy, it is crucial to acknowledge and study the social and societal side of circular economy.

This chapter will first discuss how this thesis can contribute to the current body of literature on acceptance of ownerless consumption as well as the quickly growing field concerning the transition to a circular economy. Subsequently the more societal and commercial contributions will be considered.

5.8.1 Implication for research

From an academic point of view, this thesis has embarked on three novel approaches that have caused conceptual and methodological challenges but also brought about valuable insights. These novel approaches are first and foremost the use of the object-self relationship to enhance the understanding of the slow consumer adoption of ownerless consumption. Secondly, the integration of a number of single concepts derived from existing literature and thirdly, the attempt to quantify and test concepts from social practice theory.

Zooming in on the first insight, this thesis has shown that observing the object-self relationship and how it develops with the use of social practices, is a highly valuable way of bringing about a deeper and more holistic understanding of the acceptance of ownerless consumption.

Generally, the results have shown that it is not single elements of social practices, i.e. the specific product type, the degree of competences, meanings or values, that separately determine the acceptance of ownerless consumption. There are instead clear indications that the acceptance can better be explained by the way these are linked with each other in the object-self relationship. A potential reason for this is that social practice theory helps to integrate practical, social and physical aspects into a kind of system theory, which allows it to better account for the broad and systemic implications of a shift to ownerless consumption. The pursuit to integrate several different concepts into one overarching framework in order to test them alongside each other, follows in this line of opting for systemic understanding and explanations. Clearly, this attempt has brought about both theoretical and methodological challenges, but it has also shown that these different concepts are indeed often closely linked demonstrating that it is important to pursue conceptual and cross-disciplinary integration in research to be able to draw a more complete picture. Exactly this argument has been nicely captured by Donella Meadows:

“There are no separate systems. The world is a continuum. Where to draw a boundary around a system depends on the purpose of the discussion.”
(Meadows & Wright, 2008)

Finally, this study attempted to make a quantitative analysis based on social practice theory. Although this attempt has shortcomings that have been discussed above, it is revealing that the quantitative results appear to support the distinct predictions about the social reality that can be derived from social practice theory. In a pursuit to fully move the study of social practice into the domain of statistics as well, it might also be necessary to reassess the statistical methods that are used. Currently, most statistical analyses are geared towards finding unique effects of factors rather than investigating the collateral effects that elements of social practices seem to have. It is important to recognise the strength and necessity of using qualitative methods when it comes to studying and understanding social practices but since it appears that a quantification of social practice theory can also produce insightful results, endeavours in this direction can only mature the theory further and hopefully expand its popularity and recognition in consumer studies.

5.8.2 Societal implications

In line with the argument from the introduction, a main point in this subchapter is that it is important to recognise that transitioning to a circular economy has tremendous social and societal implications which will hardly be solved solely by technological advancements, corporate turnarounds or even progressive policies. Spaargaren put this argument in the following way:

“(...) the ecological modernization within networks of utility provision is to a great extent carried by and dependent on technological innovations, but these innovations are socially

variable in the sense that social relations are not determined by sustainable technologies.
(2003, p. 693)

The view that the impact of technologies as well as corporate and political interventions are conditioned by the social environment was prominent in McDonough and Braungart's book, *Cradle to Cradle - Rethinking the way we make things*, that arguably laid the foundation for circular economy. They put a strong emphasis on the social elements of what they call eco-effectiveness (McDonough & Braungart, 2002) and the book is filled with narratives about aesthetic innovations that were perfectly aligned with the local cultural and practical conditions. Since then, the efforts to transition to a resilient and restorative economy, championed by EMAF, has been primarily a matter of technological engineering, policy change and corporate management. 'Psychological barriers' were, however, mentioned only a single time in EMAF's first report in 2013 (EMAF, 2013a) as a potential challenge for establishing incentives to boost the recollection rate of smartphones. Since then social and symbolic aspects of consumer acceptance have not featured in their reports (EMAF, 2013b; 2014; 2015a; 2015b).

This thesis does not claim to have full comprehension of the literature on circular economy. Admittedly, some steps are taken to integrate social research into the field of circular economy. Het Groene Brein, a network of Dutch scientists with focus on sustainability, has, for example recently, published a report presenting five essential research topics for the circular economy. Interestingly, one of these is the *social conditioning of the circular economy* (Het Groene Brein, 2015, p. 20). This more or less brings us back to Spaargaren's conclusion above, so what does social conditioning entail in this context? Based on the findings of this thesis, some answers to this question will be suggested below.

Challenging conservative perceptions of ownerless consumption

For most consumers, the idea of renting everyday products, such as ordinary clothing, is a novelty. This perception means that conservative values give rise to an object-self relationship that is less likely to adopt ownerless consumption. Therefore, in order to also appeal to the early and late majority, it is necessary to change the way conservative value dispositions influence the creation of meanings regarding ownerless consumption. An obvious way to do this is to recognise and change the contextuality of the object-self relationship. Two of the interview participants did, for example, express strong aversion against renting clothing for normal use but saw no problem whatsoever in sharing and renting clothing in the local hockey club. This shows how the context of different social practices can support quite opposite object-self relationships, with regards to ownerless consumption without causing any sense of incoherence.

The presence of already accepted PSSs is therefore a valuable resource in the pursuit for social change because it provides tangible examples that can challenge conservative meanings concerning ownerless consumption. Shove et al. argue that social change happens when the elements of practices link together in new ways. Hence, we don't need to invent new values or new kinds of meanings. Instead it is essential to show how other practices involve ownerless

consumption and link it with new domains where ownerless consumption is still unexplored. In this way key elements from one practice, say hockey, can become embedded in other practices, such as working, which allows the development of a new object-self relationship that supports ownerless consumption of clothing at work.

Ownerless consumption as a 'green' consumption choice

Since ownerless consumption has not yet been established as a form of 'green consumption' it seems obvious to consider exactly that as an unexploited marketing potential. There are, however, some shortcomings in such an approach that need to be considered. First of all, it might not be as easy to convince consumers that ownerless consumption is better for the environment. On one hand because it is indeed sometimes more resource intensive than ownership-based consumption. On the other hand because the message itself might also be too complex to easily convey. The potential environmental benefits are often systemic rather than inherent to the product itself, which makes it less intuitive to grasp. Lastly, it might not be the best option altogether. The idea of 'green consumerism' typically entails that the consumer pays slightly more for a product to account for negative externalities that are normally not included in the price and thus gets good conscience in return. At least in theory, ownerless consumption need not be more expensive - in fact the opposite is suggested (Mont, 2002a; Baines et al. 2007). Hence, as ownerless consumption has the potential to be price competitive, it can potentially be harmful to give the impression that it is a more ethical way of consumption potentially implying extra costs.

Market analysis for ownerless consumption

The most important finding of this study is that the object-self relationship rather than the single elements constituting it, appears to be determining the acceptance of ownerless consumption. This insight suggests that a powerful way of performing market analysis for PSSs is to focus on assessing and segmenting object-self relationships with the use of social practice theory. With such an approach, marketing segmentation for PSSs can be made based on the meanings, competences and additional material elements that constitute the practices in which the specific product occur and therefore contribute to the development of the object-self relationship. Offerings for electric kitchen devices could in this way be differentiated between consumer profiles based on object-self relationships. An example of a profile could be imaginary Bernie who cooks extensively and enjoys to do so with friends and family. Bernie has extensive competences in cooking and is concerned about the virginity of the product because other users might not treat it as well. He is however also interested in having a flexible machine park for the kitchen, such that machines that are only occasionally needed can be ordered seamlessly and be used for just some days when he and his friends are trying out new things. Bernie is therefore targeted with the luxurious and fully customisable Gourmet Kitchen offering, which allows him to borrow and use as many high-end kitchen machines as he likes from the local utility library.

The new market opportunities in the circular economy

Littig argues that a 'revolution of sufficiency', i.e. a less materialistic and consumeristic mindset, can facilitate the adoption of ownerless consumption. The findings of this thesis, however, show that the dominance of ownership does not seem to stem from a need for possession and materialistic wealth. The fact that self-transcendence, and therefore also self-enhancement is not related to acceptance of ownerless consumption, indicates that ownership is not driven by a need for materialistic self-promotion. Instead, a feeling of freedom is paramount for consumers when confronted with ownerless consumption. It is further intriguing that this freedom can either be a feeling of control over one's life, which is more important for everyday activities, or a feeling of flexibility and absence of responsibility, which is mostly relevant in special occasions. In order to make access a real competitor to ownership, we might therefore not need to wait for a cultural revolution but merely better understand the social context. It is crucial for the process of mainstreaming ownerless consumption that focus is shifted away from all the welfare it can provide in terms of flexibility and environmental benefits towards an emphasis on delivering reliability and control to the consumer. This is obviously a matter of marketing but it is at least as much a matter of structuring the PSSs in a way that makes the user feel that he or she is in control and does not experience major disturbances to the habitual exercise of everyday activities. That goes for financial aspects as well as the practical services and communication that are part of the provider-user interaction. Achieving this requires more and better infrastructure for logistics, communication and finances supporting ownerless consumption. That objective can in some instances be a task for policy-makers who want to seize the lucrative potentials of transitioning to a circular economy. But just as often it can prove to be an opportunity for corporate actors and entrepreneurs who acknowledge that the massive societal change towards a circular economy can potentially be the next big unexploited market.

Conclusion

The aim of this thesis was to build further on the efforts of Littig (2000) and other scholars who have suggested that a shift to ownerless consumption needs to be studied not only as a technological and commercial change but also as a social and symbolic one. Hence, this thesis gathered results from all available empirical research and studied these within a coherent framework based on social practice theory. The most central concept of the framework is the object-self relationship denoting the ever-evolving relation between user and product and involves practical as well as social and symbolic factors. The fundamental assumption in this thesis is thus that studying the object-self relationship in different modes of consumption leads to profound insights about the acceptance of ownerless consumption and its potential to pave the way for a transition to a circular economy. This assumption was addressed by the main research question:

How does ownership or the absence of ownership influence the object-self relationship of consumers and what does this influence mean for the acceptance of ownerless consumption in the context of innovative circular economy-oriented product-service systems?

As the object-self is a multi-faceted concept, it has in this thesis been studied from different perspectives in the attempt to encompass its nature and relevance for ownerless consumption. The attention to these different perspectives has been explicated through the five sub-questions and the conclusions for the main research question must be extracted from the answers given to the sub-questions.

Importantly, the conclusions to the five sub-questions all point towards the importance of the object-self relationship and the use of social practice theory for understanding the full implications of ownerless consumption. The different kinds of meaning that were quantitatively investigated seemed to influence the acceptance of ownerless consumption in conjunction with each other rather than as separate independent factors. The product type turned out to not be relevant in itself but instead through its role in the object-self relationship. Competences, something that has not hitherto been studied much in the field of ownerless consumption but is to be considered part of the object-self relationship, proved to be an important factor. The assessment of how ownerless consumption supports different important performances appeared to be not only a matter of practicalities but just as much a matter of a feeling of control over one's everyday life. Finally, the inclusion of values did not show any direct impact on the acceptance of ownerless consumption but appeared to be mediated by the elements in the object-self relationship.

Shifting to ownerless consumption is a radical change from the default ownership-based mode of consumption and has systemic consequences for all aspects of consumption. The main immediate differences are of a practical kind. This study shows that the concern for freedom as consumer is essential in such a transition. The most important finding, however, is that no single

factor can account for the acceptance of ownerless consumption. Instead it appears that multiple factors, both practical, social and symbolic account for the acceptance of ownerless consumption in a complex and interactive manner. The fundamental assumption can be verified by the evidence presented in this thesis: the object-self relationship developed with the use of social practice theory is essential to understand for both researchers and societal actors in order to assess the complex implications of shifting to ownerless consumption in a circular economy.

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Appendix 1 – Example of questionnaire

Explanation:

One example out of the 6 different questionnaires. There was one for each of the three product groups and each of those were specified for the gender of the respondent. This one is for males showing sweaters

Questionnaire

- Thank you for taking the time for this questionnaire.

Purpose

This study investigates attitudes towards renting and buying products.

Procedure

The questionnaire will take 10-15 minutes. You don't need to spend time on thinking about the answers. There are no right or wrong answers and you can just answer what immediately comes to your mind. Participation in this study is completely voluntary and you are free to stop at any time. However, partly finished questionnaires are invalid for the research so please make an effort to finish the survey.

Reward

All participants are rewarded the chance to win one of three available gift cards. Each gift card has a value of €20. To be eligible for winning a gift card you are asked to leave your email address in the end of the questionnaire.

Confidentiality

All data obtained from participants will be kept confidential and no one other than the primary investigator will have access to them. Your responses will only be used as part of an aggregated analysis with +100 respondents and no personal or individual information about you will be made available.

- All questions regarding this study can be sent to Thomas Thorin at thomas.thorin@wur.nl.

1. What is your gender?

- Male
- Female

2. Where are you from?

- I am from the Netherlands
- I am from another country

3. Please write you age: _____

Please have a look at these sweaters and pick the one you like the most.



Below you will be asked questions about acquiring the sweater by either renting or buying it.

If you rent the sweater:

You pay a monthly rent that is automatically transferred from your banking account. If the sweater wears out or if you want another one, you can always exchange it. When you don't need the sweater anymore, you can send it back and thereby end the contract.

If you buy the sweater:

You pay the full price up front and you will then own the sweater. It comes with a two year warranty as all other products. When you don't need the sweater anymore, you can sell or dispose it.

4. Please indicate how much you agree or disagree with each of the statements below.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I have much knowledge about clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have much experience with choosing and combining clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in having this sweater.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I currently need a sweater in my everyday.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important for me to own the sweater instead of renting it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Please indicate whether you would prefer to rent or buy the sweater.

- Strongly prefer to rent the sweater
- Prefer to rent the sweater
- Neutral
- Prefer to buy the sweater
- Strongly prefer to buy the sweater

6. If you were to RENT this sweater for two years (24 months), what is the maximum price you would pay per month?

Please enter the amount in euros here: _____ €

7. If you were to BUY the sweater, what is the maximum price you would pay?

Please enter the amount in euros here: _____ €

8.a. (Only answer this question if you prefer to BUY the sweater)

Please choose one or more of the reasons why you prefer to BUY the sweater.

- It is not profitable for me to rent it
- I just like to own my things
- I don't want to be dependent on a provider
- The product is not suited for renting
- I don't want to pay rent all the time
- Buying is more safe
- Other reasons

8.b. (Only answer this question if you prefer to RENT the sweater)

Please choose one or more of the reasons why you prefer to RENT the sweater.

- It is more profitable for me to rent it
- I just like renting better
- I want to be able to exchange it
- The product is more suited for renting
- I don't want to spend all that money on buying it
- With renting I can have a replacement if I break it
- Other reasons

9. Imagine that you OWN the sweater.

Please indicate below how much you agree or disagree with the following statements:

When I OWN the sweater instead of renting it:

	I strongly disagree	I disagree	Neither agree nor disagree	I agree	I strongly agree
I can express my character better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that it doesn't express as much who I really am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more prestigious with it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more old-fashioned among my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more free to use it exactly how I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more restricted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good because others have not used it before me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more isolated from other users.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Now, imagine that you are RENTING the sweater.

Please indicate below how much you agree or disagree with the following statements:

When I RENT the sweater instead of owning it:

	I strongly disagree	I disagree	I neither agree nor disagree	I agree	I strongly agree
I cannot use it to show who I really am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can better express my personality with it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more trendy and smart towards others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel nervous that others might think worse of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel more free and flexible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncertain about how I am allowed to use it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel positively connected to other users.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncomfortable about others having used it before me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Good job! You are about halfway now.

11. Each of the statements below briefly describe a person. Please read each description and think about how much each person is or is not like you.

Tick the box to the right that shows how much the person in the description is like you.

	Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to him to be rich. He wants to have a lot of money and expensive things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He thinks it is important that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is very important to him to show his abilities. He wants people to admire what he does.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He believes that people should do what they're told. He thinks people should follow rules at all times, even when no-one is watching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He thinks it's important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>not to ask for more than what you have. He believes that people should be satisfied with what they have.</p> <p>Having a good time is important to him. He likes to "spoil" himself.</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(Continued)	Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
<p>It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.</p> <p>It's very important to him to help the people around him. He wants to care for other people.</p> <p>Being very successful is important to him. He likes to impress other people.</p> <p>It is very important to him that his country be safe from threats from within and without. He is concerned that social order be protected.</p> <p>He looks for adventures and likes to take risks. He wants to have an exciting life.</p> <p>It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong.</p> <p>It is important to him to be in charge and tell others what to do. He wants people to do what he says.</p> <p>It is important to him to be loyal to his friends. He wants to devote himself to people close to him.</p> <p>He strongly believes that people should care for</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

nature. Looking after the environment is important to him.						
Religious belief is important to him. He tries hard to do what his religion requires.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Reward

Please enter your email address to be eligible for winning one of the gift cards.

13. Focus group interviews

As part of this study, I will also perform so-called focus group interviews on the same topic later on. The interview will take about an hour. For your participation, you would receive my eternal gratitude and a lunch at the university.

Would you be interested in receiving more information about the focus group interviews and how to participate?

- Yes
- Maybe
- No

14. Questions

If you have any comments or questions regarding the questionnaire or research, please add them in the field below. Thank you.

That was it.

Thank you very much for your participation!

Appendix 2 – Communication with potential focus group participants

1st email

Sent: March 23rd 2016, 18:19:53

Title: Thank you for answering my questionnaire

Hi!

I am writing you because you answered my questionnaire at some point during the last two months.

First of all, thank you SO much for that! Here is a picture of me smiling saying thank you to show how happy I am for your help:



When you answered my questionnaire, you also indicated that you are interested in hearing more about the option to participate in a focus group interview, which is the second part of my study. So here is some more information.

About the focus group interview:

- We will be 4-6 people sitting in a room with no disturbances.
- I will shortly introduce myself and the topic and ask everyone to present her or himself.
- I will present a few ground rules - such as: only one can speak at a time; no interrupting; etc.
- Then you will be asked to share and discuss your opinion on renting and buying different products as well as your opinion on why you like one or the other.
- I will not speak much but make sure that everyone else get to speak.
- The session will last for max 1 hour and will be recorded for my personal use.
- All participants will gain a free lunch and I am sure that it will be enjoyable and interesting for all of us.

Participation

I will be very grateful for your participation as it is an important contribution to my research. All the interviews will take place in the Forum building.

If you would like to participate, then please respond to this doodle:

<http://doodle.com/poll/znkk9et8ze74iqee>

Note, that it is important that you write your email address instead of your name. Otherwise I cannot identify and contact you. The doodle is made secret so no one else can see your email address and your responses in the doodle.

That was it. I sincerely hope that you will help me. And once again, thank you for answering my questionnaire.

Kindest Regards,

Thomas Thorin

Student at Wageningen University

Twitter: @Thomas_Thorin LinkedIn: [Thomas Thorin](#)

2nd email:

Sent: March 28th 2016, 17:57:19

Title: Second call: Please help me with my research

Dear all,

Unfortunately there were not so many that responded to my request for participation in my focus group interviews.

Therefore, I now make a second (slightly more desperate) request.

It would be a really big help for me if you would sign of for one the the sessions in this doodle:
<http://doodle.com/poll/znkk9et8ze74iqee>

In return I will be eternally grateful and provide you with a free lunch.
I sincerely hope that you will reconsider to participate in the interviews.
See the original mail below for practical information.

Kindest Regards,

Thomas Thorin
Student at Wageningen University
Twitter: @Thomas_Thorin
LinkedIn: [Thomas Thorin](#)

Original mail

[Copy is 1st mail]

Appendix 3 – Interview Guide

Introduction

- Welcome
 - Thank you for coming
 - About me
 - The agenda
 - Name round
- The study
 - Purpose: To learn more about how we relate to products and what that means for our interest in renting and buying.
- Rules
 - I will raise some topics for discussion in the group.
 - I present two different products that can be used for comparisons.
 - I will take notes and make sure that everyone gets to speak.
 - Please don't speak on top of each other and make room for those who speak less.
 - Don't interrupt each other.
 - Don't hold back with saying your opinion. No opinion is better or more relevant than another.
 - Listen to the group and think about your opinion.

Topics

Preference

- Would you prefer to rent or buy either of these two products? → Why?

Performances

- When and how would you use these products?
 - How important are these activities in your everyday?
- Do you think you would use this product differently depending on whether you own or rent it?

Meanings

- Are you concerned about others having used the product already? → Why?
- Do you feel more free when you rent or when you buy? → Why?
- Does it mean anything for your ability to express your personality whether you buy or rent? → Why?
- Do you feel more connected to other users when renting a product?

Competences

- Do you think your preference has anything to do with your prior experience with using the products?

Appendix 4 – SPSS Syntax for data handling and analysis

Data preparation syntax:

* Encoding: UTF-8.

This script is for changing the raw data exported from qualtrics and make the dataset ready for analogue entries, further data construction or analysis.

Do not change this script unless it is to prepare the data.

*****.

*Deleting unfinished cases.

select if v10=1.

execute.

*Making sample batch variable.

if v5= " batch=1.

if v5~=" batch=2.

variable labels batch 'Sampling batch'.

value labels batch 1 'Anomymous online' 2 'Friend' 3 'ENR-31306'

4 'GEO-30806' 5 'MCB-30306' 6 'ECS-51306' 7 'ENP-10806'

8 'ESA-20806' 9 'Krisis Class'.

execute.

*Recoding gender variable.

recode Q1.2 (1=1) (2=2) (else=sysmis) into gen.

VARIABLE LABELS gen 'Gender'.

VALUE LABELS gen 1 'Male' 2 'Female'.

execute.

*Recoding country of origin.

RECODE Q1.3 (1=1) (2=2) (ELSE=SYSMIS) INTO origin.

VARIABLE LABELS Origin 'Nationality'.

VALUE LABELS origin 1 'Dutch' 2 'Not Dutch'.

EXECUTE.

***Recoding age.**

```
RECODE Q1.4 (1 thru 100=Copy) (ELSE=SYSMIS) INTO age.  
VARIABLE LABELS age 'Age'.  
EXECUTE.
```

***Defining product variable.**

```
if (Q2.2_1>0) or (Q2.2_2>0) or (Q2.2_3>0) or (Q2.2_4>0) or (Q2.2_5>0) or (Q2.4_1>0) or  
(Q2.5_1>0) product=1.  
if (Q3.3_1>0) or (Q3.3_2>0) or (Q3.3_3>0) or (Q3.3_4>0) or (Q3.3_5>0) or (Q3.6_1>0) or  
(Q3.7_1>0) product=2.  
if (Q4.2_2>0) or (Q4.2_3>0) or (Q4.2_4>0) or (Q4.2_5>0) or (Q4.2_13>0) or (Q4.4_1>0) or  
(Q4.5_1>0) product=3.  
variable labels product 'Product type frame'.  
value labels product 1 'Tablet' 2 'Sweater' 3 'Coffee machine'.  
execute.
```

***Changing values in first battery so missing values become 0.**

```
recode Q2.2_1 Q2.2_2 Q2.2_3 Q2.2_4 Q2.2_5 Q3.3_1 Q3.3_2 Q3.3_3 Q3.3_4 Q3.3_5  
Q4.2_2 Q4.2_3 Q4.2_4 Q4.2_5 Q4.2_13 (sysmis=0) (else=copy).  
execute.
```

***Recoding competences.**

```
compute know=Q2.2_1+Q3.3_1+Q4.2_2.  
compute expr=Q2.2_2+Q3.3_2+Q4.2_13.  
recode know expr (0=sysmis) (else=copy).  
variable labels know 'Competence: knowledge' expr 'Competence: experience'.  
value labels know expr 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.  
execute.
```

***Recoding interest and need.**

```
compute interest=Q2.2_3+Q3.3_3+Q4.2_3.  
compute need=Q2.2_4+Q3.3_4+Q4.2_4.  
recode interest need (0=sysmis) (else=copy).  
variable labels interest 'Interest in having the product' need 'Current need for the product'.  
value labels interest need 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.  
execute.
```


***Recoding preference for buying in first battery.**

compute own1=Q2.2_5+Q3.3_5+Q4.2_5.

recode own1 (0=sysmis) (else=copy).

variable labels own1 'It is important for me to own the product instead of renting it'.

value labels interest need 1 'Strongly disagree' 2 'Disagree' 3 'Neither agree nor disagree' 4 'Agree' 5 'Strongly agree'.

execute.

***Recoding buying preference variables so missing value is 0 and then accumulating the number across products.**

recode Q2.4_1 Q2.5_1 Q3.6_1 Q3.7_1 Q4.4_1 Q4.5_1 (sysmis=0) (else=copy).

compute own2=(Q2.4_1+Q2.5_1+Q3.6_1+Q3.7_1+Q4.4_1+Q4.5_1)/20.

recode own2 (0=sysmis) (else=copy).

variable labels own2 'Preference for renting (low) vs owning (high)'.

execute.

***Recoding payment preferences so missing values are 0 and collapsing them to a cross product variable.**

recode Q2.6 Q2.7 Q3.8 Q3.9 Q4.6 Q4.7 (sysmis=0) (else=copy).

compute prent=Q2.6+Q3.8+Q4.6.

compute pown=Q2.7+Q3.9+Q4.7.

recode prent pown (0=sysmis) (else=copy).

VARIABLE LABELS pown 'Reference price for owning' prent 'Reference price for monthly payment over a period of two years'.

execute.

***Collapsing questions about reasons for preferring to buy or rent into cross product variable.**

recode Q2.9_3 Q2.9_4 Q2.9_5 Q2.9_6 Q2.9_7 Q2.9_8 Q2.9_9
Q2.10_3 Q2.10_4 Q2.10_5 Q2.10_6 Q2.10_7 Q2.10_8 Q2.10_9
Q3.12_3 Q3.12_4 Q3.12_5 Q3.12_6 Q3.12_7 Q3.12_8 Q3.12_9
Q3.13_3 Q3.13_4 Q3.13_5 Q3.13_6 Q3.13_7 Q3.13_8 Q3.13_9
Q4.9_3 Q4.9_4 Q4.9_5 Q4.9_6 Q4.9_7 Q4.9_8 Q4.9_9
Q4.10_3 Q4.10_4 Q4.10_5 Q4.10_6 Q4.10_7 Q4.10_8 Q4.10_9
(sysmis=0) (else=copy).

compute rb1=Q2.9_5+Q3.12_5+Q4.9_5.

compute rb2=Q2.9_6+Q3.12_6+Q4.9_6.

compute rb3=Q2.9_7+Q3.12_7+Q4.9_7.

compute rb4=Q2.9_8+Q3.12_8+Q4.9_8.

compute rb5=Q2.9_9+Q3.12_9+Q4.9_9.

compute rb6=Q2.9_3+Q3.12_3+Q4.9_3.

```
compute rb7=Q2.9_4+Q3.12_4+Q4.9_4.
```

```
compute rr1=Q2.10_5+Q3.13_5+Q4.10_5.
```

```
compute rr2=Q2.10_6+Q3.13_6+Q4.10_6.
```

```
compute rr3=Q2.10_7+Q3.13_7+Q4.10_7.
```

```
compute rr4=Q2.10_8+Q3.13_8+Q4.10_8.
```

```
compute rr5=Q2.10_9+Q3.13_9+Q4.10_9.
```

```
compute rr6=Q2.10_3+Q3.13_3+Q4.10_3.
```

```
compute rr7=Q2.10_4+Q3.13_4+Q4.10_4.
```

```
VARIABLE LABELS rb6 'Buying is more safe' rb7 'Other reasons'
```

```
rb1 'It is not profitable for me to rent it' rb2 'I just like to own my things'
```

```
rb3 'I dont want to be dependent on a provider' rb4 'The product is not suited for renting'
```

```
rb5 'I dont want to pay rent all the time'
```

```
rr6 'With renting I can have a replacement if I break it' rr7 'Other reasons'
```

```
rr1 'It is more profitable for me to rent it' rr2 'I just like renting better'
```

```
rr3 'I want to be able to exchange it' rr4 'The product is more suited for renting'
```

```
rr5 'I dont want to spend all that money on buying it'.
```

```
execute.
```

***Collapsing variables for meaning attached to owning into one set of eight variables.**

recode

```
Q2.13_12 Q2.13_13 Q2.13_14 Q2.13_15 Q2.13_16 Q2.13_17 Q2.13_18 Q2.13_19
```

```
Q3.17_5 Q3.17_6 Q3.17_7 Q3.17_8 Q3.17_9 Q3.17_10 Q3.17_11 Q3.17_12
```

```
Q4.13_5 Q4.13_6 Q4.13_7 Q4.13_8 Q4.13_9 Q4.13_10 Q4.13_11 Q4.13_12
```

```
(sysmis=0) (-99=0) (else=copy).
```

```
compute oIDPos=Q2.13_12+Q3.17_5+Q4.13_5.
```

```
compute oIDNeg=Q2.13_13+Q3.17_6+Q4.13_6.
```

```
compute oStaPos=Q2.13_14+Q3.17_7+Q4.13_7.
```

```
compute oStaNeg=Q2.13_15+Q3.17_8+Q4.13_8.
```

```
compute oFrePos=Q2.13_16+Q3.17_9+Q4.13_9.
```

```
compute oFreNeg=Q2.13_17+Q3.17_10+Q4.13_10.
```

```
compute oConPos=Q2.13_18+Q3.17_11+Q4.13_11.
```

```
compute oConNeg=Q2.13_19+Q3.17_12+Q4.13_12.
```

```
recode oIDPos oIDNeg oStaPos oStaNeg oFrePos oFreNeg oConPos oConNeg (0=sysmis)  
(else=copy).
```

```
variable labels
```

```
oIDPos 'I can express my character better' oIDNeg 'I feel that it does not express as much who I  
really am.'
```

oStaPos 'I feel more prestigious with it' oStaNeg 'I feel more old-fashioned among my friends'
oFrePos 'I feel more free to use it exactly how I want' oFreNeg 'I feel more restricted'
oConpos 'I feel good because others have not used it before me' oConNeg 'I feel more isolated
from other users'.

VALUE LABELS oIDPos oIDNeg oStaPos oStaNeg oFrePos oFreNeg oConPos oConNeg
1 'I strongly disagree' 2 'I disagree' 3 'Neither agree nor disagree' 4 'I agree' 5 'I strongly agree'.
execute.

***Collapsing variables for meaning attached to renting into one set of eight variables.**

recode

Q2.12_17 Q2.12_18 Q2.12_19 Q2.12_20 Q2.12_21 Q2.12_22 Q2.12_23 Q2.12_24
Q3.16_26 Q3.16_27 Q3.16_28 Q3.16_29 Q3.16_30 Q3.16_31 Q3.16_32 Q3.16_33
Q4.12_9 Q4.12_10 Q4.12_11 Q4.12_12 Q4.12_13 Q4.12_14 Q4.12_15 Q4.12_16
(sysmis=0) (-99=0) (else=copy).

compute rIDPos=Q2.12_18+Q3.16_27+Q4.12_10.
compute rIDNeg=Q2.12_17+Q3.16_26+Q4.12_9.
compute rStaPos=Q2.12_19+Q3.16_28+Q4.12_11.
compute rStaNeg=Q2.12_20+Q3.16_29+Q4.12_12.
compute rFrePos=Q2.12_21+Q3.16_30+Q4.12_13.
compute rFreNeg=Q2.12_22+Q3.16_31+Q4.12_14.
compute rConPos=Q2.12_23+Q3.16_32+Q4.12_15.
compute rConNeg=Q2.12_24+Q3.16_33+Q4.12_16.

recode rIDNeg rIDPos rStaPos rStaNeg rFrePos rFreNeg rConPos rConNeg (0=sysmis)
(else=copy).

variable labels

rIDNeg 'I cannot use it to show who I really am' rIDPos 'I can better express my personality with
it'

rStaPos 'I feel more trendy and smart towards others' rStaNeg 'I feel nervous that others might
think worse of me'

rFrePos 'I feel more free and flexible' rFreNeg 'I feel uncertain about how I am allowed to use it'

rConPos 'I feel positively connected to other users' rConNeg 'I feel uncomfortable about others
having used it before me'.

VALUE LABELS rIDNeg rIDPos rStaPos rStaNeg rFrePos rFreNeg rConPos rConNeg

1 'I strongly disagree' 2 'I disagree' 3 'Neither agree nor disagree' 4 'I agree' 5 'I strongly agree'.
execute.

***NB the order of the variables does not correspond with the questionnaire, hence a new set is
made below.**

***Recoding value variables and colapsing them into one set of variables for both men and women.**

```
DO IF (gen = 1).  
RECODE Q5.1_25 Q5.1_27 Q5.1_30 Q5.1_32 Q5.1_34 Q5.1_37 Q5.1_39 Q5.1_42 Q5.1_44  
Q5.1_46 Q5.1_47  
    Q5.1_50 Q5.1_51 Q5.1_52 Q5.1_53 Q5.1_56 Q5.1_58 Q5.1_61 Q5.1_63 Q5.1_66 Q5.1_68  
(1=1) (2=2) (3=3)  
    (4=4) (5=5) (6=6) (else=sysmis) INTO val1 val2 val3 val4 val5 val6 val7 val8 val9 val10 val11  
val12  
    val13 val14 val15 val16 val17 val18 val19 val20 val21.  
end if.
```

```
do if (gen = 2).  
RECODE Q5.2_25 Q5.2_27 Q5.2_30 Q5.2_32 Q5.2_34 Q5.2_37 Q5.2_39 Q5.2_42 Q5.2_44  
Q5.2_46 Q5.2_47  
    Q5.2_50 Q5.2_51 Q5.2_52 Q5.2_53 Q5.2_56 Q5.2_58 Q5.2_61 Q5.2_63 Q5.2_66 Q5.2_68  
(1=1) (2=2) (3=3)  
    (4=4) (5=5) (6=6) (else=SYSMIS) INTO val1 val2 val3 val4 val5 val6 val7 val8 val9 val10 val11  
val12  
    val13 val14 val15 val16 val17 val18 val19 val20 val21.  
end if.  
EXECUTE.
```

VARIABLE LABELS

```
val1 'He wants to care for other people.'  
val2 'It is important to him to be loyal to his friends'  
val3 'He thinks it is important that every person in the world be treated equally.'  
val4 'It is important to him to listen to people who are different from him.'  
val5 'He strongly believes that people should care for nature'  
val6 'He likes to do things in his own original way'  
val7 'It is important to him to make his own decisions about what he does'  
val8 'He thinks it is important to do lots of different things in life'  
val9 'He wants to have an exciting life'  
val10 'Having a good time is important to him'  
val11 'He seeks every chance he can to have fun'  
val12 'He wants people to admire what he does'  
val13 'Being very successful is important to him'  
val14 'It is important to him to be rich'  
val15 'He wants people to do what he says'  
val16 'He avoids anything that might endanger his safety'
```

val17 'He is concerned that social order be protected.'
val18 'He believes that people should do what they are told'
val19 'It is important to him always to behave properly'
val20 'He thinks it is important not to ask for more than what you have'
val21 'Religious belief is important to him'.
EXECUTE.

***Recoding value variables into new variables with order that fits questionnaire.**

recode val6 val14 val3 val12 val16 val8 val18 val4 val20 val10
val7 val1 val13 val17 val9 val19 val15 val2 val5 val21 val11
(1 thru 6=copy) (else=sysmis) into va1 va2 va3 va4 va5 va6 va7 va8 va9 va10 va11 va12 va13
va14 va15 va16 va17 va18 va19 va20 va21.

VARIABLE LABELS

va12 'He wants to care for other people.'
va18 'It is important to him to be loyal to his friends'
va3 'He thinks it is important that every person in the world be treated equally.'
va8 'It is important to him to listen to people who are different from him.'
va19 'He strongly believes that people should care for nature'
va1 'He likes to do things in his own original way'
va11 'It is important to him to make his own decisions about what he does'
va6 'He thinks it is important to do lots of different things in life'
va15 'He wants to have an exciting life'
va10 'Having a good time is important to him'
va21 'He seeks every chance he can to have fun'
va4 'He wants people to admire what he does'
va13 'Being very successful is important to him'
va2 'It is important to him to be rich'
va17 'He wants people to do what he says'
va5 'He avoids anything that might endanger his safety'
va14 'He is concerned that social order be protected.'
va7 'He believes that people should do what they are told'
va16 'It is important to him always to behave properly'
va9 'He thinks it is important not to ask for more than what you have'
va20 'Religious belief is important to him'.

value labels va1 va2 va3 va4 va5 va6 va7 va8 va9 va10 va11 va12 va13 va14 va15 va16 va17
va18 va19 va20 va21

1 'Very much like me' 2 'Like me' 3 'Somewhat like me' 4 'A little like me' 5 'Not like me' 6 'Not
like me at all'.

execute.

***Creating email variable.**

string email (a200).

if Q6.1~="" email=Q6.1.

if (Q6.1="") and (Q6.3~="") email=Q6.3.

if (Q6.1="") and (Q6.3="") email=v5.

VARIABLE LABELS email 'Email of respondent'.

execute.

***Creating variable for focus group interview interest.**

recode Q6.2 (1=1) (2=2) (6=3) (else=sysmis) into focusgroup.

variable labels focusgroup 'Attitude to participating in focus group interview'.

value labels focusgroup 1 'Yes' 2 'Maybe' 3 'No'.

execute.

***Making new variable for questions.**

string question (a2000).

Compute question=Q6.5.

VARIABLE LABELS question 'Questions asked by participants'.

execute.

***saving ID code for online respondents.**

string online_ID (a200).

compute online_ID=v1.

variable labels online_ID 'Identification name given by Qualtrics for online respondents'.

execute.

***saving entry date for respondents.**

compute entry_date=v9.

formats entry_date(sdate10).

variable labels entry_date 'Data of ended entry'.

execute.

***Deleting original variables to leave only transformed variables.**

delete variables v1 to LocationAccuracy.

delete variables val1 to val21.

execute.

***Setting the right measurement levels for all variables.**

variable level batch to origin (nominal) age (scale) product (nominal) know to prent (scale) rb1 to rr7 (nominal) oIDPos to va21 (scale) email to entry_date (nominal).

From here the dataset should be ready to received analogue entries or to be changed further

*****.

Variable developing syntax:

* Encoding: UTF-8.

This syntax develops the necessary variable out of the 'raw' ones so the data is ready for analysis.

***Testing internal consistency for two competence variables.**

```
DATASET ACTIVATE DataSet1.
```

```
RELIABILITY
```

```
  /VARIABLES=know expr
```

```
  /SCALE('ALL VARIABLES') ALL
```

```
  /MODEL=ALPHA
```

```
  /STATISTICS=DESCRIPTIVE SCALE CORR
```

```
  /SUMMARY=TOTAL.
```

execute.

***C Alpha is .789 so the two variables can be used together.**

***Creating single variable for competence.**

```
compute Competence = (know+expr)/2.
```

```
variable labels Competence 'Combined competence'.
```

```
value labels Competence 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.
```

execute.

***Centering competence around sample average.**

```
FREQUENCIES VARIABLES=Competence
```

```
  /STATISTICS=MEAN
```

```
  /ORDER=ANALYSIS.
```

***Mean is 3,0496.**

```
Compute Comp_unCen = Competence.
```

```
Compute Competence = Comp_unCen- 3.0496.
```

```
FREQUENCIES VARIABLES=Competence
```

```
  /STATISTICS=MEAN
```

```
  /ORDER=ANALYSIS.
```


***Testing internal consistency for interest and need.**

DATASET ACTIVATE DataSet1.

RELIABILITY

/VARIABLES=interest need

/SCALE('ALL VARIABLES') ALL

/MODEL=ALPHA

/STATISTICS=DESCRIPTIVE SCALE CORR

/SUMMARY=TOTAL.

execute.

***C Alpha is .700 so the two variables can be used together.**

***Make variable to combine interest and need.**

Compute Demand=(interest+need)/2.

Variable labels Demand 'Sum of need and interest'.

value labels Demand 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.

execute.

***Centering demand around sample average.**

FREQUENCIES VARIABLES=Demand

/STATISTICS=MEAN

/ORDER=ANALYSIS.

***Mean is 2,7805.**

Compute Dem_unCen = Demand.

Compute Demand = Dem_unCen- 2.7805.

FREQUENCIES VARIABLES=Demand

/STATISTICS=MEAN

/ORDER=ANALYSIS.

***Testing for misunderstood responses to the rent question - some respondents have entered the full amount for all 24 months instead of the monthly rate.**

FREQUENCIES prent

/HISTOGRAM.

***6 respondents have entered a number that is 150 or higher and the next level below that is 40.**

***So these have clearly misunderstood the question and the answer should be divided with 24 to avoid extreme outliers.**

Do if (prent>100).

compute prent = (prent/24).

end if.

execute.

***Making rent/buy price ratio.**

recode pown prent (0=sysmis).

compute ratio=pown/prent.

VARIABLE LABELS ratio 'Ratio between buying and renting price - high number indicates preference for buying'.

execute.

***Turning around scales for own1 and own2 so they measure acceptance of ownerless consumption instead of preference for buying.**

frequencies own1 own2

/HISTOGRAM.

recode own1 (1=5) (2=4) (3=3) (4=2) (5=1) into acceptance1.

recode own2 (0 thru 1 = 5) (1,1 thru 2 = 4) (2,1 thru 3 = 3) (3,1 thru 4 = 2) (4,1 thru 5 = 1) into acceptance2.

VARIABLE LABELS acceptance1 'Acceptance for renting' acceptance2 'Acceptance for renting'.

Value labels acceptance1 acceptance2 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.

frequencies acceptance1 acceptance2

/HISTOGRAM.

***Testing internal consistency for variables measuring preference between renting and owning.**

RELIABILITY

/VARIABLES=own1 own2 ratio

/SCALE('ALL VARIABLES') ALL

/MODEL=ALPHA

/STATISTICS=DESCRIPTIVE SCALE CORR

/SUMMARY=TOTAL.

***Chronbach's alpha is extremely low for these three measures (-.013).**

***It is ratio that is not correlated at all. *When it is taken out, C alpha is .714 which is okay.**

***Therefore acceptance1 and acceptance2 can be combined into one measure.**

```
compute Acceptance = (acceptance1+acceptance2)/2.  
VARIABLE LABELS Acceptance 'Acceptance for renting'.  
Value labels Acceptance 1 'Very low' 2 'Low' 3 'Medium' 4 'High' 5 'Very high'.
```

```
delete variables acceptance1 acceptance2.
```

```
FREQUENCIES Acceptance  
/histogram.
```

***Centering Acceptance around sample average.**

```
FREQUENCIES VARIABLES=Acceptance  
/STATISTICS=MEAN  
/ORDER=ANALYSIS.
```

***Mean is 2,8659.**

```
Compute Accept_unCen = Acceptance.  
Compute Acceptance = Accept_unCen- 2.8659.
```

```
FREQUENCIES VARIABLES=Competence  
/STATISTICS=MEAN  
/ORDER=ANALYSIS.
```

***Making product variable into two dummy variables with sweater as reference value - only two are to be used at a time in analysis.**

```
Recode product (1 = 1) (2 = 0) (3 = 0) into Tablet.  
Recode product (1 = 0) (2 = 0) (3 = 1) into Coffee.  
Recode product (1 = 0) (2 = 1) (3 = 0) into Sweater.
```

***Recoding value names and turning around scale so high value indicates importance.**

```
frequencies va1 to va21  
/histogram.
```

recode va1 va2 va3 va4 va5 va6 va7 va8 va9 va10 va11 va12 va13 va14 va15 va16 va17 va18
va19 va20 va21
(1=6) (2=5) (3=4) (4=3) (5=2) (6=1)
into SD1 PO1 UN1 AC1 SE1 ST1 CO1 UN2 TR1 HE1 SD2 BE1 AC2 SE2 ST2 CO2 PO2 BE2
UN3 TR2 HE2.

***Deleting old value variables.**

DELETE VARIABLES va1 to va21.
execute.

***Centering values to correct for differences in survey usage - cf Schwartz' ESS instruction.**

***These function as the proxies of the 10 values.**

COMPUTE mrat = MEAN(SD1 to HE2) .
EXECUTE .
COMPUTE SEcenter = MEAN(SE1, SE2) - mrat .
EXECUTE .
COMPUTE COcenter = MEAN(CO1, CO2) - mrat .
EXECUTE .
COMPUTE TRcenter = MEAN(TR1, TR2) - mrat .
EXECUTE .
COMPUTE BEcenter = MEAN(BE1, BE2) - mrat.
EXECUTE .
COMPUTE UNcenter = MEAN(UN1, UN2, UN3) - mrat .
EXECUTE .
COMPUTE SDcenter = MEAN(SD1, SD2) - mrat .
EXECUTE .
COMPUTE STcenter = MEAN(ST1, ST2) - mrat .
EXECUTE .
COMPUTE HEcenter = MEAN(HE1, HE2) - mrat.
EXECUTE .
COMPUTE ACcenter = MEAN(AC1, AC2) - mrat .
EXECUTE .
COMPUTE POcenter = MEAN(PO1, PO2) - mrat .
EXECUTE .

Making value axes

Compute Openness = (mean (SDcenter, STcenter, HEcenter) - mean (TRcenter, COcenter, SEcenter)).

Compute Transcendence = (mean (UNcenter, BEcenter) - mean (HEcenter, ACcenter, POcenter)).

Variable labels Openness 'Openness to change' Transcendence 'Self-transcendence'.

frequencies Openness Transcendence

/histogram.

Note: Because many respondents found the meaning questions irrelevant, the data has to be cleaned. *There was not chance for writing 'not applicable' and this has lead to variables that are logically opposites (given that you care) to be highly correlated for many cases.

FREQUENCIES VARIABLES=oIDPos oIDNeg oStaPos oStaNeg oFrePos oFreNeg oConPos oConNeg
rIDPos rIDNeg

rStaPos rStaNeg rFrePos rFreNeg rConPos rConNeg

/STATISTICS=STDDEV MEAN

/ORDER=ANALYSIS.

***Assessing how many respondents have found the question irrelevant and placed answer wrongly.**

if oIDPos = oIDNeg and oIDPos ~= 3 oIDcare = 0.

if oIDPos ~= oIDNeg or (rIDPos =3 and rIDNeg = 3) oIDcare = 1.

execute.

if rIDPos = rIDNeg and rIDPos ~= 3 rIDcare = 0.

if rIDPos ~= rIDNeg or (rIDPos =3 and rIDNeg = 3) rIDcare = 1.

execute.

if oStaPos = oStaNeg and oStaPos ~= 3 oStacare = 0.

if oStaPos ~= oStaNeg or (rStaPos =3 and rStaNeg = 3) oStacare = 1.

execute.

if rStaPos = rStaNeg and rStaPos ~= 3 rStacare = 0.

if rStaPos \neq rStaNeg or (rStaPos =3 and rStaNeg = 3) rStacare = 1.
execute.

if oFrePos = oFreNeg and oFrePos \neq 3 oFrecare = 0.
if oFrePos \neq oFreNeg or (rFrePos =3 and rFreNeg = 3) oFrecare = 1.
execute.

if rFrePos = rFreNeg and rFrePos \neq 3 rFrecare = 0.
if rFrePos \neq rFreNeg or (rFrePos =3 and rFreNeg = 3) rFrecare = 1.
execute.

if oConPos = oConNeg and oConPos \neq 3 oConcare = 0.
if oConPos \neq oConNeg or (rConPos =3 and rConNeg = 3) oConcare = 1.
execute.

if rConPos = rConNeg and rConPos \neq 3 rConcare = 0.
if rConPos \neq rConNeg or (rConPos =3 and rConNeg = 3) rConcare = 1.
execute.

FREQUENCIES rIDcare oIDcare rStacare oStacare rFrecare oFrecare rConcare oConcare
/statistics mean.

***For respondents that have given the same response to a pair of logically opposite statements, the response is coded to 3, which is the correct response for indicating that the statement is 'not applicable'.**

if oIDpos = oIDneg oIDpos = 3.
if oIDpos = oIDneg oIDneg = 3.

if oStapos = oStaneg oStapos = 3.
if oStapos = oStaneg oStaneg = 3.

if oFrepos = oFreng oFrepos = 3.
if oFrepos = oFreng oFreng = 3.

if oConpos = oConneg oConpos = 3.
if oConpos = oConneg oConneg = 3.

if rIDpos = rIDneg rIDpos = 3.
if rIDpos = rIDneg rIDneg = 3.

if rStapos = rStaneg rStapos = 3.
if rStapos = rStaneg rStaneg = 3.

if rFrepos = rFreneq rFrepos = 3.
if rFrepos = rFreneq rFreneq = 3.

if rConpos = rConneg rConpos = 3.
if rConpos = rConneg rConneg = 3.
execute.

frequencies oIDPos oIDNeg rIDPos rIDNeg oStaPos oStaNeg rStaPos rStaNeg oFrePos oFreNeg
rFrePos rFreNeg oConPos oConNeg rConPos rConNeg
/histogram.

Analysis syntax:

* Encoding: UTF-8.

SYNTAX FOR ANALYSIS

The syntax will be structured according to the research questions, With the exception that second research question will be answered first.

SUB-QUESTION 1:

How does the creation of meaning in the object-self relationship influence consumer acceptance of ownerless consumption?

Testing and construction of indices for Meaning - using factor analysis.

*For Freedom.

DATASET ACTIVATE DataSet1.

FACTOR

/VARIABLES oFrePos oFreNeg rFrePos rFreNeg

/MISSING LISTWISE

/ANALYSIS oFrePos oFreNeg rFrePos rFreNeg

/PRINT INITIAL CORRELATION SIG EXTRACTION

/CRITERIA MINEIGEN(1) ITERATE(25)

/EXTRACTION PC

/ROTATION NOROTATE

/METHOD=CORRELATION.

FREQUENCIES oFrePos oFreNeg rFrePos rFreNeg

/histogram.

***For Identity creation.**

```
FACTOR  
/VARIABLES oIDPos oIDNeg rIDPos rIDNeg  
/MISSING LISTWISE  
/ANALYSIS oIDPos oIDNeg rIDPos rIDNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

```
frequencies oIDPos oIDNeg rIDPos rIDNeg  
/histogram.
```

***For social status.**

```
FACTOR  
/VARIABLES oStaPos oStaNeg rStaPos rStaNeg  
/MISSING LISTWISE  
/ANALYSIS oStaPos oStaNeg rStaPos rStaNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

***Repeated without oStaNeg.**

```
FACTOR  
/VARIABLES oStaPos rStaPos rStaNeg  
/MISSING LISTWISE  
/ANALYSIS oStaPos rStaPos rStaNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

```
frequencies oStaPos rStaPos rStaNeg  
/histogram.
```

***For Contagion.**

FACTOR

```
/VARIABLES oConPos oConNeg rConPos rConNeg  
/MISSING LISTWISE  
/ANALYSIS oConPos oConNeg rConPos rConNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

***Repeated without oConNeg.**

FACTOR

```
/VARIABLES oConPos rConPos rConNeg  
/MISSING LISTWISE  
/ANALYSIS oConPos rConPos rConNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

```
frequencies oConPos rConPos rConNeg  
/histogram.
```

Extracting the factors as variables

***.

***Contagion.**

FACTOR

```
/VARIABLES oConPos rConPos rConNeg  
/MISSING LISTWISE  
/ANALYSIS oConPos rConPos rConNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/SAVE REG(ALL)  
/METHOD=CORRELATION.
```

***Social status though ownership.**

FACTOR

```
/VARIABLES rStaPos rStaNeg oStaPos  
/MISSING LISTWISE  
/ANALYSIS rStaPos rStaNeg oStaPos  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/SAVE REG(ALL)  
/METHOD=CORRELATION.
```

***Identity creation through ownership - only first factor is extracted.**

FACTOR

```
/VARIABLES oIDPos oIDNeg rIDPos rIDNeg  
/MISSING LISTWISE  
/ANALYSIS oIDPos oIDNeg rIDPos rIDNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA FACTORS(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/SAVE REG(ALL)  
/METHOD=CORRELATION.
```

***Freedom through ownership.**

FACTOR

```
/VARIABLES oFrePos oFreNeg rFrePos rFreNeg  
/MISSING LISTWISE  
/ANALYSIS oFrePos oFreNeg rFrePos rFreNeg  
/PRINT INITIAL CORRELATION SIG EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/SAVE REG(ALL)  
/METHOD=CORRELATION.
```

***Renaming factors.**

Compute Virginité = FAC1_1.

Compute Status = FAC1_2.

Compute Identity = FAC1_3.

Compute Freedom = FAC1_4.

SUB-QUESTION 2:

How does the product type influence the object-self relationship and thus the consumer acceptance?

*****.

First testing the influence on meaning creation.

***.

***Testing for normal distribution of variables.**

SORT CASES BY product.

SPLIT FILE LAYERED BY product.

frequencies Virginité Status Identity Freedom
/HISTOGRAM NORMAL.

SPLIT FILE OFF.

***Testing relation.**

ONEWAY Freedom Identity Status Virginité BY product

/STATISTICS DESCRIPTIVES

/PLOT MEANS

/MISSING ANALYSIS.

Testing relation between Competence and product type.

***.

***Testing relationship.**

ONEWAY Competence BY product

/STATISTICS DESCRIPTIVES

/PLOT MEANS

/MISSING ANALYSIS.

SUB-QUESTION 3:

How does the existence or absence of competences to use the relevant product influence consumer acceptance of ownerless consumption?

Testing correlations between competence and Meaning

FREQUENCIES competence

/histogram.

***Making dichotomious variable for Competence to test for variance in Meaning variables for different values of competence.**

if Competence < 0 Comp2 = 0.

if Competence >= 0 Comp2 = 1.

Value labels Comp2 0 'Low' 1 'High'.

frequencies comp2

/histogram.

***Testing for normal distribution of variables.**

SORT CASES BY Comp2.

SPLIT FILE LAYERED BY Comp2.

frequencies Virginitiy Status Identity Freedom

/HISTOGRAM NORMAL.

SPLIT FILE OFF.

T-TEST GROUPS=Comp2(0 1)

/MISSING=ANALYSIS

/VARIABLES=Identity Virginitiy Status Freedom

/CRITERIA=CI(.95).

*****Testing whether Competence instead merely leads to high values in Meaning - rather than a certain direction.**

***Constructing new unipolar Meaning variables.**

Compute Fre = mean(oFrePos, rFreNeg) - mean(oFreNeg, rFrePos).

Compute Sta = mean(rStaNeg, oStaPos) - rStaPos.

Compute Vir = mean(oConPos, rConNeg) - rConPos.

Compute Ide = mean(oIDPos, rIDNeg) - mean(oIDNeg, rIDPos).

FREQUENCIES Fre Sta Ide Vir
/HISTOGRAM.

if Fre < 0 FreP = Fre*-1.

if Fre >= 0 FreP = Fre.

if Vir < 0 VirP = Vir*-1.

if Vir >= 0 VirP = Vir.

if Ide < 0 IdeP = Ide*-1.

if Ide >= 0 IdeP = Ide.

if Sta < 0 StaP = Sta*-1.

if Sta >= 0 StaP = Sta.

FREQUENCIES FreP StaP IdeP VirP
/HISTOGRAM.

***Testing relationship.**

T-TEST GROUPS=Comp2(0 1)

/MISSING=ANALYSIS

/VARIABLES=IdeP VirP StaP FreP

/CRITERIA=CI(.95).

SUB-QUESTION 5:

How do personal values influence the acceptance of ownerless consumption?

***Regression analysis and test for preconditions:**

- **Linearity**

- **No extreme outliers**

- **Low multicollinearity**

- **Normal distribution of residuals**

- **Homoskedasticity.**

***Testing for linearity with the use of Lowess curve.**

GRAPH

/SCATTERPLOT(MATRIX)=Virginity Openness Transcendence
/MISSING=LISTWISE.

***Low linearity with Openness.**

GRAPH

/SCATTERPLOT(MATRIX)=Identity Openness Transcendence
/MISSING=LISTWISE.

***Low linearity for Transcendence.**

GRAPH

/SCATTERPLOT(MATRIX)=Status Openness Transcendence
/MISSING=LISTWISE.

***Looks fine.**

GRAPH

/SCATTERPLOT(MATRIX)=Freedom Openness Transcendence
/MISSING=LISTWISE.

***Looks fine.**

Creating interaction variables to test for interaction with product type.

***.

Compute OpenxSweater = Openness*Sweater.

Compute OpenxCoffee = Openness*Coffee.

Compute TransxSweater = Transcendence*Sweater.

Compute TransxCoffee = Transcendence*Coffee.

VIRGINITY.

***Regression with partial plots, test for normal distribution of residuals, test for multicollinearity and extreme outliers.**

REGRESSION

/MISSING LISTWISE

```
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Virginitiy
/METHOD=ENTER Openness Transcendence
/METHOD=ENTER Coffee Sweater
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee
/PARTIALPLOT ALL
/SCATTERPLOT=(*SDRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID)
/SAVE LEVER SDRESID.
```

***Testing for outliers.**

```
GRAPH
/SCATTERPLOT(BIVAR)=LEV_1 WITH SDR_1
/MISSING=LISTWISE.
```

***Testing for homoskedasticity.**

```
GRAPH
/SCATTERPLOT(BIVAR)=Transcendence WITH SDR_1
/MISSING=LISTWISE.
```

```
GRAPH
/SCATTERPLOT(BIVAR)=Openness WITH SDR_1
/MISSING=LISTWISE.
```

***Normal distribution of residuals.**

```
PLOT
/VARIABLES=SDR_1
/NOLOG
/NOSTANDARDIZE
/TYPE=Q-Q
/FRACTION=BLOM
/TIES=MEAN
/DIST=NORMAL.
```

*****FREEDOM***.**

***Regression with partial plots, test for normal distribution of residuals, test for multicollinearity and extreme outliers.**

```
REGRESSION
```



```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Freedom
/METHOD=ENTER Openness Transcendence
/METHOD=ENTER Coffee Sweater
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee
/PARTIALPLOT ALL
/SCATTERPLOT=(*SDRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID)
/SAVE LEVER SDRESID.
```

***NOTE Slight tendency for heteroskedasticity.**

***Testing for outliers.**

```
GRAPH
/SCATTERPLOT(BIVAR)=LEV_2 WITH SDR_2
/MISSING=LISTWISE.
```

***Testing for homoskedasticity.**

```
GRAPH
/SCATTERPLOT(BIVAR)=Transcendence WITH SDR_2
/MISSING=LISTWISE.
```

```
GRAPH
/SCATTERPLOT(BIVAR)=Openness WITH SDR_2
/MISSING=LISTWISE.
```

***Normal distribution of residuals.**

```
PLOT  
/VARIABLES=SDR_2  
/NOLOG  
/NOSTANDARDIZE  
/TYPE=Q-Q  
/FRACTION=BLOM  
/TIES=MEAN  
/DIST=NORMAL.
```

*****STATUS***.**

***Regression with partial plots, test for normal distribution of residuals, test for multicollinearity and extreme outliers.**

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Status  
/METHOD=ENTER Openness Transcendence  
/METHOD=ENTER Coffee Sweater  
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee  
/PARTIALPLOT ALL  
/SCATTERPLOT=(*SDRESID,*ZPRED)  
/RESIDUALS HISTOGRAM(ZRESID)  
/SAVE LEVER SDRESID.
```

***Testing for outliers.**

```
GRAPH  
/SCATTERPLOT(BIVAR)=LEV_3 WITH SDR_3  
/MISSING=LISTWISE.
```

***NOTE: One extreme outlier - Testing effect with DFBETA and DFFIT values.**

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Status
```

```
/METHOD=ENTER Openness Transcendence  
/METHOD=ENTER Coffee Sweater  
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee  
/SAVE DFBETA SDFIT.
```

***NOTE: One case with too high DFFIT value -0,98 where treshold is 0,376.**

```
USE ALL.  
COMPUTE filter_$=(SDF_1 < 0.7 and SDF_1 > -0.7).  
VARIABLE LABELS filter_$ 'SDF_1 < 0.7 and SDF_1 > -0.7 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter_$ (f1.0).  
FILTER BY filter_$.  
EXECUTE.
```

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Status  
/METHOD=ENTER Openness Transcendence  
/METHOD=ENTER Coffee Sweater  
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee.
```

***Note: the result are relatively robust for taking out this outlier - which I can however not just do.**

```
FILTER OFF.  
USE ALL.  
EXECUTE.
```

***Testing for homoskedasticity.**

```
GRAPH  
/SCATTERPLOT(BIVAR)=Transcendence WITH SDR_3  
/MISSING=LISTWISE.
```

GRAPH
/SCATTERPLOT(BIVAR)=Openness WITH SDR_3
/MISSING=LISTWISE.

***Normal distribution of residuals.**

PLOT
/VARIABLES=SDR_3
/NOLOG
/NOSTANDARDIZE
/TYPE=Q-Q
/FRACTION=BLOM
/TIES=MEAN
/DIST=NORMAL.

*****IDENTITY***.**

***Regression with partial plots, test for normal distribution of residuals, test for multicollinearity and extreme outliers.**

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Identity
/METHOD=ENTER Openness Transcendence
/METHOD=ENTER Coffee Sweater
/METHOD=ENTER OpenxSweater OpenxCoffee TransxSweater TransxCoffee
/PARTIALPLOT ALL
/SCATTERPLOT=(*SDRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID)
/SAVE LEVER SDRESID.

***Testing for outliers.**

GRAPH
/SCATTERPLOT(BIVAR)=LEV_4 WITH SDR_4
/MISSING=LISTWISE.

***Testing for homoskedasticity.**

GRAPH
/SCATTERPLOT(BIVAR)=Transcendence WITH SDR_4
/MISSING=LISTWISE.

GRAPH
/SCATTERPLOT(BIVAR)=Openness WITH SDR_4
/MISSING=LISTWISE.

***Normal distribution of residuals.**

PLOT
/VARIABLES=SDR_4
/NOLOG
/NOSTANDARDIZE
/TYPE=Q-Q
/FRACTION=BLOM
/TIES=MEAN
/DIST=NORMAL.

GENERAL ANALYSIS OF ACCEPTANCE

Analysis and precondition test

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Acceptance
/METHOD=ENTER Openness Transcendence Coffee Sweater
/METHOD=ENTER Demand Competence Virginity Freedom Status Identity
/PARTIALPLOT ALL
/SCATTERPLOT=(*SDRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID)
/SAVE LEVER SDRESID DFBETA SDFIT.

***Testing for outliers.**

```
GRAPH  
/SCATTERPLOT(BIVAR)=LEV_5 WITH SDR_5  
/MISSING=LISTWISE.
```

***One critical outlier - Test with DFFIT and DFBETA.**

```
SORT CASES BY SDF_2(D).
```

***The outlier has a high DFFIT value --> Robustness of results is tested by excluding outlier.**

```
USE ALL.  
COMPUTE filter_$=(SDF_2 < 0.8).  
VARIABLE LABELS filter_$ 'SDF_2 < 0.8 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter_$ (f1.0).  
FILTER BY filter_$.  
EXECUTE.
```

REGRESSION

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Acceptance  
/METHOD=ENTER Openness Transcendence Coffee Sweater  
/METHOD=ENTER Demand Competence Virginity Freedom Status Identity.
```

```
FILTER OFF.
```

```
USE ALL.  
EXECUTE.
```

***Testing for homoskedasticity.**

```
GRAPH  
/SCATTERPLOT(BIVAR)=Transcendence WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Openness WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH
```

```
/SCATTERPLOT(BIVAR)=Competence WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Demand WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Virginité WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Status WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Freedom WITH SDR_5  
/MISSING=LISTWISE.
```

```
GRAPH  
/SCATTERPLOT(BIVAR)=Identity WITH SDR_5  
/MISSING=LISTWISE.
```

***Normal distribution of residuals.**

```
PLOT  
/VARIABLES=SDR_5  
/NOLOG  
/NOSTANDARDIZE  
/TYPE=Q-Q  
/FRACTION=BLOM  
/TIES=MEAN  
/DIST=NORMAL.
```

Making big bloc recursive model

*****.

***Making interaction between variables with cross-product terms.**

Compute IDxCoffee = Identity*Coffee.

Compute IDxSweater = Identity*Sweater.

Compute StaxCoffee = Status*Coffee.
Compute StaxSweater = Status*Sweater.

Compute VirxCoffee = Virginitiy*Coffee.
Compute VirxSweater = Virginitiy*Sweater.

Compute FreexCoffee = Freedom*Coffee.
Compute FreexSweater = Freedom*Sweater.

Compute CompxCoffee = Competence*Coffee.
Compute CompxSweater = Competence*Sweater.

Compute IDxComp = Identity*Competence.
Compute StaxComp = Status*Competence.
Compute VirxComp = Virginitiy*Competence.
Compute FreexComp = Freedom*Competence.

***Individually testing each variable with bivariate correlations.**

REGRESSION

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Acceptance
/METHOD=ENTER Contagion.

REGRESSION

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Acceptance
/METHOD=ENTER Status.

REGRESSION

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Acceptance
/METHOD=ENTER Identity.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Acceptance

/METHOD=ENTER Freedom.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT Freedom

/METHOD=ENTER Sweater Coffee.

Appendix 5 – Coded quotations from qualitative analysis

Explanation:

These are all the text pieces that have been coded in the qualitative analysis. It is almost completely raw output from Atlas.ti. The codes that have been attached to the respective pieces are shown in each headline and quotations that have gotten several codes will appear for each of the codes.

HU: Focus group interviews
File: [\\Cnas.ru.nl\u483134\Documents\Focus group interviews.hpr7](#)
Edited by: Super
Date/Time: 2016-05-05 18:15:37

Code: Competence {18-0}~

(245:245)

Codes: [Competence]

Erhm. And you say about the, erhm, about the fact that you use it regularly or something. I would also see a difference in like the technical, erh, state of the product. So a sweater, yeah, I mean it is just fibres put together and a coffee machine is a lot of different things that can break and stuff. Mmm, personally I wouldn't buy such a coffee machine anyway but let's assume I would. Then, erh, I could imagine that you would rent something like that so that

(273:273)

Codes: [Competence] [Self-transcendence]

M: I think, like for me, errhm. The, yeah, [other participant coughing], the big benefit what I see where I would rent such an item is that, erhm, I don't have to think where to leave it when I don't want it anymore. Because now although I'm like pretty aware of it or pretty like, mmm... Yeah, whereas the renting system more like that, things, machines can be taken back so like and end up in a new circle. I still wonder a lot of times what I need to do with a light bulb or with like a machine that doesn't work anymore or with, with bikes. I, I have no clue where I need to leave my bike when it is broken. Like really like done. Erhm, and I think that there would be a big benefit to like there you don't have to look it up on the internet or like ask someone, yeah.

(317:317)

Codes: [Competence] [Freedom]

M: Errhm, yeah I think that's, errh, like in some or in most cases err it is more like an extra, an extra thing. Like something that takes more energy, err, unless, err, it comes with some benefits. In the sense of, like that, that... With cars for example I think it is really nice that if something is broken then I do not have to arrange things or with my landlord for example the same, I mean, if the roof is leaking, then I don't need to take care of it. It, I just call him and then. If everything is ideal and he is not like giving me any problems then he's fixing it. And I think that's, that's really nice because not everybody needs to have or at least I don't need to have the expertise about these products.

(410:411)

Codes: [Competence] [Identity]

INTERVIEWER: Yeah... [Break]. I feel like there is maybe a comp... comparability between you using your tablet, it's very personal for you and something that you put a lot of energy into and you C using your sewing machine [C: Yeah] a bit. Which is something that you know a lot about and care a lot about [C: Mhmm]. [To C] Would you consider renting a sewing machine? Say, if it was equally expensive for you or so.

C: Ohh huu... I think the first impulse was: 'Ha, no why would I do that?'. No. I don't know. No. I was even thinking about taking my sewing machine to my internship if go to Switzerland. And I wouldn't do that with a rented... No, I don't know. It's... You don't rent friends. No!

2:80 [C: Hmmm. I think, I'd ..] (416:416)

Codes: [Competence] [Freedom]

C: Hmm. I think, I'd be willing to pay a little more renting, depending on service. Errh, depends on how good I know the thing. For a sewing machine, I can fix it myself, so I don't need it. But for the tablet for instance, or a laptop and there is something broken and they say: 'Okay, it's our property, just send it in. Errh, you have your stuff on the cloud, we will upload it and you'll get a new item', I'd love that, actually. Yeah. For the coffee machine, the same. Because usually it's not fixable. At least I cannot do it. So if I don't have the hassle of looking for a new coffee machine that costs 80 Euros again and this one is not old enough. I am just so annoyed this fact. So then I'll pay a little more.

2:81 [Y: Mmmhmm. Yeah, it would..] (417:417)

Codes: [Competence] [Identity]

Y: Mmmhmm. Yeah, it would be convenient. But the interesting thing that I think is, sometimes I have something and it breaks [C: Yes]. And I tried, because I have it, nobody is going to give me the following service. So I have to fix it. The once I tried then to fix it, it's more valuable to me [C laughs].

2:82 [C: Yes. I have that wi..] (422:422)

Codes: [Competence] [Identity]

C: Yes. I have that with my laptop now and I would agree. There's something... If you're really looking for it on the internet for hours and then you fix it yourself and you're proud of it, then you want to keep it a little longer. Although the screen is a little scratched or broken [Y: Yeah] or whatever. Yeah.

2:109 [With the tablet. Maybe about p..] (67:67)

Codes: [Competence] [Virginity]

With the tablet. Maybe about privacy or bots or viruses or something like that. Probably because I don't know anything about it. So, ehm, it would depend on how much I trust the person who rents it to me. That he has the knowledge and capabilities to give me a clean iPad and make sure that all the things that I didn't delete will be deleted when I, when I hand it in. I think that would be a concern for me.

2:116 [Ehm, and for the tablet, ehm....] (87:87)

Codes: [Competence] [Freedom]

Ehm, and for the tablet, ehm... Yeah again, if it's, if it's... If you can... If it gets stuck or something or it will not start up and you can just go somewhere and say: 'Hey, I have this problem. Can you fix it?'. And then you, like, you don't have to go a week without a... without it. Then, I think renting has a lot of benefits, if there's someone you can go to who has the knowledge to, I don't know, press a few buttons and fix the tablet for you.

2:121 [H: But these electronic thi..] (106:106)

Codes: [Competence] [Freedom]

H: But these electronic things, I have to admit. You avoid it getting it somewhere into a cupboard, and now you can recover the, the, the materials. You have to bring it back after the renting period is over. Then the iPad is back to the renter. Ehm, the person who, or the insti... Monday of the Tuesday morning [referring to his inability to find the right word, F giggles]. Whatever. The, the, the company who is renting them. They will have the machine back after it is worn down. And it wouldn't end up in a cupboard or with garbage or whatever. So you can restore the, the, the materials which it is made from. The cycle is closed then. For buying it is not that clear. You buy something and then it is out of the picture of everything. It is up to you what you do with it. For clothing, it is quite clear where it ends to but with electronics it's different.

2:122 [A lot of ele... [F interrue..] (106:112)

Codes: [Competence]

A lot of ele... [F interrupts: What do you do with the clothing?]. Old clothing. We first use them to paint the walls and that kind of things. After that we use them as towels to clean things and if they are really really worn down, they can go otherwise to the garbage or use them to make a fire with or whatever.

H: Towels! Towels are very useful, but that's another discussion. For these kind of things [referring to the tablet], if the lifespan is done, you cannot do anything with it. It's just, eh, dead piece of electronics. It should be better to return it. But how many people do? They are concerned about the privacy and the things that are on the tablet when it is broken down. So they rather tend to destroy it and throw it away with the, the garbage. Instead of bringing it back. Because it is privacy and all kind of things, people are afraid for. For renting, that would be the same but then you have to return it.

2:171 [AN: Yeah for me it's a trus..] (198:198)

Codes: [Competence] [Freedom] [Other]

AN: Yeah for me it's a trust thing as well. And know that it is kind of accessible, or I don't know. They can't hide. If you're having a shop, there's at least a place where you can go. For instance for cars I think, eh, or like if I find it nice that it's a different model than you normally use or if there is some weird things with it, that somebody can say like: 'Hey, you should open this door like this because otherwise it doesn't work', or I don't know. Eh, and often with, or, I don't know. With, eh, things which have a shop

maybe, I am also more used to that there is maybe like a kind of service system. I think that would be important for me for renting. That would make it really beneficial compared to buying. Because it almost gives you a guarantee that you can always make use of your product. Like even if it breaks, that you can just go there, maybe, and get a new one in the meantime. That's more guaranteed that you always have the product.

2:175 [K: I think service is real..] (206:206)

Codes: [Competence]

K: I think service is really important and I think, ehm, that even though you rent it or buy, I still want to have the same information. So if you buy something, you know it's your own and you want to know how it works. But if I rent it, I think it would be really an advantage or I would be more enthusiastic if they also explain exactly how it works. So I would say that both the service in both situations is the, really important. Because of course you are going to, if you have a new phone, you're also going to figure it out. But if you buy another device, which you never worked with before or you don't know it, I really like it if I'm in the shop, that they explain to me: 'Oh, this is how you can use it and this easy', 'Yeah this is a tip, what you can do'. And I think in both situations, it's important.

2:176 [G: Yeah but I think a..] (207:207)

Codes: [Competence] [Freedom]

G: Yeah but I think already they try to solve that when you buying things online that there's always the option of chatting with a, an employee. Somewhere or there are manuals available or ehm... If I want to know how it works or if people are, yeah, pleased with the product, then I look on forums. So yeah, it is possible to find the information online but it will take more effort. And, I prefer to go to the shop. Because there are, eh, yeah, people that know about this product already. They can tell you in person, like: 'This is how it works. I can show you an example'. Or, eh, I need to download things, I don't know. So, it is possible but it is more time saving to go to a shop.

2:177 [AM: I can drive a car like ..] (211:211)

Codes: [Competence] [Virginity]

AM: I can drive a car like really well but again there is just a difference in renting and buying a car like I've seen it, eh, back in my country that people who rent car, a car, they are more, eh, more careless about handling it. And people who have their own car they are like, they really treat them as like their babies or something. So it is also a big factor when buying something, which everybody knows or is supposed to know how to drive, they are buying a car. So they are good at it. They can be good and they can be bad as well. Eh, in India mostly they are bad drivers [laughs]. But, eh, yeah. That how it works. They are less concerned about the scratches on the car if they rent one. You don't have any rules or any laws that are, that the renter can really charge you a lot of money or sue for destroying it.

2:179 [AN: I think that if you kno..] (213:213)

Codes: [Competence] [Virginity]

AN: I think that if you know a lot about a product. For instance, how to repair a bike, then I assume that you also have some interest in doing it and taking care of your product and then I would think if I would have that with a product, that I would want to have it and take care of it myself and be sure it is always in a good condition.

2:180 [G: Ehhh, yeah. I, eh,..] (218:220)

Codes: [Competence] [Virginity] G: Ehhh, yeah. I, eh, well I had an example in my head about, eh, cooking equipment [laughs].

Yeah, I, I also think, eh, most are not really careful with those things. For example with a blender. Ehm, it looks really straight forward but you really need to yeah to clean it well and not put in, ehm, ice, ehm cubes for example. Ehh, so yeah. It's a random example, I know but yeah. I would not like to rent it for that case. I would like to own it for myself. Cause I know that it will be in the same state as it was.

2:181 [AM: Ehh, eh, here in Nether..] (221:221)

Codes: [Competence] [Virginity]

AM: Ehh, eh, here in Netherlands you don't often use the pressure cookers. I think you know about them [G: yeah, yeah, true]. It's a lot of safety involved in that and it's always better to buy a new one than to rent one because it can cause a lot of trouble. It can also cause deaths at time [G: yeah, true].

Code: Freedom {51-0}~

2:5 [Also because it feels a bit li..] (244:244)

Codes: [Freedom]

Also because it feels a bit like buying it on credit. And I think it is really weird to do that. I really try to avoid it because introduces uncertainty. What if you break it and it is much... I mean that is likely both a sweater or a coffee machine. What if you break it, you have to pay everything back. I... Yeah, I really ehm, I don't know, if it something that I use regularly, I think usually it makes more sense to buy it.

2:13 [But I think you could. I could..] (248:248)

Codes: [Freedom]

But I think you could. I could also go renting if there is the deal with it that like if it is broken or like once I, after a year or after a

couple of months, erhm, I think that I want something else, which makes like better cappuccino or has different features that, especially with these expensive, erhm, yeah, machine that can be outdated or that certain trends can be in, erhm, then I can imagine if I can exchange it more easily, then I can rent it if there are some extra benefits with it.

2:16 [T: But generally I find i..] (253:255)

Codes: [Freedom]

T: But generally I find it a really strange idea to not own it. Because it is just, I mean if you own, if you buy something, it is an investment that you make and it is finished. There will not be anymore costs in the future. Unless it breaks and you have to fix it. But that's your own risk or responsibility but it is not like somebody gonna charge you or hold you accountable for, for whatever you do with this item. Cause it is entirely my own responsibility, my own choice also. And I feel like if I rent it, I am constrained in that. For instance, I couldn't paint it orange... M: [laughs]. T: On king's day. I couldn't because it is rented. Whereas if it is my own, I could. I could do with it whatever I wanted and I prefer that idea.

2:17 [W: Yeah, that's like with..] (256:256)

Codes: [Freedom] [Performances]

W: Yeah, that's like with renting a car. Erh, my girlfriend is always more in favour of flying somewhere and then renting a car there. Whereas I would prefer to drive there so that you have your own car and you can do... It's not that you're going to crash your car and you wouldn't do that with a renting car but it is just like: you can do whatever with it and you don't have to worry about all the limitations that you have when you rent something. Erh.

2:18 [M: I think, like for me, e..] (257:257)

Codes: [Freedom]

M: I think, like for me, erh, the thing of renting also is that, like, even though a coffee machine you probably think about it and look for a best option for you and stuff like that. But that already involves quite a lot of thinking. And like a process before you actually have the machine. But if you like think about renting then there is like a whole other process as well. In the sense that you have [other participant coughing] to read through the terms, whether the terms, like, suit you. If you agree with the like the renting, the price, the, the, like the period that you have to the machine. So it's a whole lot more to think about and if you, erhm, just easily wanna buy something like, you have the idea: I want to have this coffee machine. Then, to me it seems more complicated.

2:19 [M: I would say the opposi..] (260:260)

Codes: [Freedom]

M: I would say the opposite [giggles]. Sorry, that's, that's how I have to make an investment and it should be the best for long time, be trustworthy and I would really look in details for, for that product. But if it's just renting, if I just don't like that, I would give it back and it's much more easy for me. Like a quick, 'I like or I don't like'. If I like now but well at the end I see it's not exactly what I was expecting, well it's not mine. I can give it back. So it's for me it's easier.

2:20 [T: I feel like, if you re..] (264:266)

Codes: [Freedom]

T: I feel like, if you rent, you are constrained in the amount of choices that you have because a renting company will never have all choices. Never. Because it is - I mean, if you go somewhere to rent a car they have...W: [speaking at the same time] The popular things are already gone. T: ...a certain. [Responding to W] That might be the case. But also, they might not have the specific one that I want. That, so, there's always fewer choices than on the free market.

2:30 [But more because it's just, er..] (280:280)

Codes: [Freedom]

But more because it's just, err, because it's not, yeah, worth the, err, whole organisational setup of renting. I think it is just easier if somebody... If I just pay somebody once and he gives it to me and we're done. The interaction is over and I can do whatever I want with it. Then I can last with it as long as I want. We don't have to think about each other anymore, the guy selling and the person buying. And with renting, yeah, I think a sweater is not... Yeah yeah.

2:41 [Erhm, but like, for the longer..] (307:307)

Codes: [Freedom]

Erhm, but like, for the longer term, err, I think indeed, like you said, that errhm, it's true that you, like for me at least like, if, err, renting means that it can keep me up with the speed of the technology improvement, then there would be a benefit. But on the other hand, if I imagine now for example my laptop. Erhm, there is so much stuff on there, like photos, documents and everything. And of course I can put it on a, on a like hard disc and then ehm, err, and then put it on a new laptop. But there is an extra activity now it is just on my laptop and it is fine. I know where to find it and then every time after. Like the same with a telephone. If you have to like put the numbers from one telephone on the other, then photos and then everything. It takes a lot of effort. So there I would like would hold me a bit from renting. The idea that I have to do this more than I need to do it now.

2:43 [Also I really dislike, I mean,..] (310:312)

Codes: [Freedom]

Also I really dislike, I mean, if you, if you imagine that you rent several things. And you have a monthly income of say 300 Euros. Then you have a tablet rented, you have a coffee machine rented and three sweaters. Say that's 100 euro every month that you pay for renting things. Now imagine, your bicycle gets stolen and you need to buy a new one. All of a sudden your income for the month is gone but you still have these payments. And they will come every month but you don't have the money so it'll dry

you up pretty quick. In, in situations that you can't anticipate. So for me, renting things creates additional uncertainty.

2:44 [M: Errhm, yeah I think tha..] (317:317)

Codes: [Competence] [Freedom]

M: Errhm, yeah I think that's, errh, like in some or in most cases err it is more like an extra, an extra thing. Like something that takes more energy, err, unless, err, it comes with some benefits. In the sense of, like that, that... With cars for example I think it is really nice that if something is broken then I do not have to arrange things or with my landlord for example the same, I mean, if the roof is leaking, then I don't need to take care of it. It, I just call him and then. If everything is ideal and he is not like giving me any problems then he's fixing it. And I think that's, that's really nice because not everybody needs to have or at least I don't need to have the expertise about these products.

2:47 [M: And I think also, one t..] (319:319)

Codes: [Freedom]

M: And I think also, one thing T said, errhm, with that you have to pay this monthly fee. I think this can really be a problem because. Yeah you, like now if you have the money, you can buy something and you can kind of estimate what you spend every month. But if, like, imagine that all the things you rent, ehm, like are. Like that you rent all the things you have at your house, err, or that you use. Then, like then it's also easy but now, the in between like renting half of the things and owning half of the things. It really makes it difficult to estimate, like how much money you have every month or like how much you can save. Because with some things you make it like a onetime things so I don't know, you spend 300 Euros and then I have so much left. But on the other hand, I also every month have to pay all these ehm. Like you have to kind of keep in mind two perspectives.

2:53 [C: Uff, okay for the ..] (350:350)

Codes: [Freedom]

C: Uff, okay for the tablet my immediate response is I'll rent it if you know all my data is on a platform or something. Because I am not interested in having that thingy, every tablet would do. But I want my data, my photos, my contacts, whatever and if I can easily transfer that from one machine to the other, I would not care.

2:59 [C: But that's actuall..] (358:358)

Codes: [Freedom]

C: But that's actually quite funny because when you said: 'Oh tablet, I don't expect it long for so long'. For this is actually an argument to rent it because I know if it's broken after two years, then if I rent it, I get a new one and I don't need to bother with looking for the perfect tablet. [To INTERVIEWER] I don't know if I have a contract or something. Then, it would just continue and they will update me to the latest technology. Which I personally don't like to do.

2:62 [C: Yeah, I could go w..] (364:364)

Codes: [Freedom]

C: Yeah, I could go with that somehow. But you say: 'If I make it mine, if I feel attached to it, then I want to buy it'. I can understand. But I mean if it's easily transformable. All my apps, everything. Then I personally wouldn't mind but if... You know for laptops sometimes you need to install all the products again and I don't like doing that so if it's not easy transferable. Then I think I'd also prefer to buy it. Like I did with my laptop.

2:67 [Y: Mmmmm... Erhm... I, I,..] (378:378)

Codes: [Freedom]

Y: Mmmmm... Erhm... I, I, I... I feel that, ehm, I don't tend to rent a thing, pre... eh, generally. Ehh, if I want something but I don't... I'm not kind of person that I want everything. So once I want something I would make sure that I want it. If I... If I'm sure that I want it, I'll buy it. And ehh, mmm... For me the feeling of possess this thing, ehm, makes me use the best use of it. Make the best use of this thing. Because, ehh, I'm free to use it. Then I would use it all the time

2:74 [C: Okay. Hmmm. I don't..] (389:389)

Codes: [Freedom]

C: Okay. Hmmm. I don't know how... I think it is easier for me to explain with a phone because I don't have a tablet but it starts with the contacts. If you have your contacts somewhere in a cloud and you get a new phone. Zak, you have it. So, I, I don't know. And.

2:80 [C: Hmmm. I think, I'd ..] (416:416)

Codes: [Competence] [Freedom]

C: Hmmm. I think, I'd be willing to pay a little more renting, depending on service. Errh, depends on how good I know the thing. For a sewing machine, I can fix it myself, so I don't need it. But for the tablet for instance, or a laptop and there is something broken and they say: 'Okay, it's our property, just send it in. Errh, you have your stuff on the cloud, we will upload it and you'll get a new item', I'd love that, actually. Yeah. For the coffee machine, the same. Because usually it's not fixable. At least I cannot do it. So if I don't have the hassle of looking for a new coffee machine that costs 80 Euros again and this one is not old enough. I am just so annoyed this fact. So then I'll pay a little more.

2:83 [C: Errrhf... Yeah, I t..] (426:426)

Codes: [Freedom]

C: Errrhf... Yeah, I think... I mean there are some offer that you have a subscription for a wardrobe and then you go in and you pick whatever you want and you keep it for a month. That's basically like renting. I think that is very appealing for fashion. More

appealing than using the technology things. Because for fashion, it often happens to that I have something in my wardrobe, either I got it from somebody or I bought it and then I'm not wearing it. And with... Yeah, I don't know. And if you... have it and need to give it back and you really really like the sweater, then you can still decide to buy it. If you really want it. So I, I think for fashion it's nice. Because fashion is fast and changing. And... I'd like to get more involved with fashion than with tablets. Yeah.

2:89 [Ehm, but for me it would also ..] (13:13)

Codes: [Freedom]

Ehm, but for me it would also very much depend on the conditions on renting it. Like how far would I have to travel, ehm. And especially with the iPad, if it is broken, like where do I send it to. How long does it take till I get another one, like how much of the liabilities put on me. Like how much do I have to prove that it was not my fault, that I still have to pay it. So then... I think especially the conditions and how close it is to my house, ehm, would very much influence my decision to either rent or buy it. But in general, ehm, I'm, I don't have like, eh, all this in mind. Because in general when you rent it for a longer time or when you have a clear... Ehm, a clear time frame within you rent it, then you can just use it whenever you want. It's not that you have to say, eh, 'Oh I want to rent it between one and two' or, and then when it's not there, you cannot have it. So that's my first, eh... My first thoughts.

2:91 [But... It really depends on th..] (17:17)

Codes: [Freedom] [Performances]

But... It really depends on the purpose if I would do that. Probably I'm somewhat more drawn back in that. I don't have that much clothing. I always have those old crappy things [F laughs]. And I don't treat them that well. So the chance is that I use them for digging a, a whole in the ground or things like we do in the study of environmental sciences that it gets dirty, it get damages. The chance is quite big. I also came from a farm. So we have all suits, yeah. I think, buying grants you for this kind of cloth the safety that it doesn't matter what happens. It's your problem. It's not getting a problem with a tail of, eh, yeah... How can I say that? If something got damaged, you say: 'Oh, uff, shit I have to buy another one'. But if you rent it, a whole chain of trouble will start. 'Okay I have to turn it back. I have to say what, how was that done. How much damage will it be. What is the, the leftover value of it'.

2:92 [For a sweater I think, the thi..] (17:17)

Codes: [Freedom]

For a sweater I think, the thing is too small to rent it. But for the iPad, it's very different. An iPad is an expensive device. It really depends how often you use it but... If you are a heavy user of the iPad, yeah, renting probably will be cheaper than buying it because after a year you can say: 'Okay, I think this machine is really outdated now'. And if you have a nice contract or so whatever, I don't know what kind of business model will be behind it, then it ensures you that the machine will work. Because if there is something wrong with it, which is not your fault. Then you can go back with the iPad and yeah I have a problem and I pay the rent and for a working product. But also buying it. Yeah, an iPad is really expensive. [INTERVIEWER: Mmmm] But even separate from the price you wouldn't have problems with that as well. It's... If you have problems with the iPad, it's not such a big problem that you can't carry the problem. For example, if you have a big problem with your car, okay, you need insurance for that. But for an iPad, okay, that's annoying but you can handle. So for the iPad, I would be quite neutral on that.

2:94 [Ehm, but... If you go out, eh..] (20:20)

Codes: [Freedom] [Performances]

Ehm, but... If you go out, eh, if you go out or you have like, I don't know with Christmas a brunch and you want to have this nice sweater but in the shop it's really expensive. So then I would really like to rent it, like: 'Ahh, I got this, this sweater'. Ehm, yeah because I know there are places where you can rent clothes.

2:97 [H: If you rent everything. ..] (21:21)

Codes: [Freedom]

H: If you rent everything. You will have a lot of administration about that.

2:98 [F: Ehm, for me it would be..] (23:23)

Codes: [Freedom] [Other] [Performances]

F: Ehm, for me it would be the easiest if there would be a shop nearby that's open before you go to work and when you come home [giggles]. So you can just stop by on your way to work stop by and say like: 'Ey, yeah, I'm returning my sweater' or 'Do you have a new one?' or like 'My iPad is broken, erh, can I get a new one?'. Ehm, that would be the ideal situation. I mean, it's not really, eh, I don't think it's a really suitable business model. But that would be really nice.

2:99 [F: Because for me it would..] (25:25)

Codes: [Freedom] [Other]

F: Because for me it would depend like if I have rent it like for a day or for seven days, then it might be different like with your personal data and everything. Then it would be more tricky than when you just have it for two years.

2:100 [H: I can agree with that. A..] (30:30)

Codes: [Freedom] [Performances]

H: I can agree with that. A service, eh, that is... What you said for example when you can go yourself. When you have to return something when there is something wrong or you want something different, you have to take action yourself instead that they will all bring it your home or so. I don't like that idea. I grew up at a farm. It's really expensive to have something brought to your home [F giggles]. So I'm quite used to the model that you have to go somewhere if you want something. And for this thing, yeah,

all the, ehh, [00:13:55 - inaudible word]. You can decide whether you want to go there, at your time. And not that you have to wait out somebody who will bring something to your home.

2:101 [H: Yeah, those things are q..] (32:32)

Codes: [Freedom] [Other] [Performances]

H: Yeah, those things are quite small. You can carry them. So it's no problem to take them with you when you're going to do something else. Like the groceries or so. If it is as big as a bicycle then the problem will start. When you have to go, yeah, between two other things, you cannot get the bicycle back. For these things, it's easy to handle.

2:103 [F: Ehm. During my studies ..] (37:37)

Codes: [Freedom] [Performances]

F: Ehm. During my studies I considered it. It might be handy to take notes but I'm already..., almost done so. That argument kind of goes. But I think, if I would, I can imagine if I would work somewhere that I would have to travel in the train all the time, then it might be nice because it is easier to carry than a laptop, especially in the train. You don't have to like, how do you say? Flap it open [giggles]. And I can just like, it's more easy to return email and make appointments than on a smaller screen that's on the phone.

2:111 [INTERVIEWER: Yeah, okay. Ehm, ..] (72:75)

Codes: [Freedom]

INTERVIEWER: Yeah, okay. Ehm, and... Okay. H you already said, eh, that, eh, it's more troubleless to buy something, to own something. I think you, you, said that it's a whole chain of trouble if something breaks and you have to rent it and you have to return it or something like that. Ehm, so does that also mean that you feel more free to use the product how you want to when, eh, when you own it? H: Yes. For all types of products.

2:112 [F: Ehm... A little bit but..] (77:79)

Codes: [Freedom] [Other]

F: Ehm... A little bit but ehm, yeah, I, I, I trust people a lot. So, I trust it when something happens and I used it normally that we can just solve it. And then it would be... I would actually really like it if somebody can solve my problem without me having to pay a lot of money for it and trying to like find a new one.

2:114 [H: Okay that's not even the..] (85:85)

Codes: [Freedom]

H: Okay that's not even the worth value of my car, you know. But... With such prices, it can be nice to rent it. Because then you know for sure that it can be fixed or replaced when it is not your fault. So that's... For example in half of the cases when it is not your fault, you can get away with it. In the way you want. Because it is not your fault so it shouldn't be your problem, in that sense. When you buy something, and it break down prior to the end of life, you go back to the warranty and that kind of things, which always has fails. It always breaks down half a month after the warranty pasted out.

2:116 [Ehm, and for the tablet, ehm....] (87:87)

Codes: [Competence] [Freedom]

Ehm, and for the tablet, ehm... Yeah again, if it's, if it's... If you can... If it gets stuck or something or it will not start up and you can just go somewhere and say: 'Hey, I have this problem. Can you fix it?'. And then you, like, you don't have to go a week without a... without it. Then, I think renting has a lot of benefits, if there's someone you can go to who has the knowledge to, I don't know, press a few buttons and fix the tablet for you.

2:115 [F: Ehm... I think actually..] (87:87)

Codes: [Freedom] [Other] [Performances] [Self-transcendence]

F: Ehm... I think actually the price would be one of the most important factors. How much it would cost to rent it. Like whether it would be worth renting it or whether I can do a longer time without it, save the money. Ehm, and buy it with clothes... Ehm, I would actually like to rent it if it's like in a store near my house. Because then, ehm, it's just like, a new clothes every two weeks would be nice [laughs]. Ehm, so for that, yeah. Like, ehm... Yeah so, I don't know. I would probably prefer renting over buying if it's still like reasonable

2:121 [H: But these electronic thi..] (106:106)

Codes: [Competence] [Freedom]

H: But these electronic things, I have to admit. You avoid it getting it somewhere into a cupboard, and now you can recover the, the, the materials. You have to bring it back after the renting period is over. Then the iPad is back to the renter. Ehm, the person who, or the insti... Monday of the Tuesday morning [referring to his inability to find the right word, F giggles]. Whatever. The, the, the company who is renting them. They will have the machine back after it is worn down. And it wouldn't end up in a cupboard or with garbage or whatever. So you can restore the, the, the materials which it is made from. The cycle is closed then. For buying it is not that clear. You buy something and then it is out of the picture of everything. It is up to you what you do with it. For clothing, it is quite clear where it ends to but with electronics it's different.

2:123 [K: Yeah, sure! Ehm, we fir..] (127:127)

Codes: [Freedom]

K: Yeah, sure! Ehm, we first start with the sweaters right? [INTERVIEWER nods] Yeah. Because I think, ehm, renting a sweater would be a outcome. Because then you can, ehm, have a lot of clothes and also get new clothes every month. And then you have

some different ehm, colours or, or different ehm, clothing, you can use

2:135 [I think it's a product, you ma..] (129:129)

Codes: [Freedom]

I think it's a product, you maybe use if you have a tablet for a long time on a daily basis. Ehm, and then you can know yourself, how careful you are with it or not. And if it breaks, then it's only your loss and you don't have to pay a new one. If you don't feel at that point to replace it.

2:148 [. But if you want it for a lon..] (141:141)

Codes: [Freedom]

But if you want it for a longer time, yeah. I can imagine that people want to have it on, for themselves. But if it breaks or you have some trouble with it, you have to pay it yourself and I assume that when you rent it, they will solve the problem for you. Then you don't have to pay extra for it. So, yeah.

2:149 [AN: I was also thinking one..] (143:143)

Codes: [Freedom] [Performances]

AN: I was also thinking one thing about the last question. That it is also nice with keeping things yourself, that in the morning, you don't have that much choice. You can just sometimes know with your favourite clothes, they are there and then... [laughter]. And in those kind of periods something slowly becomes favourite and you know that it is there. In the morning is not my best moment of the day and it's best if I have as little choice as possible. Like, ehm, and eh, I think in moments where you are busy, maybe you don't want to have the choice of even more stuff to choose from.

2:157 [AM: Well, I agree with you ..] (169:169)

Codes: [Freedom] [Performances]

AM: Well, I agree with you that, yeah it may end up being more than what you pay when you buy the product. When you're renting it and you don't know the horizon, the time frame. But from my, eh, personal experience I can talk of one thing. That's my hockey stick. I joined the hockey team here and didn't really know if I'm going to play the team or not. And, eh, I rented a hockey stick. And, eh, I played to a point until I got to know that yeah, this would work for me. I join up well in the team and, and, eh, yeah, this is my sport. And then, at that point, I bought a new one. Because then I knew that I am not going to leave the team now. So, I decided to invest in one. And now I have one and, eh... So I don't rent it anymore. So I, in my opinion it's really hard a product if you don't really the horizon, the time frame you're renting it for.

2:158 [K: It's, eh, with the exam..] (170:170)

Codes: [Freedom] [Performances]

K: It's, eh, with the example, yeah, with the hockey, you also rent your clothes there. So you pay a certain fee for your, your, outfit. So, eh, the, the skirt and the T-shirt, you rent. You actually rent it because you buy a fee per year. And you have your own socks because that's more hygienic, I think. But, but it's an example of renting, renting your clothes for sports. Because then you don't have to invest in new ones because you can just start playing hockey. It's rather expensive to get the whole thing new. Or the whole outfit. And, eh, what you do in Wageningen is that you pay a certain fee and every year you all get someone else's T-shirt or whatever but you don't have to invest in it yourself. So I think in the end, it is cheaper. Because it really gets, eh, oh wait. How do you say that? It gets bad really easy. Because you use it every week and you wash it every week. So it's an example of renting.

2:160 [AN: I only thought about my..] (175:175)

Codes: [Freedom] [Performances]

AN: I only thought about my bicycle in France. That I rented for four months and if I would have stayed longer, I would just have kept renting it because it was really nice, eh, systems there. Eh, and if it would break down, they would repair it for you. If your tyre would get punctured [starts laughing]. It the thing I hate most. You could just bring it back and without paying extra. So you knew at all times that you would have a bike for a good price, eh, which is not that likely to be stolen because it was like extremely yellow [laughs]. And with a logo from the firm. Ehm, but that, eh, that was one thing, I thought, I could rent it for the rest of my life

2:163 [K: I'm actually a bit used..] (184:184)

Codes: [Freedom] [Performances]

K: I'm actually a bit used to it because in sport teams often . Well I was used to that I bought my own skirt, my own socks and all the other attributes and the shirts were from the club itself. And you, yeah of course you, you play a season with it. But it could be that the next season, you have to take over shirts from another team, or, or whatever so it is your number in the end, you don't own it. You didn't bought it because sponsors paid for it so. With sports, I think it is rather normal, in my opinion. Especially the t-shirts, I am used to it that you wash it all together and yeah. It's the way it is but I wasn't used to it when I came here in Wageningen that you pay a certain fee which is doable actually. And that the whole tenue [don't know what that word means] is from the club and not for yourself. But I thought it was actually easy. Because if something is broken or it is worn out, you get a new one. Without paying extra. So, yeah with sports, I think it is okay. But I think it is different when it are your daily clothes.

2:165 [Eh, I would say that you do it..] (187:187)

Codes: [Freedom]

Eh, I would say that you do it online. Of course it is also good if there is a store that you really can shop. But yeah, it's, it's... I think a web shop is fine as well and that they deliver it at home. So that you can just go on a web shop to, to rent your clothes and they deliver it at your place. And I think it is important that you immediately get a box or a, a something along with it if you want

to sent it back so you don't have to put too much effort in it to get it back to the, to the store or where you rent it from. And, eh, yeah, I think they should make it easy to use. So you just order it and within the next few days you get and you already have something, eh, in the box to sent it back when you're, you don't want to have the item anymore. I think that is important.

2:166 [G: Yeah. I think, ehm..] (188:188)

Codes: [Freedom] [Other]

G: Yeah, I think, ehm, I am more concerned about my personal accounting. Ehm, like, what I need to pay for these separate items, I am renting. So what would be very useful for me would be to get, eh, some kind of an email or an alert like: 'In two days' or 'In three days we will, eh, eh, you need to pay your rent., Or it will be transferred or whatever. Ehm, so that you can get some kind of system that you know which days, you have to pay for the kind of stuff. Yeah [laughs] don't know if I can explain it, but.

2:169 [Besides that, just like an eas..] (195:195)

Codes: [Freedom]

Besides that, just like an easy system, which doesn't take too much time. Or maybe it takes the first time a bit more time but just after that it is easy.

2:170 [AM: Uh, I agree with that. ..] (196:196)

Codes: [Freedom] [Performances]

AM: Uh, I agree with that. I also would rent, eh, from a physical shop or something and online. And I did that like last week. I was in Rome and I rented a bike for just €10 for the whole day. Ehm, by just giving a document and, I personally would like that kind of things for renting. Not a sweater or something or something I would have for a lot longer. No I am not going to take my bike from the Netherlands to Rome for a day. And for €10 deposit you can have it for the whole day so. Yeah it's... And you get to choose your bike. There are different kinds of bikes there. I think only when you choose things online, it's much different from what you, eh, like do in person so. Ehm. Yeah that's my opinion.

2:171 [AN: Yeah for me it's a trus..] (198:198)

Codes: [Competence] [Freedom] [Other]

AN: Yeah for me it's a trust thing as well. And know that it is kind of accessible, or I don't know. They can't hide. If you're having a shop, there's at least a place where you can go. For instance for cars I think, eh, or like if I find it nice that it's a different model than you normally use or if there is some weird things with it, that somebody can say like: 'Hey, you should open this door like this because otherwise it doesn't work', or I don't know. Eh, and often with, or, I don't know. With, eh, things which have a shop maybe, I am also more used to that there is maybe like a kind of service system. I think that would be important for me for renting. That would make it really beneficial compared to buying. Because it almost gives you a guarantee that you can always make use of your product. Like even if it breaks, that you can just go there, maybe, and get a new one in the meantime. That's more guaranteed that you always have the product.

2:174 [AN: I think that, ehm, for ..] (202:202)

Codes: [Freedom] [Self-transcendence]

AN: I think that, ehm, for me it is not that much leisure time. I don't enjoy it that much. [G: okay] [Laughter]. I think the good thing is that you can try it and know if it is like right for you.

2:176 [G: Yeah but I think a..] (207:207)

Codes: [Competence] [Freedom]

G: Yeah but I think already they try to solve that when you buying things online that there's always the option of chatting with a, an employee. Somewhere or there are manuals available or ehm... If I want to know how it works or if people are, yeah, pleased with the product, then I look on forums. So yeah, it is possible to find the information online but it will take more effort. And, I prefer to go to the shop. Because there are, eh, yeah, people that know about this product already. They can tell you in person, like: 'This is how it works. I can show you an example'. Or, eh, I need to download things, I don't know. So, it is possible but it is more time saving to go to a shop.

2:178 [K: I think what you were s..] (212:212)

Codes: [Freedom] [Performances]

K: I think what you were saying with your hockey stick or when you are going to practice a new sport. It's always nice that you can rent it. That you have that possibility. Ehh, so that you don't invest too much money in it if you are not sure whether you like it or not. So, I think with the example you gave or if you go winter sports and you want to learn ski, skiing. I think it's really nice that you can rent it and don't have to buy it immediately. So yeah, I think especially with new things it's... If you want to try it, it's good that you can rent it but in the end if you're, if you... For example I also want to own my own hockey stick now because it's mine and I really [laughs] will not share it with someone else. So it depends on the product I think.

Code: Identity {24-0}~

2:1 [M: Like the comparison im..] (243:243)

Codes: [Identity]

M: Like the comparison immediately is really some. Because a coffee machine is easy to rent for me in my opinion. If it is good, it is okay. But I wouldn't definitely say the same for a nice, ehh, lovely t-shirt. So clothes, now. Erhm. I don't know. I am not

wearing a coffee machine so it is not so personal relation. It is just a nice object that could work or not work but that doesn't [Other participant coughing]. There is just. You know you put it on the table. It is not something SO personal. So, for me it is: for one it is fine for the other, not so much.

2:7 [W: Hmm... Erhh, I think, ..] (245:245)

Codes: [Identity]

W: Hmm... Erhh, I think, mmm, a little bit of the same what you guys say. On one hand, erhh, a coffee machine is not very personal, you said. I agree. Erhh, but, yeah, I'm not sure how that would really affect my decision to rent or not to rent it.

2:10 [And maybe you can also do that..] (248:248)

Codes: [Identity]

And maybe you can also do that with renting but like now I kind of own it and then I have it in my wardrobe and like I can have it and wear it whenever. And I think indeed with that it is so personal, so, erhm, yeah.

2:29 [W: I don't have that with..] (280:280)

Codes: [Identity]

W: I don't have that with a lot of things. I was thinking about, errrh. I was reading my diary the other day about me before I flew back from my travelling on the west coast of USA. I remember I went to a shop and... or a mall and I bought two jeans there. And I still have, err, err, two jeans that I bought in Seattle. So I was thinking like: 'Ohh yeah, that's cool. I bought jeans in Seattle'. Err, but thinking about it, like I don't really have a very personal connection to clothes. I don't really care a lot about clothes or fashion. And so maybe rarely, or yeah once every now and then I will think of a shirt or a sweater or something that I think is really cool or that is funny or something and then I'll wanna keep it for a long time. But for the rest, I don't care too much about clothes. I wouldn't necessarily mind renting because of it being a personal thing.

2:31 [T: I have a bit similar i..] (281:281)

Codes: [Identity]

T: I have a bit similar idea about this. For me most, most of clothes are also not really personal or special. Some of course I remember: 'Oh, I bought this in Guinea and it was a special place' or something. Generally I don't have this

2:34 [M: Yeah, I find it difficu..] (289:289)

Codes: [Identity]

M: Yeah, I find it difficult. I was thinking about it. Like, I mean for example, when errm, when I, I see someone that has the same shirt as I have. Errhm, I'm, I'm like, I'm not super comfortable with that [laughs]. In the sense that of course I don't buy my clothing like in a gallery or something so I know there are people with the same stuff. But still, errhm, it's, like I associate it with me. Errhm, so I don't really like to see other people like wearing exactly the same clothes. Errm, but on the other hand I was thinking that errm, like do I really, like, errm, find it important that it is mine? That I, err, that I own it? I, I don't think that that is very important errm, feeling to me. It is more that I can use it for the time being. Then there, I have the feeling that I really need to own it. Because I can also imagine that, errm, or imagine like, sometimes when I, errm, do like a cloth swap or something with friends, err, and a shirt that didn't wear for a long long time and they wearing it afterwards, like with proud or like happy that they can wear it, then I am also kind of proud that they are wearing my stuff or that they are happy with my stuff. But then it is not anymore that we can wear the same thing at the same time kind of. Then I know that I had my period with it before and then I, then they have the period with it, kind of. Errm, so I think for me it is more, being original or having, having my identity with that, the possibility to use it at that moment than really owning it. Don't know if I make the distinguish clear but...

2:55 [Y: Yeah for me, eh, for ..] (351:351)

Codes: [Identity] [Performances]

Y: Yeah for me, eh, for tablets I would, eh, the immediate idea for me is to buy it. Because for me, erh, I would tend to buy a digital product because I don't believe digital products last a long time. Then, errh errh, then I would like to use it from the beginning to the end. And so I could design, like how it is arranged and, eh eh, what kind of applications I would install. Anyway I got the feeling of possessing it.

2:60 [Y: Could be a good reaso..] (359:361)

Codes: [Identity]

Y: Could be a good reason to rent it also. But the, the thing is... I think between things the most of... The biggest difference I can, I see is, this [the tablet] is something that you can change. I mean, there are things you can design. I can design. Like I, I install different applican... Ah arh, applicants. And I put different, eh, things that I like to use... The way... So it's... It could be unique.

C: Ahaa...

Y: So if I possess it then it's really unique. It belongs to me. It's mine.

2:61 [C: Ah, okay. Y: ..] (362:363)

Codes: [Identity]

C: Ah, okay.

Y: And the coffee machine doesn't do the same thing. It's like I got it but it's the same which everyone else has.

2:68 [If I, eh, if I don't, mmm, hav..] (378:378)

Codes: [Identity]

If I, eh, if I don't, mmm, have this attachment to it, a stuff, I, I don't know, I got... It's hard to express, like if I got a book. I buy a

book. I read it very, eh eh, seriously or, eh, with all my heart. I make notes on the book. I, I cross it anyway. Yeah as my personal book. But if I rent it, or not rent. I borrow it from the library, I would consider if I put too much marks on it, it's not very good. And then I cannot use it fully [C: Ahh, okay]. So I like to buy things and use it fully.

2:72 [C: And I have a person..] (384:384)

Codes: [Identity]

C: And I have a personal attachment. It has a name. Ehh, sometimes I tell my boyfriend that she is, eh, fooling around like it is a person - to me. But I don't have that with any other thing. Yeah.

2:78 [Y: Mmmmm. And more! I thi..] (406:408)

Codes: [Identity]

Y: Mmmmm. And more! I think. Because I can design... I can design, ehh... I can make it different from the other tablets even it's also an iPad, who else have it [C: Aha]. But mine is different because I... I have different applications, I have different, eh, pictures, err, as the background. Then it's kind of a unique thing that show you my, ehh, personality.

C: Ehm, but this uniqueness, isn't it then in the software and not in the hardware?

Y: I can also put like a cover for it [C: Yeah]. It is very different from the normal cover that others use also.

2:79 [INTERVIEWER: Yeah... [Break]. ..] (410:411)

Codes: [Competence] [Identity]

INTERVIEWER: Yeah... [Break]. I feel like there is maybe a comp... comparability between you using your tablet, it's very personal for you and something that you put a lot of energy into and you C using your sewing machine [C: Yeah] a bit. Which is something that you know a lot about and care a lot about [C: Mmmm]. [To C] Would you consider renting a sewing machine? Say, if it was equally expensive for you or so.

C: Ohh huu... I think the first impulse was: 'Ha, no why would I do that?'. No. I don't know. No. I was even thinking about taking my sewing machine to my internship if go to Switzerland. And I wouldn't do that with a rented... No, I don't know. It's... You don't rent friends. No!

2:81 [Y: Mmmmmm. Yeah, it would..] (417:417)

Codes: [Competence] [Identity]

Y: Mmmmmm. Yeah, it would be convenient. But the interesting thing that I think is, sometimes I have something and it breaks [C: Yes]. And I tried, because I have it, nobody is going to give me the following service. So I have to fix it. The once I tried then to fix it, it's more valuable to me [C laughs].

2:82 [C: Yes. I have that wi..] (422:422)

Codes: [Competence] [Identity]

C: Yes. I have that with my laptop now and I would agree. There's something... If you're really looking for it on the internet for hours and then you fix it yourself and you're proud of it, then you want to keep it a little longer. Although the screen is a little scratched or broken [Y: Yeah] or whatever. Yeah.

2:93 [F: Ehm. Yes I can [giggles..] (20:20)

Codes: [Identity]

F: Ehm. Yes I can [giggles]. Ehm, yeah, I think it's nice to have, to just have some clothes that are really you, that you like so much that you wear it a lot, that you just always have in your place. For example these jeans, I, I think I hardly wore anything else last week.

2:126 [G: Okay. So ehm, firs..] (128:128)

Codes: [Identity]

G: Okay. So ehm, first the sweaters, ehm, I'm not sure if I would like to rent it. Ehm, that's because, ehm, if you really like certain pieces, you want to collect it because it is part of your identity, in my case. Ehm, so yeah to a certain extend I would be willing to do so but, eh, there need to be the option that you can actually buy it later on if you really want this piece.

2:143 [K: Yeah, I think it's real..] (134:134)

Codes: [Identity]

K: Yeah, I think it's really something about who you are. But I think, in my opinion, you shouldn't... I don't have to possess the item. But the item should fit my personality or the clothes, I normally wear. But yeah, I think, it's really linked to your identity what you wear. But I wouldn't, I would, don't really have to possess the item. I'd rather like to switch [laughter].

2:145 [AN: I am, also think, eh, c..] (136:136)

Codes: [Identity]

AN: I am, also think, eh, clothing might be part of my identity but indeed, eh, if you don't own the piece like if you borrow something from somebody, I don't feel when I'm wearing it less myself or something. So I think it is the same would go for renting.

2:146 [AM: I agree with that. I th..] (137:137)

Codes: [Identity]

AM: I agree with that. I think, eh, it's part of my identity, like clothing I feel comfortable. Some days when I wear yeah like one

of my favourite clothes, I, I'm more comfortable wearing this sweater now because, yeah, it's one of my favourites. Eh, so I think actually it really shapes your identity to that extend.

2:147 [INTERVIEWER: So for you AM, ..] (138:139)

Codes: [Identity]

INTERVIEWER: So for you AM, it means something that you then own it? Or what?

AM: Eh, yeah. I, I have to own it and it really... I think that it represents me in some way, like it is connected to me. I can't really get away from that. It's a part of me. If I own it, then when I wear it like on a regular basis, it becomes a part of me.

2:150 [INTERVIEWER: Identity connecte..] (144:145)

Codes: [Identity]

INTERVIEWER: Identity connected to the tablet.

AN: Ahm, no. I think I don't have that really. I'm not that connected or would be with a tablet.

2:151 [AM: Can I follow? Okay. I'm..] (146:146)

Codes: [Identity]

AM: Can I follow? Okay. I'm connected. I think it is part of my identity as well. I never sell my second hand stuff to anyone. I would give it to someone in my family. Eh, at the maximum. But I don't think I would give it to a third person, ever. I've never done that. Erhh, and, yeah, it's, eh, it's part of your identity but also you use it like every day and you have your pictures or your mail, everything in there. You don't know that... At the end, the privacy thing comes into the picture.

2:159 [AM: But again, I don't real..] (171:171)

Codes: [Identity]

AM: But again, I don't really know if it is just in my team or not, everybody has his own identity. Like you rent the shirts [K: the number]. Yeah the number and the numbers stays constant, like, if anybody takes someone else's number he's in trouble [laughter]. So...

Code: Openness to change {5-0}~

2:52 [T: I would conclude actua..] (336:336)

Codes: [Openness to change]

T: I would conclude actually... Mmm that because of talking about renting, I'd consider renting more of an option now. Simply because renting was never so present in my mind. And I know there's a lot of... I already expressed quite a few of my concerns about renting. But there of course some advantages for it.

2:90 [H: Yeah. What should I say ..] (17:17)

Codes: [Openness to change]

H: Yeah. What should I say about that? Renting clothes. I never heard from it. Only for very luxury purposes like a gala or something like that. Then renting a whole suit - is quite common. But renting a sweater? Never even thought about it.

2:119 [Ehm, for bigger things, like r..] (92:92)

Codes: [Openness to change]

Ehm, for bigger things, like renting cars, like you're saying, the sharing economy and that kind of things, renting or buying a service instead of buying a car, that means that you have a contract with which you can drive a car. Like leasing but even more further than that. You don't even possess it anymore. Probably it can work but I've never seen it for real. And they're so new all those kind of things. It's, ehm... There are no clear examples of things that went well or things that went bad. So somebody has to start it anyway but... Hmm. I am not a forerunner in a lot of things. So I first might to watch: how is it going? And if it is going well, I jump in. And otherwise, okay, let it pass. So probably the people who are ahead of things, they really like to experiment with this kind of things. And the vast majority, that's where it is always struggle. They wait it out and it will take years to, to introduce some new business models for these kind of things. And only then you can really see if it is interesting for you. Because if other people have good stories about it. They say: 'Yeah, that really works for me'. And they have a kind of life similar to yours, then you can start to think: 'Okay that's a good argument'. And now it's all new. You have to invent the wheel for this and... It is not in my person to do so. So probably I'm quite stuck to old models like buying things just because I did yesterday as well.

2:137 [AM: Ehh, really coming from ..] (130:130)

Codes: [Openness to change]

AM: Ehh, really coming from India, I never heard of renting clothing a lot. The only thing that we, eh, rent are costumes for different events. So that was a new thing for me and I'm not used to it at all. So personally I would never rent, eh, a sweater or be it any clothing.

2:182 [K: And maybe, yeah somethi..] (222:222)

Codes: [Openness to change]

K: And maybe, yeah something else besides the question. I really think also that the renting idea is not familiar among people. And I think because with sports for example, it is. But I think with normal clothes it is not familiar for people, and that's why all, a lot of people, I think, think a bit like: 'Hmm I don't want to rent something, because someone else's worn it'. But I think if it's more

familiar or more well know, I think a lot of people are, would be more positive to the idea. But it's still a bit strange. And I think, because humans and people always have to get used to something and if it works and there are positive response on it, I think it really can work out. If it is cheaper [others: Mmmm].

Code: Other {36-0}~

2:4 [Also because it feels a bit li..] (244:244)

Codes: [Other]

Also because it feels a bit like buying it on credit. And I think it is really weird to do that.

2:6 [Also because I have the idea t..] (244:244)

Codes: [Other]

Also because I have the idea that people who rent it out, they rent it out for a reason and that is because they expect a profit. So it can't be advantageous for me in that sense.

2:11 [Like if I, if I buy it, then I..] (248:248)

Codes: [Other]

Like if I, if I buy it, then I buy it for the reason that I like it and that I wanna wear it for a long time. Erhm, and then, I don't think that I would like soon enough give it back. Like, I only wanna give it back once I, once it's really broken or broke or when it's, erhm, yeah. When I had it already for like, let's say three or four or five years or something. And then I think it is better to like, bring it to a second hand shop or something like that to, like, rebuy it, or someone else can like buy it, than rent it. Because then the quality is already so much lower that, erh, like it doesn't really make sense to rent it anymore.

2:12 [With the coffee machine, erhm,..] (248:248)

Codes: [Other]

With the coffee machine, erhm, I think I, I indeed would like, erhm, earlier rent it but I agree with what you said T that it, erh, that it should be a very cheap rent otherwise you have the idea that - the same with like housing, if you rent it, in the end you pay more than once you like buy it.

2:14 [Me I had something. Yeah, thin..] (249:249)

Codes: [Other]

Me I had something. Yeah, thinking about the coffee machine, I realise that I would, eh, probably rent it if for example I had the idea to live in one place for few time. Erh, for example if my time horizon is one year or half a year and I still want to have a good cappuccino at home then I would definitely rent something that is, let's say look nice, so it is good but for ever because I am not gonna stay there forever. So it depends probably on my, erh, yeah... time horizon, let's say. On my expectation on that. Like a good thing but only for few time. Not for my life.

2:15 [W: Yeah, I think it's an ..] (251:251)

Codes: [Other]

W: Yeah, I think it's an interesting, erh, way to look at it and very, errh, applicable to yeah this idea of renting something. As soon as you're going to use it for a long time, then you might as well buy it. Because otherwise you have the feeling that it might be too expensive in the end.

2:24 [T: Mm. For me it really d..] (272:272)

Codes: [Other] [Self-transcendence]

T: Mm. For me it really depends on the kind of renting. If you, I mean I mentioned earlier the drill. Of course it's more resource efficient if, if you just have one drill per community and then you can rent it. But with an everyday-item I think it is different. Then I think it is more the situation that you, you painted. That, that actually people tend to when they rent, to exchange it more often than usually, have more trash generated. But it, I mean, it depends. Think for, for... For something that you need every once in a while, once a year, fine rent it. But everyday-items, I don't think are more sustainable when they are rented.

2:37 [T: I think there needs to..] (297:297)

Codes: [Other] [Performances]

T: I think there needs to be some kind of situation in which I need to be willing to pay extra. To have something for a short, for instance for a short period of time, like a coffee machine that I cannot take with me because I am going on a, I don't know, a student exchange or a short job somewhere. And I really want that coffee machine but I can't take it back home so it wouldn't make sense to buy one but then I would be willing to pay extra to still have one and make good use of it. But otherwise, there need to be some kind of... That's why everyday-items don't make sense for me to rent. If you always use them then buying them is simply more economical. On the other hand, if it is something big. When do you ever need a concrete mixer?

2:39 [W: Under the condition th..] (306:306)

Codes: [Other]

W: Under the condition that, errr, technology advances at a rapid pace. Which is the case. Err, so even though you use it every day and you use it for a long period of time, err, I mean, I would love to use a laptop for thirty years but it is not gonna last that long. So, and even if it would technically then, you know, the software and stuff would be outdated. So then it would be very handy to

just replace it and give it back to some sort of institution that would take care of it and, err, and you get an updated version back. So that is an extension to the rule. Like, err, development of the inside of the machine. Which is not very much the case in a, in a coffee machine I guess.

2:42 [T: Mmmm. Not really. Beca..] (310:310)

Codes: [Other]

T: Mmmm. Not really. Because it is a service that people provide and, and so, inherently it has to be more expensive than buying it, to me. It's the same idea with I don't know, a casino. People wouldn't run casinos if it wasn't profitable for them. And the same has to be with renting. It has to be, mmm, the person who buys it that is on the losing side, in a way for me

2:45 [But otherwise, then I imagine ..] (317:317)

Codes: [Other]

But otherwise, then I imagine that this person that I am renting from also sends me some newsletters or sends me stuff to get in contact with him like once in a while and that just takes, although it is not much, it just takes you more time and more effort and more... Yeah.

2:46 [Especially because of what you..] (318:318)

Codes: [Other]

Especially because of what you said, I think is a very a comp... err, yeah... interesting argument that the person who is renting is losing money because the person renting out is, that's his job so, err. And I think that would be, yeah, that would be in the back of my mind. Err, definitely. Even though that person or institution can be doing a very good job and it can be very helpful and very, yeah fine that you have this backup and stuff, but still you're paying for it. Yeah.

2:58 [Y: Yeah but also because..] (357:357)

Codes: [Other]

Y: Yeah but also because I think coffee machine is a bit, eh, daily life. [C: yeah] Then, if think about daily, then it has the feeling that I'm going to use it forever unless it's broken down [C: Aha]. Then maybe buy it would be a more efficient way. It also could be.

2:65 [Y: Hmmm... I'm thinking. ..] (373:373)

Codes: [Other] [Virginity]

Y: Hmmm... I'm thinking. Because, ehh, I live in a corridor so I share all the kitchen stuff with my roommates. Emmm... At least after one half year living with them I don't get any feeling that, ehh, [C laughs] I don't like to share any food stuff. It's okay. But if I'm really going to rent a food... a thing, ehh. Stuff related to food from a company, that this stuff is used by someone I don't know, I would also consider it seriously before rent it. Because yeah... It's also. It's... Food is something you eat inside. Eat in...

2:71 [C: Well, there are som..] (382:382)

Codes: [Other]

C: Well, there are some gadget, I am attached to. My sewing machine. I would never ever in my life share it with somebody. I think, nobody has ever used it. Erhm, but I that's because it is so expensive and I don't want anybody to break it and then have a problem with me because it's, ehh, an expensive sewing machine. So, I think that's the reason. But I have a second one and with this people can come to me and they can sew use it. Because its', it's cheap. And, yeah if something happen, happens with it, then it's easy to fix. So yeah. I don't know. But... the... How you fill it in is generally more important but there is something about monetary value as well.

2:73 [Y: I have all the things ..] (387:387)

Codes: [Other]

Y: I have all the things come out my mind. Like, eh, articles and notes and this kind of information. I have them updated to cloud. But the information that I collected from different sources, I don't update. I only update those come out from myself [C: okay]. So I make sure I don't lose them. The information I collected, I believe that I can, I can collect them again. So it's there, it's there. If I lose them, mmm, I would not be so sad.

2:75 [Y: So, do you mean that, ..] (390:395)

Codes: [Other]

Y: So, do you mean that, the tablet for me, for you actually means a, a thing to present the information?

C: Yes...

Y: Mmmm, rather than, more than a concrete stuff? Like a coffee machine.

C: Yes. It's more a portal to whatever I want or I have on it. Not so much what's inside.

Y: For you, information, it can present is much more important than tablet?

C: Yes. Yes.

2:76 [Y: Hmm. I don't... I woul..] (396:396)

Codes: [Other] [Performances]

Y: Hmm. I don't... I would more see it as a stuff. A concrete stuff that I have, I, ehmm... Yeah, apparently I use it also to, ehm, to deal with information but... I see it as, eh, a stuff have really multiple, ehm, uses. I would, as I said before I would use fully, I

made fully use of it. I try to, like, like, eh, before I consider if I'm going to buy a kindle, but I think 'No I got a tablet'. [C: Yeah] So this is, this is ehmm, the thing that I can, eh, alternate it, how to... It's eh, yeah it can be used as multiple things. So it's stronger than, eh, like a coffee machine which has only single use. [C: Ahaa, okay] That's why I have more willingness to, eh, have it.

2:88 [F: Ehm, okay. I think, eh..] (13:13)

Codes: [Other]

F: Ehm, okay. I think, eh, I wouldn't mind renting either of them. Ehm, I mean, I would like some sweaters of my own. Like some basic, eh, outfit that you always have or something

2:98 [F: Ehm, for me it would be..] (23:23)

Codes: [Freedom] [Other] [Performances]

F: Ehm, for me it would be the easiest if there would be a shop nearby that's open before you go to work and when you come home [giggles]. So you can just stop by on your way to work stop by and say like: 'Ey, yeah, I'm returning my sweater' or 'Do you have a new one?' or like 'My iPad is broken, erh, can I get a new one?'. Ehm, that would be the ideal situation. I mean, it's not really, eh, I don't think it's a really suitable business model. But that would be really nice.

2:99 [F: Because for me it would..] (25:25)

Codes: [Freedom] [Other]

F: Because for me it would depend like if I have rent it like for a day or for seven days, then it might be different like with your personal data and everything. Then it would be more tricky than when you just have it for two years.

2:101 [H: Yeah, those things are q..] (32:32)

Codes: [Freedom] [Other] [Performances]

H: Yeah, those things are quite small. You can carry them. So it's no problem to take them with you when you're going to do something else. Like the groceries or so. If it is as big as a bicycle then the problem will start. When you have to go, yeah, between two other things, you cannot get the bicycle back. For these things, it's easy to handle.

2:107 [INTERVIEWER: Yeah. And it's ch..] (56:58)

Codes: [Other]

INTERVIEWER: Yeah. And it's cheaper for you to buy a second hand sweater?

H: Or have an old one from my brother.

INTERVIEWER: Yeah.

2:112 [F: Ehm... A little bit but..] (77:79)

Codes: [Freedom] [Other]

F: Ehm... A little bit but eh, yeah, I, I, I trust people a lot. So, I trust it when something happens and I used it normally that we can just solve it.

INTERVIEWER: Mmm

F: And then it would be... I would actually really like it if somebody can solve my problem without me having to pay a lot of money for it and trying to like find a new one.

2:113 [H: Good one. If the product..] (83:83)

Codes: [Other]

H: Good one. If the product is really expensive, you cannot buy it. So you have to rent it. Like for example your, your home. Or a building. We're all students. We rent our room over here. You cannot buy a room somewhere in the town. I don't even want to. So it's, when the price is getting really high, renting becomes interesting from a whole different point of view. Just because there is no other realistic option. And renting a room, yeah it's incomparable to renting an iPad, so it's probably not a good argument. But renting expensive things, then the administration starts to turn over in something that is probably useful, which can save you a lot of money. If then something is wrong, and you cannot carry the costs, then you can get back with it. When it is not your fault, then it's good. When it is your fault, of course then you have to pay anyway. But when it breaks down by itself, and I don't know the price of an iPad to be honest. €600?

2:115 [F: Ehm... I think actually..] (87:87)

Codes: [Freedom] [Other] [Performances] [Self-transcendence]

F: Ehm... I think actually the price would be one of the most important factors. How much it would cost to rent it. Like whether it would be worth renting it or whether I can do a longer time without it, save the money. Ehm, and buy it with clothes... Ehm, I would actually like to rent it if it's like in a store near my house. Because then, eh, it's just like, a new clothes every two weeks would be nice [laughs]. Ehm, so for that, yeah. Like, eh... Yeah so, I don't know. I would probably prefer renting over buying if it's still like reasonable

2:139 [I would better buy a sweater a..] (130:130)

Codes: [Other]

I would better buy a sweater at, eh, at discount at Jack & Jones or something than, than, rent it. That would save me money also, I guess.

2:154 [K: Mmm, I would think that..] (163:163)

Codes: [Other]

K: Mmm, I would think that with every, with a lot of product, you want a new one. So within a few years you want to have a new version or the new brand or I think it... Everything, also with clothing, it changes every season. And also with devices or mobile phones. If the new iPhone is there, everyone wants them. So I think it's for a certain time frame, I think. Especially the people who really like the brand or devices really want to have new stuff every few years, even though it still works. I think they want to adapt with the trend or have the newest things so. It depends on the product, that it's life-ending or how do you say it? It really depends on the product, I think.

2:155 [G: Yeah, I also agree..] (164:164)

Codes: [Other]

G: Yeah, I also agree on that. It really depends on the product. Ehm, but for example, I would be willing to rent a car. Ehm, I know that's also... They started to work on that on the system. But a car, eh, normally has well, it lasts for at least ten years for example. So and that way it would be cheaper, ehm, to actually rent it. Yeah because you already expect that it will last longer and a car is not something that you would want to replace for a newer version. Not in my case for example. If you already buy an A-labelled car then that would be enough. Ehm, also washing machine for example has the same length duration [laughs]. So I would also be willing to do that.

2:156 [AN: Yeah. I, I think for so..] (168:168)

Codes: [Other]

AN: Yeah. I, I think for something like a washing machine, for instance. Because I was once in the, eh... We had the discussion in the house, do we want to a new one or indeed rent one. Eh, and then thought it would be just cheaper to buy one and I think the contract was, eh, quite expensive. If it would be for a short time... And we thought in the end, somebody of us wants to have a washing machine, so, eh... Then we decided to buy it. Because we thought it was cheaper. And you're not gonna live, or at least we thought, without a washing machine [laughs]. Anyway, so why not keep it for yourself while like for instance renting a car is really nice if you just need like, eh, that minivan for one day, you can go to renting shop and get it for the period, you need. But that is with the horizon again. So I'm thinking, I don't know what I would rent without knowing... when to give it back. Let me think maybe a little bit.

2:161 [G: Yeah and in my case..] (177:177)

Codes: [Other]

G: Yeah and in my case there was not a possibility. So you had to buy your own stuff. For example my dancing shoes. I have to buy them. Because, yeah, it's your size. It's... It also depends, eh, on your level, your in. So it was not an option to actually rent it.

2:162 [K: I also think that renti..] (179:179)

Codes: [Other] [Performances]

K: I also think that renting is more attractive if it is really cheap. Because also if you go winter sports. It's really better to... If you go every year, it's really better to buy your own stuff because in three four year, you have your own thing and I think that's nice and I would really want to own for myself. But, ehm, but I also wouldn't bother to rent it if it's really cheap but it's just so expensive to rent it. So that is an example that I think like, yeah. If they would make renting cheap with those items, I would definitely rent it. Because then, yeah, and other things every year. Now I bought it myself because I know it's really cost me a lot of money if I go on winter sport every year. I think that is also a sport article that, that I think is yeah.

2:166 [G: Yeah. I think, ehm..] (188:188)

Codes: [Freedom] [Other]

G: Yeah. I think, ehm, I am more concerned about my personal accounting. Ehm, like, what I need to pay for these separate items, I am renting. So what would be very useful for me would be to get, eh, some kind of an email or an alert like: 'In two days' or 'In three days we will, eh, eh, you need to pay your rent., Or it will be transferred or whatever. Ehm, so that you can get some kind of system that you know which days, you have to pay for the kind of stuff. Yeah [laughs] don't know if I can explain it, but.

2:167 [AN: Eh, no just like that t..] (195:195)

Codes: [Other]

AN: Eh, no just like that there is a physical place where you can go, eh and not that everything goes via email or so. So in case you want, at least you can go there. Ehm. I think it shouldn't take too much time.

2:168 [Like for instance with the bik..] (195:195)

Codes: [Other]

Like for instance with the bike from France. After three months I still don't have my deposit back. Eh, but that's maybe a French, eh, thing. Eh, and, eh, a thing is that I think, if you rent a lot of things, you don't want to pay deposit for everything but that at one point a new like... Maybe I was still expecting over €600 in deposit from different type of things. That you have to pay deposit for your house, then your bike, then if also have a deposit on your iPad and I don't know what else. Then I think it is just a waste of money if all your life, eh, above... If you rent a lot like thousand Euros is like being at different companies. So that I wouldn't like, if there is too much deposit.

2:171 [AN: Yeah for me it's a trus..] (198:198)

Codes: [Competence] [Freedom] [Other]

AN: Yeah for me it's a trust thing as well. And know that it is kind of accessible, or I don't know. They can't hide. If you're having a shop, there's at least a place where you can go. For instance for cars I think, eh, or like if I find it nice that it's a different model

than you normally use or if there is some weird things with it, that somebody can say like: 'Hey, you should open this door like this because otherwise it doesn't work', or I don't know. Eh, and often with, or, I don't know. With, eh, things which have a shop maybe, I am also more used to that there is maybe like a kind of service system. I think that would be important for me for renting. That would make it really beneficial compared to buying. Because it almost gives you a guarantee that you can always make use of your product. Like even if it breaks, that you can just go there, maybe, and get a new one in the meantime. That's more guaranteed that you always have the product.

Code: Performances (41-0)~

2:2 [T: Alright, I would rent ..] (244:244)

Codes: [Performances]

T: Alright, I would rent neither. Because I think they are both items that I use regularly. I would maybe rent something that I don't use a lot like tools, maybe a drill, something like that I would rent. I wouldn't rent an everyday use item.

2:9 [M: I have a bit the same w..] (248:248)

Codes: [Performances] [Self-transcendence]

M: I have a bit the same with the sweater but I, erh, I think I wouldn't rent it. Because I, I just like to, errhm. Like first of all, I like the idea of shopping [giggle]. To like go to a shop and then look through clothes.

2:17 [W: Yeah, that's like with..] (256:256)

Codes: [Freedom] [Performances]

W: Yeah, that's like with renting a car. Erh, my girlfriend is always more in favour of flying somewhere and then renting a car there. Whereas I would prefer to drive there so that you have your own car and you can do... It's not that you're going to crash your car and you wouldn't do that with a renting car but it is just like: you can do whatever with it and you don't have to worry about all the limitations that you have when you rent something. Erh.

2:21 [And also I really like first o..] (266:266)

Codes: [Performances] [Self-transcendence]

And also I really like first of all the anticipation of looking for a product and then buying it. And I also really enjoy looking how, like finding the product that has those features that I really wanted. And then I have this anticipation of going to buy and then having it at home and [00:19:58-00:20:01 - inaudible]. And every morning I push the button and it would come out just the way I wanted. I don't think I can have the satisfaction with renting.

2:36 [W: I was thinking about I..] (296:296)

Codes: [Performances]

W: I was thinking about like, errm, then, errh, forming a general rule based on what you also said in the beginning and you. Like I think, maybe as a point of the discussion we can say... Errh, if, errhm. Renting is only interesting if it's, errhm, if it's not an everyday-product unless it's for, err errh, a short or a limited amount of time. And also maybe to something like practical like the size of the product. Like, a laptop you can take it with you but maybe, err, I don't know, maybe a television set or something, or a Dolby surround system, that's not very handy to carry so if you're going, I don't know on a holiday or if you're going to a summer school or if you're going somewhere for a couple of weeks, err, away from home. And you're going to need stuff that you have to use in an everyday setting. Then, err, that's the, I guess, that the only exception to when you [participant coughing] are actually interested or when it would be more useful to rent everyday-stuff. Cause you only use it for a limited amount of time. But for the rest. I think everyday-items are not really interesting to rent, based on what we've discussed.

2:37 [T: I think there needs to..] (297:297)

Codes: [Other] [Performances]

T: I think there needs to be some kind of situation in which I need to be willing to pay extra. To have something for a short, for instance for a short period of time, like a coffee machine that I cannot take with me because I am going on a, I don't know, a student exchange or a short job somewhere. And I really want that coffee machine but I can't take it back home so it wouldn't make sense to buy one but then I would be willing to pay extra to still have one and make good use of it. But otherwise, there need to be some kind of... That's why everyday-items don't make sense for me to rent. If you always use them then buying them is simply more economical. On the other hand, if it is something big. When do you ever need a concrete mixer?

2:38 [M: [Laughs]. I was just. ..] (302:304)

Codes: [Performances]

M: [Laughs]. I was just. I think that I think that more than everyday use not for me is like for example a car. It is perfectly fine to rent. I will use it every day. But it's so important. I don't know [giggles].

INTERVIEWER: So you would consider renting a car for example even though you're using it every day?

M: Yeah.

2:40 [M: I think for me also, li..] (307:307)

Codes: [Performances]

M: I think for me also, like errhm, concerning the tablet. I was thinking if I, errhm, for example go on a holiday or something. Then maybe for that period of time I don't want to have my laptop with me and stuff like that. In general, I don't really bother

having a tablet. But then for that period of maybe like to easily look something up, like have more access. It's more easy than a phone. Then I'll, maybe for that period of time, like to have it

2:55 [Y: Yeah for me, eh, for ..] (351:351)

Codes: [Identity] [Performances]

Y: Yeah for me, eh, for tablets I would, eh, the immediate idea for me is to buy it. Because for me, erh, I would tend to buy a digital product because I don't believe digital products last a long time. Then, errh errh, then I would like to use it from the beginning to the end. And so I could design, like how it is arranged and, eh eh, what kind of applications I would install. Anyway I got the feeling of possessing it.

2:69 [Y: Mmmmm... Erhm... I, I,...] (378:378)

Codes: [Performances] [Self-transcendence]

Y: Mmmmm... Erhm... I, I, I... I feel that, eh, I don't tend to rent a thing, pre... eh, generally. Ehh, if I want something but I don't... I'm not kind of person that I want everything. So once I want something I would make sure that I want it. If I... If I'm sure that I want it, I'll buy it. And eh, mmm... For me the feeling of possess this thing, eh, makes me use the best use of it. Make the best use of this thing. Because, eh, I'm free to use it. Then I would use it all the time. If I, eh, if I don't, mmm, have this attachment to it, a stuff, I, I don't know, I got... It's hard to express, like if I got a book. I buy a book. I read it very, eh eh, seriously or, eh, with all my heart. I make notes on the book. I, I cross it anyway. Yeah as my personal book. But if I rent it, or not rent. I borrow it from the library, I would consider if I put too much marks on it, it's not very good. And then I cannot use it fully [C: Ahh, okay]. So I like to buy things and use it fully.

2:77 [C: You're... You want ..] (399:401)

Codes: [Performances]

C: You're... You want to invest more in it. Mhmm.

INTERVIEWER: Because it is more integrated in your life?

Y: Yeah yeah.

2:76 [Y: Hmm. I don't... I woul..] (396:396)

Codes: [Other] [Performances]

Y: Hmm. I don't... I would more see it as a stuff. A concrete stuff that I have, I, ehmm... Yeah, apparently I use it also to, eh, to deal with information but... I see it as, eh, a stuff have really multiple, eh, uses. I would, as I said before I would use fully, I made fully use of it. I try to, like, like, eh, before I consider if I'm going to buy a kindle, but I think 'No I got a tablet'. [C: Yeah] So this is, this is ehmm, the thing that I can, eh, alternate it, how to... It's eh, yeah it can be used as multiple things. So it's stronger than, eh, like a coffee machine which has only single use. [C: Ahaa, okay] That's why I have more willingness to, eh, have it.

2:87 [But if it's like, eh, an expe..] (13:13)

Codes: [Performances]

But if it's like, eh, an expensive sweater or a, eh, for a special occasion, so you do not wear it that often, then I think it would be nice, eh, nice to rent, to rent them.

2:91 [But... It really depends on th..] (17:17)

Codes: [Freedom] [Performances]

But... It really depends on the purpose if I would do that. Probably I'm somewhat more drawn back in that. I don't have that much clothing. I always have those old crappy things [F laughs]. And I don't treat them that well. So the chance is that I use them for digging a, a whole in the ground or things like we do in the study of environmental sciences that it gets dirty, it get damages. The chance is quite big. I also came from a farm. So we have all suits, yeah. I think, buying grants you for this kind of cloth the safety that it doesn't matter what happens. It's your problem. It's not getting a problem with a tail of, eh, yeah... How can I say that? If something got damaged, you say: 'Oh, uff, shit I have to buy another one'. But if you rent it, a whole chain of trouble will start. 'Okay I have to turn it back. I have to say what, how was that done. How much damage will it be. What is the, the leftover value of it'.

2:94 [Ehm, but... If you go out, eh..] (20:20)

Codes: [Freedom] [Performances]

Ehm, but... If you go out, eh, if you go out or you have like, I don't know with Christmas a brunch and you want to have this nice sweater but in the shop it's really expensive. So then I would really like to rent it, like: 'Ahh, I got this, this sweater'. Ehm, yeah because I know there are places where you can rent clothes.

2:96 [Ehm, but yeah, you're, I think..] (20:20)

Codes: [Performances]

Ehm, but yeah, you're, I think everybody has some clothes that you wear all the time and also it's nice to just have an old sweater when you go work in the garden or I don't know do some jobs around the house. That you do not have to worry whether it gets dirty or not. So...

2:98 [F: Ehm, for me it would be..] (23:23)

Codes: [Freedom] [Other] [Performances]

F: Ehm, for me it would be the easiest if there would be a shop nearby that's open before you go to work and when you come

home [giggles]. So you can just stop by on your way to work stop by and say like: 'Ey, yeah, I'm returning my sweater' or 'Do you have a new one?' or like 'My iPad is broken, erh, can I get a new one?'. Ehm, that would be the ideal situation. I mean, it's not really, ehh, I don't think it's a really suitable business model. But that would be really nice.

2:100 [H: I can agree with that. A..] (30:30)

Codes: [Freedom] [Performances]

H: I can agree with that. A service, ehh, that is... What you said for example when you can go yourself. When you have to return something when there is something wrong or you want something different, you have to take action yourself instead that they will all bring it your home or so. I don't like that idea. I grew up at a farm. It's really expensive to have something brought to your home [F giggles]. So I'm quite used to the model that you have to go somewhere if you want something. And for this thing, yeah, all the, ehh, [00:13:55 - inaudible word]. You can decide whether you want to go there, at your time. And not that you have to wait out somebody who will bring something to your home.

2:101 [H: Yeah, those things are q..] (32:32)

Codes: [Freedom] [Other] [Performances]

H: Yeah, those things are quite small. You can carry them. So it's no problem to take them with you when you're going to do something else. Like the groceries or so. If it is as big as a bicycle then the problem will start. When you have to go, yeah, between two other things, you cannot get the bicycle back. For these things, it's easy to handle.

2:102 [F: Ehm, I don't own an iPa..] (34:34)

Codes: [Performances]

F: Ehm, I don't own an iPad or an, eh, eh, or how do you call it? Tablet. I thought about it but the prices kept me from purchasing it. Ehm, what I would do with it. I'm not really sure. I think I w, I would, I would buy a tablet if I could also call with it. Ehm, but now, yeah. I'm not really sure what I would use it for. I hardly use my phone so.

2:103 [F: Ehm. During my studies ..] (37:37)

Codes: [Freedom] [Performances]

F: Ehm. During my studies I considered it. It might be handy to take notes but I'm ahead..., almost done so. That argument kinds of goes. But I think, if I would, I can imagine if I would work somewhere that I would have to travel in the train all the time, then it might be nice because it is easier to carry than a laptop, especially in the train. You don't have to like, how do you say? Flap it open [giggles]. And I can just like, it's more easy to return email and make appointments than on a smaller screen that's on the phone.

2:104 [I have an old crappy phone lik..] (43:43)

Codes: [Performances]

I have an old crappy phone like that one but a rugged one. Like this [puts his phone on the table].

2:105 [And that's where we also touch..] (43:51)

Codes: [Performances] And that's where we also touch the sweater [INTERVIEWER: Mhmm]. Because indoors I'm used to sit in t-shirts. So sweaters I only use when I work outdoor, and then you get dirty. So nice sweaters, I don't have [INTERVIEWER: Mmm]. There's no need for me to have them. If I need to wear something nice outside, I use a jacket or, eh, a bloes [Dutch word]. [H asks F what the English word for bloes is].

F: What?

H: A bloes

F: Ehm, yeah, a blea, a blouse.

H: Yeah

INTERVIEWER: Ohh, like a cardigan?

F: No like, ehm... Like a fancy shirt with buttons.

INTERVIEWER: Okay, yeah.

H: Yeah [F laughs]. I don't know the English word for that. But a sweater I only use for working outside to keep warm.

2:115 [F: Ehm... I think actually..] (87:87)

Codes: [Freedom] [Other] [Performances] [Self-transcendence]

F: Ehm... I think actually the price would be one of the most important factors. How much it would cost to rent it. Like whether it would be worth renting it or whether I can do a longer time without it, save the money. Ehm, and buy it with clothes... Ehm, I would actually like to rent it if it's like in a store near my house. Because then, ehm, it's just like, a new clothes every two weeks would be nice [laughs]. Ehm, so for that, yeah. Like, ehm... Yeah so, I don't know. I would probably prefer renting over buying if it's still like reasonable

2:118 [H: Err, stuff I use a lot, ..] (92:92)

Codes: [Performances]

H: Err, stuff I use a lot, like for example a telephone or this kind of things, now, I pretty know for sure, I wear them down until they are really down. Until they are broken and until they are finished. So it's... renting them is not that useful. I mean, eh, for those can of product, I really can accept, okay I have to buy them once, I can use them for a few years and they are completely worn down and left. And all the value is lost. For those kind of product, I would even bother to rent. Because it is no business model for that. As far as I know. Probably it can be... But never thought about that.

2:133 [AN: Okay. Eh, I think, I wo..] (129:129)

Codes: [Performances]

AN: Okay. Eh, I think, I would maybe want to rent, eh, clothing but not a sweater [laughs]. I think, ehm, I have enough sweaters. I don't know how many. Maybe not too many but... It's like, a thing which if you come home or if it's cold, you want to wear, it's... I don't know. It's almost like a what you used to have when you were small, the, eh, to cuddle with [laughter]. It's like yours. It's like it makes you feel comfortable. It's not something I see as something beautiful or something you want to have new. Eh, but something which is yours and makes you feel comfortable. While for instance, it would be like a funny dress or something, then I thought maybe think like: 'Oh I want to rent that for a couple days and wear it in summer and then it is enough'. But I think, a sweater, yeah, if it is one or another, I don't care that much. But just that you know it's really comfortable. That I like about it. Eh, so for me, for a sweater it wouldn't be an option. Or I, eh, I think, I wouldn't find it worth it to take the effort to go and rent one. I think even rather more or less steal one of a friend or boyfriend or [laughter] or wherever you find one. I think, yeah.

2:134 [for the iPad. I don't know why..] (129:129)

Codes: [Performances]

for the iPad. I don't know why I would want to rent one. If there would be an occasion where I would need a tablet and I wouldn't have have one that I could borrow or I wouldn't have one myself then, yeah why not rent it if you don't need it for long. Ehm, but it's like, ehm, I think like a laptop, eh... I am currently writing my thesis, I wouldn't want to [laughter] hand it in for rent.

2:136 [Ehm, so yeah for the tablet, i..] (129:129)

Codes: [Performances]

Ehm, so yeah for the tablet, it's a bit double. I can imagine instance for a field trip that you would need one and that it would be comfortable if you can go somewhere and rent all the equipment that you need. Eh, but I think for renting, I would rather rent other things. And not these because I think these are too much mine [laughs]. Or something like that, I don't know.

2:141 [Eh, and also one more thing, I..] (130:130)

Codes: [Performances]

Eh, and also one more thing, I would like to add is, eh, from my own experience from my own country. I have been in the Netherlands for just six months. That when we buy new clothes, we [00:14:41 - inaudible word] and when it gets old you give it away to, eh, to poor people. Just like that. You don't ask money for it and that's how it was over in India. So we don't rent clothes and I think that's a better idea to give away your old clothes to poor and needy people. I think there are not a lot of them here in developed countries so. Maybe you're... You have the idea of renting it and all but, eh, it's not a trend in my country as, as of now.

2:149 [AN: I was also thinking one..] (143:143)

Codes: [Freedom] [Performances]

AN: I was also thinking one thing about the last question. That it is also nice with keeping things yourself, that in the morning, you don't have that much choice. You can just sometimes know with your favourite clothes, they are there and then... [laughter]. And in those kind of periods something slowly becomes favourite and you know that it is there. In the morning is not my best moment of the day and it's best if I have as little choice as possible. Like, ehm, and eh, I think in moments where you are busy, maybe you don't want to have the choice of even more stuff to choose from.

2:152 [K: I think, eh, an iPad is..] (160:160)

Codes: [Performances]

K: I think, eh, an iPad is, is easier to carry compared to a laptop. Because I have a really small laptop but still this is not that heavy as the one I have even though it is not really heavy. Eh, so I think it is easy to carry with you. Especially when you go on holiday. You want to bring something. It is always nicer to have a tablet than a phone, I think. Because you can do more on it. But to work on school, I really wouldn't prefer to work on a tablet because, eh, or an iPad. Because I think the screen is too small and I also don't prefer to really work on it. But if I see it when I'm at my parent's place and we are at the kitchen table and discussing things and we just want to search something or want to have a look at something online, it's really easy to just take the iPad and just at the kitchen table just quickly search something. It's for a lot of people that they also use it for that which is easy because you don't have to walk to the computer or you don't have to get your whole laptop with you. And, if your just on the couch or something it's just a really really easy device to take along and just to quickly have a look on it. Ehm, yeah, I've, I, I don't use it but I think it is easy but still I think people have it as extra and not as necessary. So not for daily work or something. Yeah.

2:153 [AN: Yeah, I think it is mor..] (161:161)

Codes: [Performances]

AN: Yeah, I think it is more easy in the more kind of social situation [K: yeah]. So that maybe sometimes I had, ehm, meetings for the education committee and if everybody has a laptop, it's kind of a wall. And the same as at the kitchen table. It's nice if you can show it like this [laughter]. And not have the whole block then it's like just the easy start to do the like this and it is working and you don't have to wait for a laptop.

2:157 [AM: Well, I agree with you ..] (169:169)

Codes: [Freedom] [Performances]

AM: Well, I agree with you that, yeah it may end up being more than what you pay when you buy the product. When you're renting it and you don't know the horizon, the time frame. But from my, eh, personal experience I can talk of one thing. That's my hockey stick. I joined the hockey team here and didn't really know if I'm going to play the team or not. And, eh, I rented a hockey stick. And, eh, I played to a point until I got to know that yeah, this would work for me. I join up well in the team and, and, eh,

yeah, this is my sport. And then, at that point, I bought a new one. Because then I knew that I am not going to leave the team now. So, I decided to invest in one. And now I have one and, eh... So I don't rent it anymore. So I, in my opinion it's really hard a product if you don't really the horizon, the time frame you're renting it for.

2:158 [K: It's, eh, with the exam..] (170:170)

Codes: [Freedom] [Performances]

K: It's, eh, with the example, yeah, with the hockey, you also rent your clothes there. So you pay a certain fee for your, your, outfit. So, eh, the, the skirt and the T-shirt, you rent. You actually rent it because you buy a fee per year. And you have your own socks because that's more hygienic, I think. But, but it's an example of renting, renting your clothes for sports. Because then you don't have to invest in new ones because you can just start playing hockey. It's rather expensive to get the whole thing new. Or the whole outfit. And, eh, what you do in Wageningen is that you pay a certain fee and every year you all get someone else's T-shirt or whatever but you don't have to invest in it yourself. So I think in the end, it is cheaper. Because it really gets, eh, oh wait. How do you say that? It gets bad really easy. Because you use it every week and you wash it every week. So it's an example of renting.

2:160 [AN: I only thought about my..] (175:175)

Codes: [Freedom] [Performances]

AN: I only thought about my bicycle in France. That I rented for four months and if I would have stayed longer, I would just have kept renting it because it was really nice, eh, systems there. Eh, and if it would break down, they would repair it for you. If your tyre would get punctured [starts laughing]. It the thing I hate most. You could just bring it back and without paying extra. So you knew at all times that you would have a bike for a good price, eh, which is not that likely to be stolen because it was like extremely yellow [laughs]. And with a logo from the firm. Ehm, but that, eh, that was one thing, I thought, I could rent it for the rest of my life

2:162 [K: I also think that renti..] (179:179)

Codes: [Other] [Performances]

K: I also think that renting is more attractive if it is really cheap. Because also if you go winter sports. It's really better to... If you go every year, it's really better to buy your own stuff because in three four year, you have your own thing and I think that's nice and I would really want to own for myself. But, ehm, but I also wouldn't bother to rent it if it's really cheap but it's just so expensive to rent it. So that is an example that I think like, yeah. If they would make renting cheap with those items, I would definitely rent it. Because then, yeah, and other things every year. Now I bought it myself because I know it's really cost me a lot of money if I go on winter sport every year. I think that is also a sport article that, that I think is yeah.

2:163 [K: I'm actually a bit used..] (184:184)

Codes: [Freedom] [Performances]

K: I'm actually a bit used to it because in sport teams often . Well I was used to that I bought my own skirt, my own socks and all the other attributes and the shirts were from the club itself. And you, yeah of course you, you play a season with it. But it could be that the next season, you have to take over shirts from another team, or, or whatever so it is your number in the end, you don't own it. You didn't bought it because sponsors paid for it so. With sports, I think it is rather normal, in my opinion. Especially the t-shirts, I am used to it that you wash it all together and yeah. It's the way it is but I wasn't used to it when I came here in Wageningen that you pay a certain fee which is doable actually. And that the whole tenue [don't know what that word means] is from the club and not for yourself. But I thought it was actually easy. Because if something is broken or it is worn out, you get a new one. Without paying extra. So, yeah with sports, I think it is okay. But I think it is different when it are your daily clothes.

2:164 [AM: I think the same. Like,..] (185:185)

Codes: [Performances]

AM: I think the same. Like, eh, if you're, eh, if you're in a team and you've worn it well then it doesn't really matter like who's t-shirt you're wearing. I was used to it from India also. Like I played cricket there and, eh, used to, we had the same system. We rented clothes. And, eh, I think that shouldn't be a problem as long as, eh, the person who has the duty to wash them, washes them properly [K laughs] for the next match. Eh, yeah. So...

2:170 [AM: Uh, I agree with that. ..] (196:196)

Codes: [Freedom] [Performances]

AM: Uh, I agree with that. I also would rent, eh, from a physical shop or something and online. And I did that like last week. I was in Rome and I rented a bike for just €10 for the whole day. Ehm, by just giving a document and, I personally would like that kind of things for renting. Not a sweater or something or something I would have for a lot longer. No I am not going to take my bike from the Netherlands to Rome for a day. And for €10 deposit you can have it for the whole day so. Yeah it's... And you get to choose your bike. There are different kinds of bikes there. I think only when you choose things online, it's much different from what you, eh, like do in person so. Ehm. Yeah that's my opinion.

2:173 [G: Yeah, I find it ha..] (201:201)

Codes: [Performances] [Self-transcendence]

G: Yeah, I find it hard to have an opinion about this question. But I think, ehm, I still prefer the shops. Also as a leisure experience. Ehm, yeah you would normally... You're already working online all day, eh... It's just a nice break of the week, ehm, to actually walk in a shop and yeah, I don't know. It's a different experience for me. I also go... I prefer to go shops that have a more personal, eh, service. So not the big stores like H&M. I prefer not to go there. Ehm, but also stores like, where they serve coffee for example or where you have a nice reading room or it's... It's a different experience. Than just buying it online, yeah. Then it is just an item that you are buying. And you can also return it easily but...

2:178 [K: I think what you were s..] (212:212)

Codes: [Freedom] [Performances]

K: I think what you were saying with your hockey stick or when you are going to practice a new sport. It's always nice that you can rent it. That you have that possibility. Ehh, so that you don't invest too much money in it if you are not sure whether you like it or not. So, I think with the example you gave or if you go winter sports and you want to learn ski, skiing. I think it's really nice that you can rent it and don't have to buy it immediately. So yeah, I think especially with new things it's... If you want to try it, it's good that you can rent it but in the end if you're, if you... For example I also want to own my own hockey stick now because it's mine and I really [laughs] will not share it with someone else. So it depends on the product I think.

Code: Self-transcendence {19-0}~**2:9 [M: I have a bit the same w..] (248:248)**

Codes: [Performances] [Self-transcendence]

M: I have a bit the same with the sweater but I, erh, I think I wouldn't rent it. Because I, I just like to, erhm. Like first of all, I like the idea of shopping [giggle]. To like go to a shop and then look through clothes.

2:21 [And also I really like first o..] (266:266)

Codes: [Performances] [Self-transcendence]

And also I really like first of all the anticipation of looking for a product and then buying it. And I also really enjoy looking how, like finding the product that has those features that I really wanted. And then I have this anticipation of going to buy and then having it at home and [00:19:58-00:20:01 - inaudible]. And every morning I push the button and it would come out just the way I wanted. I don't think I can have the satisfaction with renting.

2:23 [And so, I think eventually, er..] (269:269)

Codes: [Self-transcendence]

And so, I think eventually, erh, it is just speculating, but I would, I would, erh, consider that with stuff being rented on a large scale, maybe eventually the, like the amount of resources that you need would increase also [other participant coughing]. At the same time, maybe such a renting system will also take care of the resources that are coming back and like you have a take back system and stuff. Erhm, but then again, you would also, you could also, erh, facilitate that with people bringing their own stuff back to the recycling centre or something. So, I'm not so, I'm not so sure about the positive effect on, yeah, use of materials and resources if people can just, yeah, without a lot of consequences just take stuff and bring it back and take something new and... [Clears throat]. It seems a little bit more, yeah, resource intensive or something. Not just in material resources but also in time because you kind of have to keep reorienting and bring it back and get something new. Err, but this also depends on the type of product and time the time frame for it.

2:24 [T: Mm. For me it really d..] (272:272)

Codes: [Other] [Self-transcendence]

T: Mm. For me it really depends on the kind of renting. If you, I mean I mentioned earlier the drill. Of course it's more resource efficient if, if you just have one drill per community and then you can rent it. But with an everyday-item I think it is different. Then I think it is more the situation that you, you painted. That, that actually people tend to when they rent, to exchange it more often than usually, have more trash generated. But it, I mean, it depends. Think for, for... For something that you need every once in a while, once a year, fine rent it. But everyday-items, I don't think are more sustainable when they are rented.

2:25 [M: I think, like for me, e..] (273:273)

Codes: [Competence] [Self-transcendence]

M: I think, like for me, errhm. The, yeah, [other participant coughing], the big benefit what I see where I would rent such an item is that, erh, I don't have to think where to leave it when I don't want it anymore. Because now although I'm like pretty aware of it or pretty like, mmm... Yeah, whereas the renting system more like that, things, machines can be taken back so like and end up in a new circle. I still wonder a lot of times what I need to do with a light bulb or with like a machine that doesn't work anymore or with, with bikes. I, I have no clue where I need to leave my bike when it is broken. Like really like done. Erhm, and I think that there would be a big benefit to like there you don't have to look it up on the internet or like ask someone, yeah.

2:26 [And also thinking about the cl..] (274:274)

Codes: [Self-transcendence]

And also thinking about the clothes for example. When you rent it and you give it back, is it reused, so re-rented to another person? Is it supposed that? Or, because if not, it's a waste definitely. If it is, it's a kind of quick second hand cycle. So maybe it's better. So it's really, I think it really depends on how it's designed for example for, erhm, high technology things, of course after a while they are just obsolete so yeah you have to change it. And not reuse it. If it is an object that can be easily, yeah, re-rented, so it, that, that's faster. Positive effect on waste and recycling.

2:51 [M: Yeah maybe there is. I..] (331:333)

Codes: [Self-transcendence]

M: Yeah maybe there is. I am actually surprised now that I... Before I was more like in favour of renting and I thought it was a good idea. Erhm, because of the like circular ideas behind it. But now that I so for an hour think about it, I am actually like,

maybe I would do it for the good cause of it but really... Yeah, would it really help me in a way? Would I be kind of better or, yeah by renting it? So I am actually surprised about like the negative sides for me at least that pop up.

INTERVIEWER: And do you think that is due to, like influence from others or is it because you figured out what you actually more prefer yourself.

M: I think of course also like a little bit because we now talk about and like people give opinions but also because I never spend that much time on thinking, what are the benefits or what are the negative sides of renting. I just saw it more from like a societal aspect and more from a system approach than really from my own perspective.

2:69 [Y: Mmmmm... Erhm... I, I,..] (378:378)

Codes: [Performances] [Self-transcendence]

Y: Mmmmm... Erhm... I, I, I... I feel that, ehm, I don't tend to rent a thing, pre... eh, generally. Ehh, if I want something but I don't... I'm not kind of person that I want everything. So once I want something I would make sure that I want it. If I... If I'm sure that I want it, I'll buy it. And ehh, mmm... For me the feeling of possess this thing, ehm, makes me use the best use of it. Make the best use of this thing. Because, ehh, I'm free to use it. Then I would use it all the time. If I, eh, if I don't, mmm, have this attachment to it, a stuff, I, I don't know, I got... It's hard to express, like if I got a book. I buy a book. I read it very, eh eh, seriously or, eh, with all my heart. I make notes on the book. I, I cross it anyway. Yeah as my personal book. But if I rent it, or not rent. I borrow it from the library, I would consider if I put too much marks on it, it's not very good. And then I cannot use it fully [C: Ahh, okay]. So I like to buy things and use it fully.

2:70 [C: Uhhf, maybe rather ..] (380:380)

Codes: [Self-transcendence]

C: Uhhf, maybe rather the other way. Like, I, I have a lot of stuff but I'm annoyed by it, so I prefer to not have a lot of books. I, I... What is important for me is the information or the joy, I can get out of the book. So if I, mm, get the book out of the library and I really really like it, then I buy it. But that doesn't happen too often. And I also like to give away my things. So I'm not so much attached to the physical part. [Y: Mhmm] Yeah.

2:95 [I study a lot in sustainable f..] (20:20)

Codes: [Self-transcendence]

I study a lot in sustainable fashion in my free time. So that's maybe also why I am more open to it.

2:106 [H: So I don't need nice swee..] (53:53)

Codes: [Self-transcendence]

H: So I don't need nice sweaters. So old ones or second hand ones for example. It's fine.

2:115 [F: Ehm... I think actually..] (87:87)

Codes: [Freedom] [Other] [Performances] [Self-transcendence]

F: Ehm... I think actually the price would be one of the most important factors. How much it would cost to rent it. Like whether it would be worth renting it or whether I can do a longer time without it, save the money. Ehm, and buy it with clothes... Ehm, I would actually like to rent it if it's like in a store near my house. Because then, ehm, it's just like, a new clothes every two weeks would be nice [laughs]. Ehm, so for that, yeah. Like, ehm... Yeah so, I don't know. I would probably prefer renting over buying if it's still like reasonable

2:117 [F: Ehm, well I am currentl..] (89:89)

Codes: [Self-transcendence]

F: Ehm, well I am currently doing my thesis on sustainable procurement by the government. And there they also talk a lot about, eh, like not buying a product but buying like a service or a result and then maybe leave it up to the manufacturer how to provide you with that result. Ehm, so I actually, yeah, I really like the renting because it also makes the supplier more responsible for supplying a good product rather than, ehm, making a product that breaks, eh, like two months after the warranty expires. Ehm.

2:120 [H: It is not idealism. It's..] (104:104)

Codes: [Self-transcendence]

H: It is not idealism. It's... yeah it is the way it is.

2:128 [Ehm, but I, but on the other h..] (128:128)

Codes: [Self-transcendence]

Ehm, but I, but on the other hand, I think it's a really nice idea to reduce the waste on, eh, the amount of clothes that is, eh, just thrown away every year. I think, that needs to be limited. Eh, and people need to select their pieces more carefully. Eh, so to that extend, I agree with this system.

2:144 [G: Yeah it's true tha..] (135:135)

Codes: [Self-transcendence] [Status]

G: Yeah it's true that you can be more, today more trendy when you're constantly changing. That's true. But for me it's also an excuse to shop more [laughter]. Perhaps it's not the answer, you would like to hear. But now, yeah, yeah. For me, eh, it's a completely different eh...

2:172 [K: I think, I also prefer ..] (199:199)

Codes: [Self-transcendence]

K: I think, I also prefer to buy clothes in a store. Because I think it is the experience or the feeling that you're really buying something, so. Myself, I would also prefer a real shop because I don't really like online shopping. Like only for... I think online shopping is really for the convenience immediately need something and by now if you, if you order it before 9 o'clock in the evening, you already have it the next day. So I think that's the, the, the advantage of a web shop. But I think, if you buy it in a store, you really have the social contact as well and the whole experience so... Eh, I think that's the difference between online and a store.

2:173 [G: Yeah, I find it ha..] (201:201)

Codes: [Performances] [Self-transcendence]

G: Yeah, I find it hard to have an opinion about this question. But I think, ehm, I still prefer the shops. Also as a leisure experience. Ehm, yeah you would normally... You're already working online all day, eh... It's just a nice break of the week, ehm, to actually walk in a shop and yeah, I don't know. It's a different experience for me. I also go... I prefer to go shops that have a more personal, eh, service. So not the big stores like H&M. I prefer not to go there. Ehm, but also stores like, where they serve coffee for example or where you have a nice reading room or it's... It's a different experience. Than just buying it online, yeah. Then it is just an item that you are buying. And you can also return it easily but...

2:174 [AN: I think that, ehm, for ..] (202:202)

Codes: [Freedom] [Self-transcendence]

AN: I think that, ehm, for me it is not that much leisure time. I don't enjoy it that much. [G: okay] [Laughter]. I think the good thing is that you can try it and know if it is like right for you.

Code: Status {4-0}~

2:32 [but I have on the other hand, ..] (281:281)

Codes: [Status]

but I have on the other hand, the idea that: Image the situation where somebody walks and says: 'wow you have a really nice sweater. Where did you BUY it?'. And then you have to say: 'Oh, no. No, I rented it'. And then there comes the awkward silence. You know, I think it can create weird situations if rent such an item which is not common to rent and people might, I mean they might come, not that I really personally care, but there might be situations where there is also judgement involved. 'Ohh, you can't afford a sweater', 'Oh, you have to rent it'.

2:33 [W: At the same time, you ..] (285:287)

Codes: [Status]

W: At the same time, you could also, I could also imagine: 'Oh, dude! That's a really cool sweater. Where did you buy it?', 'Ahh, I didn't buy it. I am RENTING it'. And it's like: 'Ohh, what?! What, renting a sweater?' And then you explain it and then he's like: 'Ahh, I'll check it out'. And then maybe he thinks: 'I'm gonna rent the same sweater'.

T: [Laughs]

W: But it's out of stock because you're wearing it or something. Errr, I, yeah, I don't necessarily see like, err, something like shame or awkwardness in it. Err, but... [T interrupts with inaudible comment]. Yeah, but, mm, yeah I don't know.

2:35 [M: I don't know how I wou..] (290:290)

Codes: [Status]

M: I don't know how I would react to such a question. Because for example I am really really used to wear friends' or sisters' or mothers' clothes. I really have always something that is not mine but they are anyway my familiars or my best friends or anyway my circle. So it's kind of me. It's kind of my world. And I don't know. I don't think I would be ashamed to say I'm just renting it. For sure I should have to explain what does it mean because it is not common. So maybe I would just, mmm, maybe don't say the truth. Just not to explain and if I don't want of course. It depends, who is asking but, ehh. Mmmm, like I wouldn't, I don't know. I wouldn't be really ashamed of showing what is, where it comes from. I would just be okay.

2:144 [G: Yeah it's true tha..] (135:135)

Codes: [Self-transcendence] [Status]

G: Yeah it's true that you can be more, today more trendy when you're constantly changing. That's true. But for me it's also an excuse to shop more [laughter]. Perhaps it's not the answer, you would like to hear. But now, yeah, yeah. For me, eh, it's a completely different eh...

Code: Viginity {30-0}~

2:22 [W: Mmmm. Well, I was thin..] (269:269)

Codes: [Virginity]

W: Mmmm. Well, I was thinking what you were saying about like this endless line of yeah getting new stuff and refocusing and stuff. I was also thinking about the consequences in terms of used materials and stuff. Because if people don't, erh, own it maybe they have a little bit less responsibility, erhm, and if, erhh, people own something, they'll probably be more careful with it and they'll also probably last longer with it.

2:27 [T: But don't you find it ..] (275:275)

Codes: [Virginity]

T: But don't you find it weird that it's, when you get the product, that it's not new? In a way. I mean, if I buy something, then I want, you know I want to peel off the foil from the screen and I want to do all these things. I think that's for me, that's part of the whole experience when you buy something. And of course that is no longer the case when you rent it. It might have been used several times. Coffee machine might come with scratches or if you look inside it might not be entirely clean anymore. The sweater might have some, I don't know, errors or damages that, err, the renter company didn't see. Those kind of things are part of renting and I don't know if I would want that.

2:28 [W: Well, it depends on th..] (276:278)

Codes: [Virginity]

W: Well, it depends on the product. Like if it's a vacuum cleaner, I don't mind if it is dirty or

M: [giggles]

W: ...scratched or something.

2:48 [T: Well, I would... That ..] (325:325)

Codes: [Virginity]

T: Well, I would... That would not particularly appeal to me. But there are kind of social networks in which people rent out things to each other or just borrow and lend things to each other and that is in a way more appealing to me because there I might become a member offering a thing that I have. Let's say that I have a drill. And I wanna sometimes borrow somebody else. And it might be for free or it might be against a small charge, few Euros every now and then. And then... Then for me that's a community feeling as soon as it's corporate, then for me this community feeling is just gone in a way.

2:49 [W: It also unclear to me,..] (326:326)

Codes: [Virginity]

W: It also unclear to me, adding to that, why would there be a social community around, err, a renting interaction if, err, if the only, errhm, yeah, I mean, if I would rent, err err erm, a laptop or something and it would be, it would have a problem, I would go back to the company or write them an email or call them and say: 'It's broken and I'm gonna bring it back or come pick it up'. And that's it. Like why would I need a social network around it because everything is between me and the institution, right. Otherwise something would be wrong, I guess. If there would be a community then like: 'Hey!', like errh 'I think they are not doing it correctly or something', like. I don't see what the benefit would be or the added value. In like this setup. Whereas if it, if it's, if the renting out is based on a social interaction then I think it is very cool.

2:50 [M: Yeah, I don't think I h..] (327:327)

Codes: [Virginity]

M: Yeah, I don't think I have really something to add. I, I agree with that. If there's something wrong with the product I would go back to the owner or, yeah, find someone in my own network, errhm, instead of going to like... I imagine this like online [inaudible word] interacting would be rather full. One can also just Google it and see on a, like a totally random forum. It doesn't need to be necessarily a community around the product. Yeah.

2:54 [or the coffee machine, hmm. Eh..] (350:350)

Codes: [Virginity]

or the coffee machine, hmm. Ehm, I don't know it's also a use-object but somehow it is related to food so maybe not exactly the coffee machine itself but things that are related to food would maybe gross me off if I knew that somebody else had used it before that I don't know. Yeah.

2:56 [With the coffee machine when y..] (351:351)

Codes: [Virginity]

With the coffee machine when you say that it's food. But it's different than the other kind of food stuff which could... Things would go inside. Coffee machine is more like, ehh, you put coffee, eh, beans or powders inside and it goes out. So [C: yeah] it's not really something like you can dirty inside. For me I would rent it. Actually.

2:57 [C: Mmmm. Maybe this f..] (352:356)

Codes: [Virginity]

C: Mmmm. Maybe this feeling is not so much for the coffee machine but you know a blender or something.

Y: [at the same time] Yeah that would be, that would be grossing

C: That I find. Yeah. [Adding to Y] Something different.

[Laughs together]

C: Okay yeah. The coffee machine is on the edge but...

2:63 [Y: Ahh, another point is ..] (368:369)

Codes: [Virginity]

Y: Ahh, another point is [C: Ohh!] eh, I, I... Personally I have, ehh, higher requirements on the, like digital products or like the screen quality. I don't like any scratch on [C: Mmhhh] the digital products. Then I would expect maybe there are some scratch on the sec... rented one. Then I don't like it.

C: Okay. Okay. I wouldn't mind so.

2:64 [C: Ehh, pfffh, It's ba..] (372:372)

Codes: [Virginitiy]

C: Ehh, pfffh, It's basically the cleaning aspect. I mean I know that it happens on restaurants also. But you kind of not think about it because you don't see people preparing food on restaurants with the blender for instance. But in my experience some cooking devices are quite difficult to clean, and when renting I'd expect that, I don't know, you get something that somebody else used before for their food preparation. And I don't know if they only make food inside there or something. On the other hand, I realise, that's not very rational because if somebody has a company renting, errh, food making equipment, they'll probably clean it very thoroughly before giving it to the next person. So this is... For me it's on an emotional level.

2:65 [Y: Hmmm... I'm thinking. ..] (373:373)

Codes: [Other] [Virginitiy]

Y: Hmmm... I'm thinking. Because, ehh, I live in a corridor so I share all the kitchen stuff with my roommates. Emmm... At least after one half year living with them I don't get any feeling that, ehh, [C laughs] I don't like to share any food stuff. It's okay. But if I'm really going to rent a food... a thing, ehh. Stuff related to food from a company, that this stuff is used by someone I don't know, I would also consider it seriously before rent it. Because yeah... It's also. It's... Food is something you eat inside. Eat in...

2:66 [C: Yeah I think you ju..] (374:374)

Codes: [Virginitiy]

C: Yeah I think you just made a good point about, you know the people or you don't know and there's something about trust. If I don't know somebody then I cannot trust them. But my corridor mates, maybe in the beginning it's a little strange but, after some years you know each other and then it's fine. To even know a person used it before, you need to clean it before you use it.

2:84 [Y: Hmmm... Mmm, I would n..] (429:429)

Codes: [Virginitiy]

Y: Hmmm... Mmm, I would not rent it. Rent the clothes. It's too close to me [C laughs]. It's too close to my body.

2:85 [Y: Yeah, you see... I don..] (432:437)

Codes: [Virginitiy]

Y: Yeah, you see... I don't know, it's even, even stronger than this, than the coffee machine. Something eat.

C: Ohh

Y: Cause, ehm, I got the feeling that if I eat something, it's finished when I throw it, swallow it [C: Yeah]. And if I'm wearing a clothes that I feel uncomfortable with, but I'm feeling it all the way when I'm wearing it. And it's stronger.

C: Okay. Okay, maybe underwear I would agree but the other parts... No. Yeah.

Y: Hmmm [C laughs]

C: I would wear your sweater [Y laughs]

2:86 [Y: Yeah, I can wear a swe..] (438:438)

Codes: [Virginitiy]

Y: Yeah, I can wear a sweater from someone else like friend or I just, eh, like we're going out but I'm too cold and then I got someone we go together's clothes. It's okay for me but I would ne... I would... I don't think I will, ehm, will, eh, go there to rent a clothes. Ehm, by myself.

2:108 [F: Mmm, with the sweater n..] (67:67)

Codes: [Virginitiy]

F: Mmm, with the sweater no. I mean if it is in an okay state and it smells clean. I'm fine.

2:109 [With the tablet. Maybe about p..] (67:67)

Codes: [Competence] [Virginitiy]

With the tablet. Maybe about privacy or bots or viruses or something like that. Probably because I don't know anything about it. So, ehm, it would depend on how much I trust the person who rents it to me. That he has the knowledge and capabilities to give me a clean iPad and make sure that all the things that I didn't delete will be deleted when I, when I hand it in. I think that would be a concern for me.

2:110 [INTERVIEWER: Okay. And, yeah. ..] (69:71)

Codes: [Virginitiy]

INTERVIEWER: Okay. And, yeah. So neither of you are concerned with other people having used, a, a sweater that you would rent?

H: Just wash it.

F: No, ehm... I always wore also... My sister and I we would swap clothing with my mom and with my friends. Yeah like I said, I do a lot also in sustainable fashion. So then you have like this clothing swaps that are really popular right now. So, yeah like I said, if it smells fresh and there are no stains in it. Then, yeah.

2:124 [But, ehm, I would question if ..] (127:127)

Codes: [Virginitiy]

But, ehm, I would question if the sweater is already used by someone else. Because then I wouldn't see as really nice because

other people already wore the clothes. And that what I, in my opinion wouldn't like. But ehm, so I would question the clean, how do you say it? The clean... iness of the clothes if you rent it. Ehm, but I also think that when you buy it it's really, eh, from your, eh, you own it. And I think that also has a thing like, it's my thing. It's the same that if you buy a watch or something else. I'm happy to have it for my own and knowing that it's my own thing. Ehm, so I think it both has eh, eh, positive things but also negative things

2:125 [And with a tablet I would have..] (127:127)

Codes: [Virginity]

And with a tablet I would have the feeling like, if you rent it, ehm, it should be easy to, ehm, to eh, to remove all your, all your private things from the tablet, that that would be really easy. Otherwise, I think it is really really handy if you can, can just rent it. Because then you don't have to spend that much money. But I think it's really important with a tablet or a device that you can remove all your, all your private data or things that's on the tablet. That's my opinion, I think [laughs].

2:127 [Ehm, also I'm yeah, a bit unsu..] (128:128)

Codes: [Virginity]

Ehm, also I'm yeah, a bit unsure about the hygiene part. I know there are already companies introducing, eh, rent systems, also with jeans for example and I'm just not sure if I would like to know that someone else might have worn this piece.

2:129 [Ehm, the iPad, ehm, yeah also ..] (128:128)

Codes: [Virginity]

Ehm, the iPad, ehm, yeah also the personal data, I am not sure about it. Especially the online security is very much an issue these days. Ehm, and for the hygiene as well. I'm not sure if I would like to share my iPad with someone else. Unless I can trust this person, that, ehm, yeah can handle it carefully. Ehm, clean it afterwards, I don't know. That type of arguments. '

2:138 [So, eh, and also I, eh, saw a ..] (130:130)

Codes: [Virginity]

So, eh, and also I, eh, saw a really interesting, eh, sociology program on National Geographic, where they were doing, eh, doing experiment on people. Like people who are really willing to rent, eh, clothes. They asked them, like they told them after, after they rented clothes: 'These have been worn by people who are dead now' [subtle laughter]. And this really had like... made them like shun renting clothes forever. They didn't ever rent any clothes after that. So, eh, that's also a feeling of mine. And, eh, I personally like my own stuff.

2:140 [Ehh, coming to a tablet. Yeah,..] (130:130)

Codes: [Virginity]

Ehh, coming to a tablet. Yeah, again, eh, I agree with like all three of you. Because, yeah it's again privacy issues, eh, cleanliness as well. Eh, privacy, I think is the main thing here. With tablets you don't really know, eh. A lot of applications are save hidden data for a long time and... That can really breach your privacy.

2:142 [INTERVIEWER: Yeah, thank you. ..] (131:132)

Codes: [Virginity]

INTERVIEWER: Yeah, thank you. I'd just like to pick up on some of the, the things. You all mentioned this thing with hygiene in the sense of the sweater. Eh, maybe except from you AN.

AN: Yeah. I, I trust the hygiene part.

2:177 [AM: I can drive a car like ..] (211:211)

Codes: [Competence] [Virginity]

AM: I can drive a car like really well but again there is just a difference in renting and buying a car like I've seen it, eh, back in my country that people who rent car, a car, they are more, eh, more careless about handling it. And people who have their own car they are like, they really treat them as like their babies or something. So it is also a big factor when buying something, which everybody knows or is supposed to know how to drive, they are buying a car. So they are good at it. They can be good and they can be bad as well. Eh, in India mostly they are bad drivers [laughs]. But, eh, yeah. That how it works. They are less concerned about the scratches on the car if they rent one. You don't have any rules or any laws that are, that the renter can really charge you a lot of money or sue for destroying it.

2:179 [AN: I think that if you kno..] (213:213)

Codes: [Competence] [Virginity]

AN: I think that if you know a lot about a product. For instance, how to repair a bike, then I assume that you also have some interest in doing it and taking care of your product and then I would think if I would have that with a product, that I would want to have it and take care of it myself and be sure it is always in a good condition.

2:180 [G: Ehhh, yeah. I, eh,..] (218:220)

Codes: [Competence] [Virginity]

G: Ehhh, yeah. I, eh, well I had an example in my head about, eh, cooking equipment [laughs]. Yeah, I, I also think, eh, most are not really careful with those things. For example with a blender. Ehm, it looks really straight forward but you really need to yeah to clean it well and not put in, ehm, ice, ehm cubes for example. Ehh, so yeah. It's a random example, I know but yeah. I would not like to rent it for that case. I would like to own it for myself. Cause I know that it will be in the same state as it was.

AM: Also safety is a concern...

G: [At the same time] Yeah safety. Especially with blenders.

2:181 [AM: Ehh, eh, here in Nether..] (221:221)

Codes: [Competence] [Virginity]

AM: Ehh, eh, here in Netherlands you don't often use the pressure cookers. I think you know about them [G: yeah, yeah, true]. It's a lot of safety involved in that and it's always better to buy a new one than to rent one because it can cause a lot of trouble. It can also cause deaths at time [G: yeah, true].
