



<http://www.diva-portal.org>

Postprint

This is the accepted version of a paper published in . This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the original published paper (version of record):

Ekström, K M., Salomonson, N. (2014)

Reuse and Recycling of Clothing and Textiles: A Network Approach

Journal of Macromarketing, 34(3): 383-399

<https://doi.org/10.1177/0276146714529658>

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:hb:diva-1849>

Reuse and Recycling of Clothing and Textiles – A Network Approach

Karin M. Ekström^{a1}, Nicklas Salomonson^b

^a Professor of Marketing, School of Business and IT,
University of Borås, S-501 90 Borås, Sweden.

Email: karinm.ekstrom@hb.se

^b Associate Professor, School of Business and IT,
University of Borås, S-501 90 Borås, Sweden

+46 33 435 44 79

Email: nicklas.salomonson@hb.se

This is a **post-print** of an article which has been published in Journal of Macromarketing, 2014 by SAGE Ltd. All rights reserved. © Karin M Ekström and Nicklas Salomonson. Available online at: <https://journals.sagepub.com/doi/abs/10.1177/0276146714529658?journalCode=jmka>

Use the following reference when citing the paper:

Ekström, K. M. and Salomonson, N. (2014). Reuse and Recycling of Clothing and Textiles – A Network Approach. *Journal of Macromarketing*. 34 (3), pp. 383-399. doi: 10.1177/0276146714529658

¹Corresponding author: KarinM.Ekstrom@hb.se

Abstract

The accelerated pace of the consumption in the Western world has led to an increase of clothing and textiles disposed of in the garbage rather than being reused or recycled. The purpose of this article is to increase the understanding of how clothing and textile consumption can become more sustainable by demonstrating how members of a network view and deal with this problem. The study is based on meetings over 1,5 years and a survey. Different views on the problem as well as various solutions on how to increase reuse and recycling of clothing and textiles are presented, including means and challenges. A macromarketing perspective, involving different actors in society, is necessary in order to make consumption more sustainable and for finding long-term solutions. It is argued that an understanding of symbolic consumption and the fashion system can contribute to the macromarketing discipline when studying societal development from a sustainable perspective.

Keywords

sustainability, reuse, recycle, network, consumption

Introduction

The consumption of clothing and textiles has increased in the Western world during the last few decades parallel to the development of the consumer society. For example, statistics show that the private consumption of clothing and shoes increased by 53% in Sweden during 1999–2009 (Roos 2010). This trend is also noticeable in the UK where the volume of clothing sold increased by 60% during 1995–2005 (Morley et al. 2006). The accelerated pace of clothing consumption has led to a dramatic increase in the amount of textile waste (see e.g., Madsen et al. 2007; Morgan and Birtwistle 2009). A Swedish study (Carlsson et al. 2011) indicates that each person disposed 8 kg of textiles in the garbage every year. Another study (Gustafsson and Ekström 2013) shows that 62% of Swedes dispose of usable clothes (not socks or underwear) that they no longer want to use in the garbage. In the U.S., the Environmental Protection Agency (EPA) Office of Solid Waste assesses that Americans throw away more than 68 pounds (30.8 kg) of clothing and textiles per person per year, and that clothing and other textiles represent about 4% of the municipal solid waste (Claudio 2007, p. 449). In the UK, an average consumer throws away 30 kg of clothing and textiles per year (Allwood et al. 2006). This is a major environmental problem, particularly since the production of textiles requires significant natural resources. For example, in order to produce 1 kg of cotton, it takes between 7,000–29,000 liters of water and between 0.3 to 1 kg of oil (Fletcher 2008). Rather than disposing clothes and textiles, reusing and recycling them would be more environmentally sound. In this article, reuse is defined in accordance with Morley et al. (2006, p. 2) as the use of the original product function (e.g., clothing reused as apparel to cover the body). Recycling is defined as the use of the material properties (e.g., as a fire retardant non-woven material in a mattress spring cover)

(Morley et al. 2009, p. 2). Hence, reuse and recycling can prolong product usage and material life cycles.

Previous research on reuse and recycling of clothing and textiles has, to a large extent, focused on micromarketing issues, considering individual and managerial aspects of sustainability (Birtwistle and Moore 2007; Domina and Koch 2002; Ekström et al. 2012; Ekström and Salomonson 2012; Mannetti, Pierro, and Livi 2004; Morgan and Birtwistle 2009). We argue in this article that it is necessary to consider the macromarketing aspects of sustainability (de Coverly et al. 2008; Kilbourne 2004; Kilbourne, McDonagh, and Prothero 1997). Previously, de Coverly et al. (2008, p. 290) emphasized that waste is an important issue within the macromarketing domain. In order to better understand the problems with waste and the different dimensions of municipal solid waste management, such as environmental, economic and social aspects (Morrissey and Browne 2004), a more wide-ranging view of the problem is needed rather than a narrow microscopic perspective. Increased waste as a result of increasing consumption is a global problem that requires solutions based on cooperation between different actors in society. We find support for this argument in Wells' (1993) article where he discussed the need to have a mixed perspective from academia, business, and government.

This article is based on a study of a Swedish network of major clothing retailers, recycling companies, charitable organizations, consumer organizations, environmental organizations, branch organizations, and governmental agencies. The network was formed with the intention of trying to find solutions to the problem of increasing waste of clothes and textiles among households. The study was conducted in Sweden, a Western country that has achieved a high degree of recycling due to a nationally established system. In 2011, 92% of glass, 74% of paper packaging, 68% of metal, and 26% of plastic packaging were recycled from Swedish

households (FTI 2013). In 2009, newspaper recycling was 91% in Sweden (FTI 2013).

Politically, waste management is emphasized in Sweden as well as in many other countries in Northern Europe. However, Sweden lacks a national system for collecting clothing and textiles, which may explain why the reuse and recycling of clothing and textiles is relatively low. Since the consumption of clothing is also high in other Western countries, we believe they can learn from this example on how to increase the reuse and recycling of clothing and textiles.

The purpose of this article is to increase the understanding of how clothing and textile consumption can become more sustainable by demonstrating how members of a network view and deal with the problem of clothes and textiles being disposed of in the garbage by households rather than being reused or recycled. The study presents different views (company, consumer, and society) on the problem of textile and clothing waste and how consumption can be more sustainable. Different solutions to solve the problem of increasing textile and clothing waste are presented. The article also emphasizes the importance of recognizing how symbolic consumption as well as the fashion system, including fast fashion, contributes to the substantial societal problem of increased consumption of clothing and textiles.

We first discuss the consumption of clothing and textiles, as well as their reuse and recycling, in general. This is followed by a discussion on the need for macromarketing and the importance of considering consumption when dealing with sustainability. Thereafter, the method is presented, followed by the results, discussion, and conclusions.

Consumption of Clothing and Textiles

Even though modern consumer culture originated in the 18th century (Slater 1997), purchasing and disposal has accelerated over the last few decades. The increasing amount of consumer goods is noticeable within department stores, houses, and garages filled to the brim, and at

second-hand markets and at refuse dumps. Expanding hyper-consumption is encompassing all spheres of our lives (Lipovetsky 2011). Commenting on the role of consumption in people's lives, Assadourian (2010, p. 187) writes: "there is an increasingly common pattern across cultures to find meaning, contentment, and acceptance primarily through what we consume." Apart from economic reasons such as increased welfare, social (symbolic consumption) and cultural (fashion system) factors also contribute to increased consumption of clothing and textiles (Ekström and Salomonson 2012). Consumption is nowadays a significant social marker for showing who you are and what you want to be. The importance of symbolic consumption has increased parallel to the development of consumer culture during the last few decades and thereby also has contributed to high levels of consumption (Ekström 2013; Ekström and Glans 2011). Bauman (1998) even argues that consumption has replaced the significance of work as a status indicator. Clothing and textiles for home interior are examples of symbolic consumption reflected in social comparison, conformity, and distinction (Bourdieu 1984; Ekström 2010). People are influenced by others, but at the same time they have a desire to be perceived as being unique. However, Campbell (1996) is critical of placing too much emphasis on symbolic consumption when discussing clothes. A person's choice of clothes may have to do with what the person already has in the wardrobe, what he/she can afford, and is therefore not necessarily a conscious act to show one's identity. Other researchers have also questioned the free choice advocated in postmodern marketing (e.g., Lodziak 2002). Furthermore, it needs to be recognized that symbolic consumption concerns not only new clothes, but also second-hand clothes, as well as ecologically produced clothes.

Fashion plays a major role in decisions about consumption. It represents social differentiation, mobility, and identity in society (Crane 2007). González (2007) also discusses

how fashion is about social distinction and assimilation. Fashion allows a person to “mark” his/her identity, but its fragility makes it also possible for people to change their identity (González 2007). One crucial aspect of fashion is the novelty that actually allows consumers to embrace new fashions, but also to change their tastes (Campbell 2007). Fashion contributes to an accelerated pace of consumption. Campbell (2007) discusses how in the 18th century in Western Europe a rapid pace of change known as fashion became apparent in dress as well as other consumer goods. For clothing, the rapid pace of change increased over time parallel to the development of the consumer culture and mass production. For example, haute couture clothing was copied in industrial production (Ekström 2012). During the last few decades, “fast fashion” involving combinations of short product life cycles, limited editions, and low prices have increased (Byun and Sternqvist 2008; Cachon and Swinney 2011). Advanced technology, rapid manufacturing, and supply chain control are the key elements (Barnes and Lea-Greenwood 2006). Moreover, an increased interest in fashion in clothing and textiles in interior decoration is noticeable in programs on TV about fashion, fashion blogs, and an increased number of museums exhibiting fashion (Ekström 2012).

Increased consumption overall is not sustainable in the long run (Cohen 2011; Jackson 2009). In the case of clothing and textiles, problems with over consumption and waste negatively affect our environment. Growing criticism of fast fashion and mass consumption, for example, has become manifest in presentations of anti-consumerist ideas by different artists (see e.g., Biehl-Missal 2013). Consumption is a central issue when trying to become a sustainable society. Prothero, McDonagh, and Dobscha (2010) suggest that consumption is a locus for change. They argue that the ascendancy of consumption in modern cultures allows for changing practices and altering the dominant social paradigm (DSP) that emphasizes quality of life as

being determined by increasing levels of consumption (Kilbourne, McDonagh, and Prothero 1997). By better understanding the motivations behind consumption, it may be possible to become more sustainable. Connolly and Prothero (2008, p. 142) write: “Rather than focus on the issue of whether green consumption can work as a strategy, we should perhaps try to gain a greater understanding of the process that has led people to believe that they, as individuals, can help solve global environmental problems.” People are not always aware of the environmental effects of the consumption of clothing (Ekström et al. 2012). Connolly and Prothero (2003) found that Irish consumers did not link their consumption habits with environmental destruction.

While a majority of consumer research has focused on purchasing behavior, it is necessary to better understand product disposition in order to get a more complete understanding of the cycle of consumption (de Coverly et al. 2008). As many marketing tactics encourage a “throwaway spirit,” marketing academics have a moral obligation to understand waste (de Coverly et al. 2008). We share this view and also the more encompassing view that definitions of marketing should delineate a macro agenda as suggested by Shultz (2007). More research is needed to consider the full consumption cycle, including recycle and reuse (Prothero et al. 2011), and more studies on waste are necessary to understand the motives behind disposal. De Coverly et al. (2008) discuss how consumers are socialized to avoid waste and have garbage collectors keep it out of sight. The authors found that people became uncomfortable when faced with waste and then started to question their consumption levels. Throwing no longer needed items of clothing and textiles into the garbage does not require expending time and energy to transport items to a recycling station or recycling center. In Sweden, recycling stations are usually in close proximity to where consumers live, whereas recycling centers are further away and also encompass more kinds of waste to sort, such as refrigerators. Furthermore, throwing clothing

away can be convenient, but also a way to avoid showing others that some consumption has been frivolous. Clothes are very closely connected to personal identity (Woodward 2005), which may influence some people to discard them rather than giving them to charity. Another reason for not reusing and recycling clothes could be that consumers are unaware of this possibility. The garbage provides an easy way to get rid of the excess. De Coverly et al. (2008, p. 297) write:

The ability of informants to forget about their waste and to disregard the consequences is perhaps symptomatic of the way society operates. Alternatively, it may be the result of decades of successful socialization against waste. At best, this is mass senility, but at worst, it constitutes a manifestation of cultural doping and deserves greater scrutiny by the macromarketing academy.

Reuse and Recycling

There is relatively little research on when and how to dispose of a product and when disposal can lead to alternate usage by another person (Prothero et al. 2011). According to the seminal article by Jacoby, Berning, and Dietvorst (1977), a consumer has three general choices when contemplating disposition: keep the product, get rid of it permanently, or dispose of it only temporarily. When getting rid of it permanently, the consumer can throw it away or abandon it, give it away, sell it, or trade it (Jacoby, Berning, and Dietvorst 1977). The option of recycling has developed over time (e.g., Mannetti, Pierro, and Livi 2004). Still, research in marketing on how to reduce waste is lacking. Waste is culturally embedded societal problem. It is not sufficient to consider waste as waste management, marketing, and consumer research (de Coverly et al. 2008).

A Swedish study showed that 21% of people dispose of clothing because they are tired of them (Ungerth 2011). Young adolescents (16–19-years-old) were more likely than others to

think along these lines. The reason could be that young consumers have grown up in a consumer culture and are often more sensitive to fashion trends and symbolic consumption. Wattanasuwan (2005) argues that consumption is employed symbolically to create and sustain the self, but also to locate us in society. The latter function may be of particular importance for young consumers who are in search of establishing an identity or rather a variety of identities in different situations. Piacentini and Mailer (2004) found that teenagers' clothing choices were bound to their self-concept and used both as a self-expression and for judging people and situations they encounter. In addition, clothing made the wearer more confident and capable. Research from the Netherlands showed that the average amount of time that a person keeps his/her clothes in the wardrobe is 3 years and 5 months (Fletcher 2008). During this time, the clothes are used on average for 44 days and from 2.4 and 3.1 days between washings.

At the same time, developing second-hand cultures are of importance for understanding practices of consumption (Gregson and Crewe 2003). Purchases of second-hand clothing on the Internet are growing rapidly (see, e.g., HUI Research and Blocket.se 2012). Reasons include economic constraints, what is considered trendy, and concern for the environment. However, research indicates that consumers often do not associate giving clothes to charity with environmental benefits, but rather for philanthropic reasons (Ekström et al. 2012). Apart from private consumers selling to each other over the Internet, in markets, or via second-hand stores, an increasing number of companies and charity shops deal in second-hand goods. Overall, shopping for second-hand goods has become more popular and socially acceptable over the last few decades.

In Sweden, people give 3 kg/person/year, in total 26,000 tons, to charitable organizations (Carlsson et al. 2011). Of this, 73% (19,000 tons) are sent abroad for aid or sold for export; 12%

(3,000 tons) are sold in Sweden; and 15% (4,000 tons) are disposed (Carlsson et al. 2011). A study by Tojo et al. (2012) shows that more than half of the textiles collected by charitable organizations in Denmark, Finland, and Sweden are exported. Exporting, however, is not without problems since it may have a negative impact on developing countries' ability to foster their own textile production (e.g., Cline 2012). Consumers in developing countries may prefer to buy cheaper second-hand clothes than domestically produced clothes. In addition, fast fashion poses a problem for charitable organizations that have to handle increasing masses of decreasing quality (Cline 2012). Instead of being sold in stores, low quality fast fashion clothes are compressed and sold to textile recyclers for a lower profit (Cline 2012).

From a historical perspective, the recycling of clothing and textiles once was common in the making of rugs, mattresses, and furniture. Even though this practice has diminished over time, it can be expected to increase in the future due to environmental motives as well as economic factors, such as an increase in the price of raw materials like cotton. However, even though reuse and recycling are important actions to reduce the amount of waste, they still are not sufficient for dealing with the detrimental effects that increased consumption has on the environment. De Coverly et al. (2008, p. 299) write: "Strategies such as DEFRA's 'Reduce, Re-use, Recycle' are essential but only partial solutions to the growing waste mountain, since they tackle the symptoms not the cause."

A Need for Macromarketing

As indicated earlier, many previous studies on sustainability have had a micromarketing focus that dealt with individual choices or managerial issues. However, this presents a limited perspective on environmental problems including the increase in clothing and textile waste.

Dolan (2002) criticizes the fact that research on sustainable consumption often assumes that it is

the rational individual who is the cause of ecological problems. Instead, he suggests that we need to regard the social, cultural, and historical contextualizations of consumption, as well as consider consumption practices as relations between individuals.

Kilbourne, McDonagh, and Prothero (1997) argue that principles of micromarketing may in fact have decreased consumers' quality of life and added to the degeneration of our natural environment. By this, they mean that the separation of the object of consumption from nature is detrimental in that the image is being consumed rather than the object. Dolan (2002) argues that nature and culture interact and should therefore not be viewed as opposites. The complexity of consumption in society needs to be acknowledged, especially its role in identity shaping in a time of growing individualization (Dolan 2002). The increased focus on symbolic consumption should be recognized, but also criticized, as suggested by Wattanasuwan (2005) who argues that it may enslave us in the illusive world of consumption. It is problematic when the style and color of the clothes have a stronger impact on purchases rather than the modes of production and environmental effects. Individuals involved in marketing can play an important role in raising awareness and thereby establishing a sustainable eco-fashion market (Yan, Hyllegard, and Blaes 2012). The role of contemporary artists should be considered since they sometimes critique and resist fashion and consumption (Biehl-Missal 2013).

Even though a vast amount of research on sustainability has focused on micromarketing issues, a growing number of macromarketing studies have appeared (Assadourian 2010; Dolan 2002; Kilbourne 2004; Kilbourne, McDonagh, and Prothero 1997; Prothero et al. 2011; Prothero, McDonagh, and Dobscha 2010; Schaefer and Crane 2005). Kilbourne, McDonagh, and Prothero (1997) emphasize that macromarketing means the institutions of industrial societies need to get involved. As Dolan (2002, p. 180) expresses:

Essentially, the goal of sustainable consumption needs to be seen as a political project, recognizing the power relations between social groupings (capital and labor, the state and sectional interests and alliances, business and consumers) and between cultural value systems (environmentalism and consumer sovereignty, capitalism and socialism, collectivism and individualism).

In order to solve societal problems, actors with different perspectives and motivations need to meet. The network in the present study was established based on the notion that societal problems need to be solved by different actors collaborating rather than competing.

When discussing environmental problems such as waste, the role of the consumer versus the citizen must be considered. To what extent is the consumer willing to sacrifice time sorting the clothes for reuse and recycling rather than throwing it in the garbage? To what extent does environmentally sound behavior need to be reinforced by taxes or incentives? For example, a tax on plastic shopping bags in Ireland resulted in a 90% decrease in the consumption of plastic bags (de Coverly et al. 2008). Prothero et al. (2011) argue that it is necessary for governments to increase the public's environmental awareness, for example, by educational programs in schools, TV, and social media. When governments get involved, do they consider the citizen or the consumer? Nowadays, the traditional distinction between the citizen and the consumer often overlaps (Trentmann 2007). Individual actions, regardless of whether the consumer is acting as a consumer or a citizen, as well as actions undertaken by the companies and governmental agencies, need to be considered to solve the problem with waste. Waste needs to be dealt with in policy discussions (de Coverly et al. 2008).

Martens and Spaargaren (2005) discuss the politics of sustainable consumption in the Netherlands and argue that environmentally friendly consumption practices today are a joint

responsibility for government, industry, and citizen–consumers (Martens and Spaargaren 2005). This view represents the macromarketing perspective advocated in this article. Examples of joint initiatives to solve sustainable consumption problems are abundant. For example, in the Netherlands, the “Platform True Prosperity” consists of two-dozen organizations such as NGOs, consumer groups, charities, religious organizations, and trade unions (Martens and Spaargarten 2005). Another example in the Netherlands is the National Initiative for Sustainable Development (NIDO), consisting of governments, industries, civil-society groups, and scientists (Martens and Spaargarten 2005). The latter appears to be more in line with the network in the present study focusing on thematic programs. Sometimes, unexpected alliances emerge, such as McDonalds and Greenpeace worked together on environmental problems (Prothero, McDonagh, and Dobscha 2010).

It is interesting to reflect upon why companies get involved in finding sustainable solutions. One reason could be that companies want to be prepared when consumers ask about sustainable communication (McDonagh 1998). Prothero, McDonagh, and Dobscha (2010) argue that consumers’ improved understanding of the effects of production and consumption on the environment forces marketing executives to rethink their own business practices and philosophies. Another reason could be that companies also realize the importance of taking actions on sustainability for the sake of the planet.

Method

In order to increase the understanding of how clothing and textile consumption can become more sustainable, a qualitative research approach consisting of a network of significant stakeholders (see Table 1) was established. The stakeholders were chosen based on their positions as important actors in society having knowledge of clothing and textile design, manufacturing, and

selling (clothing retailers and branch organizations); transportation (transport companies); charity, second-hand, and reuse (charitable organizations); waste handling and recycling (recycling companies and branch organizations); consumer interests and behavior (consumer organizations); and citizens interests, regulations, permits of waste handling and laws concerning the environment (municipalities and government agencies). Our approach, involving many voices, has a polysemic touch involving rich and multiple meanings (Kozinets 1999). The stakeholders were also chosen because they represent three macromarketing perspectives – company, consumer, and society (see Table 1).

[Insert Table 1 about here]

The first meeting was held at Gekås Ullared, Scandinavia’s largest department store, in January 2011. Subsequently, the network met seven times up till September 2012 for the purpose of this study at one of the companies/organizations in the network (see Figure 1).

[Insert Figure 1 about here]

Inspiration for the network idea comes from Walmart in the United States, which has developed similar types of networks in order to solve sustainability problems and reach innovative solutions that result in financial and environmental revenue gains (Martin and Schouten 2009). In our network, a consumer perspective directs the finding of solutions to the problem. In other words, the solutions for increasing the reuse and recycling must be easy for the consumer to act upon.

One definition of a network is participants having common ambitions, benefiting from joining, participating on equal grounds and voluntarily, organizing the network themselves, having dynamic meetings, and planning the time for the meetings (KKR 2003). A new field of research, “governance network research,” considers a non-hierarchical interaction between

public, semi-public, and private actors (Sørensen and Torfing 2008). In our network, public, semi-public, and private actors participated to deal with the problems at hand. Green alliance is another term used for formal or informal collaboration among organizations aiming to find solutions to common environmental problems (Crane 1998). Continuity is important in order for the network to stay alive. Apart from the meetings, the network has stayed in touch via e-mail and a virtual area on the Internet where the researchers and other members of the network have shared documents.

The two researchers coordinating the network led seven meetings that took place over a year and a half. The researchers acted as moderators during the meetings. At the first meeting, issues and topics of importance for the research were discussed among the network members. This generated a basis for discussions in the following meetings and was also a way to delegate assignments to individuals and groups of members, which were to be presented later on in the project. Subsequent meetings focused on specific themes regarding the reuse and recycling of clothing and textiles. Member organizations were also asked to present their views on relevant issues. The agenda for each meeting was, to a great extent, influenced by what had happened at the previous meeting in order to proceed forward. Some meetings included shorter workshops covering certain topics, which needed to be discussed in more detail. Researchers and representatives of the organizations that were not part of the network were sometimes invited to present topics relevant to the network.

The qualitative network approach is similar to the focus group interviews where the participants are encouraged to discuss different topics with each other. There are several reasons for choosing this approach. First, the reuse and recycling of clothing and textiles is an under-researched area and more knowledge is needed about how different stakeholders in society can

work with issues of reuse and recycling. Second, the network approach allows the different stakeholders' perspectives to be shared. Also, new ideas about solutions might emerge as different members, who are important stakeholders when it comes to reuse and recycling of clothing and textiles, convene. Third, the network also enables the stakeholders to meet on a "neutral ground" and more freely express their ideas about different solutions. The clothing retailers in the network are competitors and the network, led by the researchers focusing on an issue of common interest, makes it easier to put aside potential conflicts of interest.

The meetings were tape-recorded and detailed notes were distributed to the members after each meeting. The empirical data in this article is based on the recordings and notes from the seven meetings that took place during the one and a half years, as well as on a short survey distributed to the members after one year in Spring 2012. The analysis started from the very first meeting and continued throughout the entire study. Interpretations were made based on the meetings, the e-mail conversations, and the shared Internet site. Different views, perspectives, and competencies among the network members were identified. The survey distributed to the members covered questions about their organization's work with the issues of reuse and recycling today as well as how they could work toward increasing this in the future. It also dealt with how they thought the reuse and recycling could be increased in society overall. They were also asked to provide their reflections on the network in general. The purpose of the survey was to gather additional insights about issues discussed in the network in order to understand more specifically how each member organization works with reuse and recycling internally. It was not intended to generate quantitative data for statistical analysis. The survey was descriptive and analyzed in accordance with traditional qualitative techniques, that is, an iterative process of sorting and categorizing the results.

Overall, the analysis in this study resembles that of action based research (see e.g., Nielsen and Svensson 2006) in that the purpose of the study was to identify different views and try to find collaborative solutions to the problem of increased clothing and textile waste among Swedish households. Even though the researchers acted as moderators, they also had a role in setting the agenda for the meetings in order to move forward with the problem-solving process. An advantage of involving two researchers was that they could compare their interpretations of the meetings and the survey results. The analyses were thereby strengthened by using triangulation in the form of different “investigators” (see Lincoln and Guba 1985). The network has continued to meet after this study was concluded, but is now moderated by other researchers.

Results

In the results, we first demonstrate how the members work with the reuse and recycling of clothing and textiles. The network’s view on how the reuse and recycling of clothing and textiles can be increased in society overall are then presented. Thereafter, obstacles for the reuse and recycling are identified. Finally, reflections about the pros and cons of the network approach are presented.

Network Members' Work with the Reuse and Recycling of Clothing and Textiles

Table 2 summarizes how the different actors in the network work with the reuse and recycling of clothing and textiles. The results are presented in more detail below.

[Insert Table 2 about here]

Reuse of Clothing and Textiles. For the charitable organizations, the handling of clothing and textiles has been a normal part of their business for a long time, in some cases more than 100 years. The public can give items directly to their second-hand stores or put it in special collection bins that are placed throughout the cities and the countryside. Charitable

organizations also collect the clothing and textiles at peoples' homes or workplaces. The items are then sorted manually in terms of quality and "the best parts" are sold in the second-hand stores. Most of what is left is mainly shipped abroad, to Europe, Africa or Asia, where it is sold at the local markets. The items remaining are shipped to the municipalities' incineration plants where they are converted into energy for district heating or electricity. Recently, several of the charitable organizations have also tried to increase the amount of collected clothing and textiles by cooperating with retail companies.

Several of the participating clothing retailers in the network are in the fast fashion segment of the clothing industry. Nevertheless, they demonstrate a willingness to increase the reuse of clothing through different projects. As mentioned, a majority of the companies give away clothes that have not been sold or have some defects to charitable organizations. Another example of cooperation is Lindex (clothing retailer) and Myrorna's (charitable organization) campaign to encourage customers to turn in clothes that they no longer want, for which they receive a rebate coupon to use the next time they shop at Lindex. The aim was to increase the customers' awareness of the need to give their clothes a "second chance." Yet another example is Gekås Ullared's (retail store) cooperation with Human Bridge (charitable organization), named "Textilreturen" (i.e., The Textile Return), where customers have been given the opportunity since Spring 2012 to donate clothes, textiles, and toys to charity. "Textilreturen" is located at the premises of Gekås Ullared.

Retail and textile chains encourage and support sustainability among member organizations through education. Consumer and environmental organizations' mainly aim to provide information to members and the public about reuse of clothes, as well as organizing activities that encourage such behavior. One example is the Swedish Society for Nature

Conservation that organizes Sweden's largest yearly clothes exchange event as a means to inform about the environmental benefits of reusing clothes.

The two waste and energy companies in the network are owned by municipalities. These companies see waste as a resource and work to reduce the amount of waste. Borås Energi och Miljö, for example, has worked to achieve this goal by providing information about sustainability to consumers. The governmental organization Swedish Environmental Protection Agency has mapped the flow of textile waste in Sweden. The agency has also arranged meetings between the recycling company FTI, charitable organizations, and The Swedish Waste Management and Recycling Association (a branch organization for waste) with the purpose of improving cooperation so that consumers can have more accessible systems for the collection of textile waste. The agency has also put reuse and recycling of textiles as a prioritized area in the Swedish waste plan. This means that municipalities are obliged to take this into account in their waste plans.

Recycling of Clothing and Textiles. Some of the charitable organizations in the network work with the recycling of clothes. For example, the Swedish Red Cross (SRC) cooperates with the Swedish Prison and Probation Service in a project where the prisoners shred cloths into natural fibers to be used by the shipping industry. The charitable organizations also have activities to redesign and remake items. One example is Stadsmissionen (charity organization) that has a department where gifts from the public such as clothes are made into new items. For example, an adult sweater can be turned into a pair of pants for a child. SRC has volunteers that work on turning textiles into cushions, pillows, and tablets. The charitable organizations also send material to Europe for recycling.

To some degree, the clothing companies also work with redesign. In 2012, Gina Tricot (clothing retailer) sold a clothing collection that design students had made from a temporary surplus of clothes from Gina Tricot. Indiska (clothing retailer) allows some of their suppliers to turn their textile waste and surplus into new clothes, cushions, pillows, lampshades, or chairs. Gina Tricot, KappAhl, and Lindex (clothing retailers) also make clothes based on recycled material such as polyester and cotton.

The recycling companies in the network focus on finding solutions that allow for the recycling of clothing and textiles. One example is Stena Recycling, which recycles textile waste from manufacturers who sell textiles for industrial use. Stena Recycling is also examining new areas for textile waste, such as insulation to reduce noise and padding for furniture.

The Swedish Environmental Protection Agency works together with other governmental agencies in the Nordic countries to prioritize the recycling of textile waste. The agency also works to find goals, indicators, and incentives that can prevent textile waste. An important part of this is to find solutions in cooperation with different actors in society, for example, by discussing environmental improvements with the clothing industry or by stimulating the development of new technologies for the reuse and recycling of textiles.

The Network's View on How to Increase the Reuse and Recycling of Clothing and Textiles in Society.

The volume of collected clothing and textiles has to increase in order to decrease the amount that otherwise ends up in the garbage. Garments that are no longer suitable for reuse need to be collected for recycling. A substantial increase in the volume is necessary in order to create a new textile recycling industry that creates new products based on recycled materials. This would decrease the need for new raw materials. The current volume is too small in order to establish an

economically sustainable recycling industry. Clothing and textiles also need to be collected continually in order to make it economically justifiable. Table 3 summarizes ideas suggested by the network on how to increase the volume of clothing and textiles for reuse and recycling. The solutions are presented in more detail below.

[Insert Table 3 about here]

Increase Consumer Knowledge. In order to expand volume, it is necessary to increase consumer knowledge about the importance of reuse and recycling. The actors in the network agree that they should share this responsibility. For example, charitable organizations need to inform the public about how clothes can be reused and why it is important to do so, considering both charitable and environmental reasons. That is, the link between consumption of clothes and the effect on the environment needs to be clarified. Thus, the network initiated a nationwide communication campaign “Don’t throw clothes or textiles in the garbage” to inform consumers about the need to view used clothes and textiles as a resource and not as something you throw away. The vision was to double the amount of clothing and textiles collected during a three-year period. Students were engaged in developing this campaign. They suggested different campaigns targeting various groups of consumers, such as people who had recently moved or who were about to “Spring clean” their closets. The students also suggested that social media should be used to reach people. A final campaign, however, had not been launched when this article is written. Overall, a consumer perspective focusing on what is important from the consumers' point of view is crucial. One challenge is that second-hand items are still not entirely accepted by everyone in our society.

Easy Access to Collection Bins. The network agreed that it was necessary to make it easier for consumers to dispose of used clothing and textiles in collection bins. The number of collection

bins and ease of access needs to be increased. It was suggested that municipalities place collection bins for clothing and textiles where bins for recycling of paper, glass, plastic, metal, and packaging are already placed (recycling stations) as well as at other accessible places in cooperation with the charitable organizations. For convenience, collection bins could also be placed at apartment buildings and close to residential areas. Another suggestion was that companies could promote the collection of their employees' professional and private clothing and textiles. Challenges are to find optimal placements of bins and to work out permissions from property owners to place the bins.

Increase the Collection of Worn/ragged Clothing and Textiles. Consumers should also be encouraged to leave not only the clean clothing and textiles without major flaws, but also items that are worn/ragged for collection since they can also be recycled. An example of this within the network is the cooperation between the University of Borås, the municipality owned waste and energy company Borås Energi och Miljö, and Human Bridge. Two bins, to be used by students and employees, were placed at the university, one for the clean and usable clothing and textiles and one for the clean and worn/ragged clothing and textiles (see Figure 2). The results will be evaluated in terms of weight and quality, thereby indicating how successful it is to also collect the worn/ragged clothing and textiles for recycling purposes. It will also provide some indications of the degree to which consumers are able to sort the two fractions correctly.

[Insert Figure 2 about here]

The network identified several challenges. Comprehensible information needs to be developed and placed on the bins, thus making it easier for consumers to distinguish between the clean and usable items and the clean and worn/ragged items. Consumers also need to understand that worn/ragged clothes and textiles should also be considered as an asset for recycling

purposes. While vintage clothes may be viewed more positively, second-hand clothes have some negative connotations and are still not entirely accepted by everyone in society. In comparison to the low wage countries, costs in Sweden for the collection and handling of used clothing are high. This is also the case for tailoring services, which results in their limited use. Furthermore, in Sweden there is the lack of trust among citizens regarding charitable organizations (Förtroendebarmetern 2013; GfK 2008).

Develop a National System for the Collection of Clothing and Textiles. The network agrees that in order to increase the volume of the clothing and textiles collected, a nationwide system needs to be established based on cooperation among governmental organizations, municipalities, companies, charitable organizations, and interest groups/organizations. Currently, only the non-profit charitable organizations have a system for collecting clothing and textiles. A challenge for the future is to find channels and markets that enable contacts between the buyers and sellers of used clothing and textiles. It is also important to formulate goals about the amount that can be collected and to discuss logistical solutions that facilitate these goals to be fulfilled.

The municipalities have a key role in implementing and promoting a nationwide recycling system. Rules and routines, similar to the collection and handling of paper, glass, plastics, and metals should be developed for clothing and textiles and all municipalities in Sweden need to interpret the rules about the handling of waste in similar ways. Furthermore, ownership of collected material will be a crucial issue for finding solutions that benefit many different actors. Today, municipalities own all the household waste left at the recycling stations/centers and can also choose the charitable organization with which to cooperate. Municipalities need to more fully recognize the work done by charitable organizations and should make it easier for these groups to get permission for placing collection bins at municipal

recycling centers/stations and close to residential areas. In addition, the municipalities need to increase their knowledge about which charities are serious and legitimate. Only such organizations should be allowed to place their collection bins on municipality owned premises.

According to the recycling companies, a functioning collection system needs to prevent textiles from being mixed with other forms of waste. More research is needed about the future supply and demand of raw materials in the clothing industry and the material flows of clothing and textiles (e.g., statistics about charity, second-hand shops, online sales, gifts between friends or family). The network would prefer to have a voluntary, rather than mandatory producer responsibility system, where producers engage in taking care of the waste from clothing and textiles. The sorting of collected clothing and textiles constitutes an additional challenge for developing a national system. Today, sorting is very labor intensive and costly. Technological solutions for sorting have been tested in Holland, but need to be developed for larger scale operations.

Create a Certification and Accreditation Program for Charitable Organizations. The network agrees that a need exists to achieve a certification and accreditation program for charitable organizations. Apart from raising the status of responsible charitable organizations, it would also make it easier for people to know which groups to trust. Also, charitable organizations need to become more transparent (e.g., how much is collected and what happens with collected items and money generated). Sweden can learn important lessons from the Netherlands, which has a certification system. Criteria for obtaining this certification and accreditation need to be developed. A dialogue among charitable organizations, the Swedish Environmental Protection Agency, and municipalities has already begun. The challenge is to develop a credible certification and accreditation program.

Develop Technology for Recycling. The network identified some obstacles, such as the fibers from recycling being of too low quality for use in the textile industry. Overall, textile waste is not homogenous when it comes to material and colors and thus is difficult to separate. New recycling technologies are needed that can generate “good as new” fibers meeting the standards required in the fashion industry. Research from a resource and environmental standpoint is needed about techniques for the recycling of fibers and about which materials are most suitable to recycle. Also, problems related to mixed materials (e.g., polyester and cotton) and fasteners (e.g., zippers and buttons that need to be removed) need to be solved. In addition, the network suggested the use of economic incentives for technological innovations. By cooperating, the clothing industry can together create an increased supply and demand for recycled fibers. International cooperation is also important.

Design for Durability and Longevity. The network has also discussed the need for the clothing industry to increase their efforts to manufacture clothes of a better quality, which last longer and are more suitable for reuse. Furthermore, clothes are not always designed for recycling. The Swedish Environmental Protection Agency suggested that the clothing industry could take the initiative to design clothes that last longer and that later can be reused and recycled. The Swedish Society for Nature Conservation emphasized that it is important to develop labels stating what clothes are made of, where they are produced, and what is their environmental impact. The Society also suggested that the clothing industry develop design for durability and longevity and develop collections that can be combined with previous ones regarding color and design. A challenge is that consumers have to learn to determine good quality since there is not always a correlation between price and quality or brand and quality. Furthermore, fast fashion items are often of too poor quality for reuse. It is necessary to help the consumers learn more

about the materials and quality as well as how to take care of their clothes so that they can last longer.

Reflections About the Network Approach

As part of the survey, the members of the network were also asked to reflect upon the pros and cons of the network approach. The pros and cons identified in the survey and during the network meetings are summarized in Table 4.

[Insert Table 4 about here]

One advantage of the network was that it provided an opportunity for substantial sharing of information and knowledge between the members. The members agreed that in order to reduce the amount of clothing and textile waste, it was important to have knowledge not only about the textile material, but also about areas such as technology, fashion, environmental issues, consumer behavior, logistics, recycling processes, as well as how to collect used clothing and textiles. For example, as a result of the network, recycling companies are able to better understand the challenges faced by clothing companies and charitable organizations. The network also facilitates benchmarking between different actors and branches.

Another advantage with the network approach is that it enables actors to meet other actors whom they might not have met otherwise. It also enables actors to make governmental agencies and other decision makers more aware of the environmental issues that they encounter. For example, the Swedish Environmental Protection Agency has been able to present ideas and get comments on environmental issues that the agency faces. Also, the Swedish Chemicals Agency has viewed the network as an opportunity to raise the awareness of the need to minimize chemical use in the production and future recycling of clothing and textiles.

Different work groups have been started within the network, such as the ones responsible for the nationwide communication campaign “Don’t throw clothes or textiles in the garbage” targeting consumers and for the certification of charitable organizations. The timing of the network was apt. Before it was established, many members had already discussed the need to raise their awareness and knowledge about the reuse and recycling of clothing and textiles in their organizations. There had also been discussions between the members of different branches to start some form of a network. This influenced their interest and involvement in the network.

A final advantage raised by the members is that researchers funded by a research foundation have led the network. This promotes more neutrality toward the different members and a greater possibility to discuss matters, in contrast to a project financed by a particular industry with its own agenda. The researchers have also kept the members up to date with the results of the research on consumption, reuse, and recycling.

A possible disadvantage is that the research approach in the network takes a longer time than having a consultant perform the work, which is often more concentrated and limited in time. Another disadvantage is that the network is fairly large. Having many participants makes the decision process more difficult. Even though several different views on issues can contribute to a variety of possible solutions, this can also make it harder to reach a unanimous decision. Also, solving problems together, for example by forming committees, can be time consuming and inefficient if not all involved actors are actively engaged. Furthermore, conflicting perspectives may prevent sharing of information and knowledge, even though this was not explicitly expressed either in the survey or during the network meetings. A possible disadvantage of benchmarking is that it may involve too much comparison and, therefore, lead to a lack of innovative ideas.

Discussion

In this article, we argue that a macromarketing perspective (Assadourian 2010; Dolan 2002; Kilbourne 2004; Kilbourne, McDonagh, and Prothero 1997; Prothero et al. 2011; Prothero, McDonagh, and Dobscha 2010; Schaefer and Crane 2005) is necessary in order to solve environmental problems. A microscopic and one-sided view requiring either individual consumers or producers to solve the problems or reuse and recycling is insufficient when trying to find long-term solutions that are also economically viable. By including various actors having different perspectives, experiences, and competencies, solutions acceptable to the majority can be reached. Environmentally friendly consumption practices are a joint responsibility for government, industry, and citizen-consumers (Martens and Spaargarten 2005). Even though cooperation for solving environmental problems is becoming more common (Prothero, McDonagh, and Dobscha 2010), it is still an under researched area.

In this study, we have presented the results from a network of major actors in Sweden, who are interested in reducing the amount of clothing and textiles waste among Swedish households. The actors have varying levels of knowledge about clothing and textiles such as design, manufacturing and selling, transportation, charity, second-hand and reuse, waste handling and recycling, consumer/citizen interests and behavior, regulations, permits of waste handling, and laws concerning the environment. The network approach, with different perspectives on the problem, presents alternative views and solutions.

Even though increased consumption is not sustainable in the long-term (Cohen 2011; Jackson 2009), this was not something that the network emphasized as an issue to be addressed during the meetings. Several of the clothing companies are in the fast fashion segment and, for obvious reasons, are not interested in reducing consumption. They consider their involvement in

reuse and recycling as a way to act sustainably at the same time as it justifies continued consumption. In addition, their interest in recycling in particular is justified by the fact that it can reduce costs significantly. Recycled fibers for production are less costly than new raw material. Another motive for participating could be that when consumers ask about sustainability, companies may want to be prepared with answers (McDonagh 1998; Prothero, McDonagh, and Dobscha 2010).

As a result of the increasing economic value of textiles, many actors today are interested in collecting clothing and textiles that consumers no longer want. Charitable organizations have traditionally received such clothes; however, clothing companies have also begun to run campaigns to receive used clothing. Recycling companies who historically have worked textiles have also found a renewed interest in used clothing and textiles. Furthermore, due to a fast changing fashion system, several of the clothing companies have an abundance of textiles or clothing that never have been used and can be reused or recycled, something that both the charitable organizations and recycling organizations have discovered. Based on this study, we can reflect on the fact that economic value directs interest in sustainability.

The increased interest in used clothing and textiles also triggered a discussion in the network about the need for a certification program for charitable organizations involved in the reuse and recycling of clothing. Actors who pose as if they are collecting clothes and textiles for charity, when in reality they are collecting to make money, are seen as a major problem. This undermines the public trust in charitable organizations and can lead to a decreased amount of collected material. Consequently, the efforts to get certified can be seen as a way to reduce the consumers' uncertainty about where to leave unwanted clothes and textiles. Consumers are socialized to avoid waste (de Coverly et al. 2008). People want to limit the visibility of waste

and, therefore, garbage is an easy solution. Easy access to charitable organizations' collection bins and an affirmation that the clothing and textiles received by them are in fact turned into philanthropic efforts could both increase the amount of collected material and ease the consciousness of waste-avoiding consumers.

The network emphasized the need for a nationwide system in order to reduce the amount of clothing and textiles waste in households, something that is also applicable to other countries in the Western world. Several years ago, Sweden established a successful nationwide solution for recycling newspaper, glass, metals, plastics, paper packages, and batteries. This required an immense amount of organization and a long-term perspective in order to function over time. These lessons should be kept in mind when establishing a nationwide system for the reuse and recycling of clothing and textiles. The network agrees that the municipalities, which today are responsible for other forms of recycling, can also play an important role in the reuse and recycling of clothing and textiles. However, in order to play this role, issues regarding the ownership of the collected material need to be resolved. How can charitable organizations, which need both reusable and recyclable material for their charity work, benefit? How can the clothing companies, who want fibers from recycled material for their production, benefit? These issues, as well as finding a nationwide solution for increasing the amount of recycling and reuse of clothing in Sweden, highlights what Dolan (2002) describes as power relations between social groupings and between cultural value systems. We agree with Dolan (2002) that the goal of sustainable consumption needs to be seen as a political project. Different perspectives and motivations of various actors in society need to be recognized in order to reach solutions for societal problems.

The network meetings have illustrated the complexity of the problem to be solved. In order to increase the amount of clothing collected for reuse and recycling, consumers have to be made aware of today's environmental problems (see Prothero et al. 2011). The link between consumption and clothes and the effect on the environment needs to be clarified. Previous studies have found that consumers do not always understand the link between consumption and its effect on the environment (Connolly and Prothero 2003). Education about the effects of consumption on the environment can be achieved by developing educational programs in schools, on TV, and through social media as suggested by Prothero et al. (2011). Here, it is important to recognize that learning in the context of consumer socialization is a lifelong process (Ekström 2006; Littlefield and Ozanne 2011). Consequently, consumers of all ages need to be approached. Prothero et al. (2011) emphasize the government's role in increasing the public's environmental awareness. We recognize this as being important, but also see a need for cooperation between many different actors (such as the members in the network) to inform consumers about the importance of sustainable consumption.

The network has focused on a consumer's perspective and acknowledged that it is crucial to make it easier for consumers to give clothes for reuse and recycling rather than disposing in the garbage. A major factor for establishing a high recycling rate for other types of waste in Sweden has been that the recycling bins are placed in close proximity to where consumers live. This is also important for increasing the amount of clothing and textiles for reuse and recycling. If consumers have to spend too much time traveling to recycling bins, it requires a sacrifice of time and cost, and also affects the environment negatively.

The network has also recognized the importance of developing technological solutions in order to increase the amount of clothing and textiles received for recycling. However, a number

of practical problems related to recycling need to be solved, for example, mixed materials (e.g., polyester and cotton) that are difficult to sort, and zippers and buttons that need to be removed. Since sorting of collected material is done manually in Sweden, new technology could cut these costs. Technology can also aid consumers, for example, by developing an application for smart phones that indicates where the nearest recycling station or charity store is located.

The network has led to several collaborations between the members, such as Textilreturen. Also, charitable organizations and clothing companies are working together by collecting used clothes from consumers in stores and then giving them to the charities.

Many of the obstacles identified by the network are not going to be solved in the short-term. For example, fast fashion clothes are often of too low quality for reuse. Since the fast fashion business model has detrimental effects on the environment, it needs to be replaced with more sustainable fashion in the near future. The high costs of collection handling, involving sorting of the used clothing and textiles in Sweden is another obstacle, as well as the fact that second-hand is still not fully accepted in society.

Conclusions

The purpose of this article is to increase understanding of how clothing and textile consumption can become more sustainable. It shows how members of a network view and deal with the problem of clothing and textiles being tossed in the garbage rather than being reused or recycled. The results demonstrate that in order for the consumption of clothing and textiles to become more sustainable, a macromarketing approach is necessary, one that involves many different actors in society taking responsibility for increasing the volume of reused and recycled clothing and textiles.

This article has contributed in several ways to the macromarketing discipline and has implications for both researchers and practitioners. First, it has presented different views (company, consumer, and society) on the problem of how consumption can be more sustainable. The results show individual as well as collaborative ways to deal with this problem and, specifically, a need for a multitude of competencies, including consumption, production, material, technology, and logistics, working together. Second, the network approach in this study has contributed a number of different solutions to solving the problem of increased waste of clothing and textiles. These include increasing consumer knowledge about reuse and recycling, making the collection bins more accessible, increasing the collection of worn/ragged clothing and textiles, developing a national system that is long-term, environmentally as well as financially sound, establishing a certification and accreditation program for charity organizations, developing technology for recycling, and designing for durability and longevity. We suggest that this network approach should continue to be deployed in a number of different sustainability areas, both among researchers and practitioners.

A third contribution to the macromarketing discipline is the importance of recognizing how symbolic consumption as well as the fashion system, including fast fashion, contributes to the substantial societal problem of increased consumption of clothing and textiles. Through their advertising campaigns, marketing professionals are heavily involved in emphasizing symbolic consumption and the fashion system. We would like to see a future where they recognize the effect this has on sustainability in the long run. Most research on symbolic consumption and fashion has had a micromarketing perspective. The macromarketing discipline would benefit from understanding symbolic consumption and the fashion system when studying societal development from a sustainable perspective. It is also a challenge for practitioners as

well as researchers to understand how environmental consumption can be represented and emphasized in symbolic consumption.

This study has focused on household waste of clothing and textiles, but the network actors have all indicated that there is also a problem with waste in the production system of the clothing and textile industry. Again, this reflects how socio-cultural aspects such as fashion, fast fashion, and symbolic consumption have come to dominate the consumer culture during the last few decades. The negative effects of consumption, resulting in an increase in the amount of clothing and textiles waste, both in households and within the industry itself, are starting to be recognized, but the problems are substantial and challenging. Nonetheless, a macromarketing perspective plays a vital role for understanding and solving this environmental problem since solutions merely based on individual action is not sufficient. Sustainable consumption is a political project; therefore, it is necessary to involve a multitude of perspectives.

Reuse and recycling are part of the solutions, but the underlying problem of increased consumption needs to be addressed by changing lifestyles and consumption patterns. In a consumer society filled with items and an increasing amount of waste, we foresee that discussions on how to deal with and reduce waste are going to be vital in coming years. Both rational solutions and creative thinking will be needed to consider waste as a resource rather than something of diminished value. It is also important to learn from history since in the past societies had fewer items and people had to care for things, as well as reuse and recycle them. Competencies regarding how to mend clothing and textiles should be maintained and valued. For future research on waste, we suggest interdisciplinary research that recognizes and considers knowledge regarding consumption, design, production, technology, material, and logistics.

Even though we understand the necessity of reducing the purchase of fast fashion in the long run, we want to warn against moralizing. Everybody participates in the catwalk of consumption and social comparison is unavoidable in a society where consumption over time has become more important as a social marker and for showing participation in society. The purchase of cheaper, fast fashion clothes is one way for low-income consumers to be included rather than excluded. Nevertheless, sustainable alternatives to fast fashion have to be developed and marketed. This development as well as the advancement of sustainable consumption overall require a macromarketing perspective.

References

Allwood, Julian M., Sören Ellebæk Laursen, Cecilia Malvido de Rodríguez, and Nancy M.P.

Bocken (2006), *Well Dressed? The Present and Future Sustainability of Clothing and Textiles in the United Kingdom*. Cambridge, UK: University of Cambridge Institute for Manufacturing, (accessed August 6, 2013), [available at http://www.ifm.eng.cam.ac.uk/uploads/Resources/Other_Reports/UK_textiles.pdf].

Assadourian, Erik (2010), “Transforming Cultures: from Consumerism to Sustainability,”

Journal of Macromarketing, 30 (2) 186-191.

Barnes, Liz and Gaynor Lea-Greenwood (2006), “Fast Fashioning the Supply Chain: Shaping the

Research Agenda,” *Journal of Fashion Marketing and Management*, 10 (3), 259-271.

Bauman, Zygmunt (1998), *Work, Consumerism and the New Poor*. Buckingham: Open

University Press.

Biehl-Missal, Birgitte (2013), “Art, Fashion, and Anti-consumption,” *Journal of*

Macromarketing, 33 (3), 245–257.

- Birtwistle, Grete and Christopher M. Moore (2007), "Fashion Clothing – Where Does it All End Up," *International Journal of Retail & Distribution Management*, 35 (3), 210-216.
- Bourdieu, Pierre (1984), *Distinction. A Social Critique of the Judgement of Taste*. Harvard: Harvard University Press.
- Byun, S. E. and Brenda Sternqvist (2008), "The Antecedents of In-Store Hoarding: Measurement and Application in the Fast Fashion Retail Environment," *International Review of Retail Distribution & Consumer Research*, 18, 133-147.
- Cachon, Gérard P. and Swinney, Robert (2011), "The Value of Fast Fashion: Quick Response, Enhanced Design, and Strategic Consumer Behavior," *Management Science*, 57, 778-795.
- Campbell, Colin (1996), "The Meaning of Objects and the Meaning of Actions: A Critical Note on the Sociology of Consumption and Theories of Clothing," *Journal of Material Culture*, 1 (1), 93-105.
- Campbell, Colin (2007), "The Modern Western Fashion Pattern, its Functions and Relationship to Identity," in *Fashion and Identity: A Multidisciplinary Approach*, Ana Marta González and Laura Bovone, eds. New York and Barcelona: Social Trends Institute, 23-37.
- Carlsson, Annika, Kristian Hemström, Per Edborg, Åsa Stenmarck and Louise Sörme (2011), *Kartläggning av mängder och flöden av textilavfall*. SMED på uppdrag av Naturvårdsverket [*Mapping the Amount and the Flow of Textile Waste*. SMED on Behalf of the Swedish Environmental Protection Agency]. Report No. 46, Norrköping: Sveriges Meteorologiska och Hydrologiska Institut [Swedish Meteorological and Hydrological Institute].
- Claudio, Luz (2007), "Waste Couture," *Environmental Health Perspectives*, 115 (9), 440-454.

- Cline, Elizabeth L. (2012), *Overdressed: The Shockingly High Cost of Cheap Fashion*. New York: Penguin.
- Cohen, Maurie J. (2011), "(Un)sustainable Consumption and the New Political Economy of Growth," in *Beyond the Consumption Bubble*, Karin. M. Ekström and Kay Glans, eds. New York: Routledge.
- Connolly, John and Andrea Prothero (2003), "Sustainable Consumption: Consumption, Consumers and the Commodity Discourse," *Consumption, Markets and Culture*, 6 (4), 275-291.
- Connolly, John and Andrea Prothero (2008), "Green Consumption: Life-politics, risk and contradictions," *Journal of Consumer Culture*, 8 (1), 117-145.
- Crane, Andrew (1998), "Exploring Green Alliances," *Journal of Marketing Management*, 14, 559-579.
- Crane, Diana (2007), "Introduction," in *Fashion and Identity: A Multidisciplinary Approach*, Ana Marta. González and Laura Bovone, eds. New York and Barcelona: Social Trends Institute, 15-20.
- de Coverly, Edd, Pierre McDonagh, Lisa O'Malley and Maurice Patterson (2008), "Hidden Mountain: The Social Avoidance of Waste," *Journal of Macromarketing*, 28, 289-303.
- Dolan, Paddy (2002), "The Sustainability of "Sustainable Consumption," *Journal of Macromarketing*, 22 (2), 170–181.
- Domina, Tanya and Kathryn Koch (2002), "Convenience and Frequency of Recycling: Implications for Including Textiles in Curbside Recycling Programs," *Environment and Behaviour*, 34, 216-238.

- Ekström, Karin M. (2006), "Consumer Socialization Revisited," in *Research in Consumer Behavior*, 10, Russell W. Belk, ed. Oxford: UK: Elsevier Science Ltd, 71-98.
- Ekström, Karin M. (2010), "Familjekonsumtion, konformitet och distinction" [Family Consumption, Conformity and Distinction] in Karin M. Ekström, eds. *Fenomenet Ullared – en förstudie [The phenomenon Ullared – a pre-study]*, Vetenskap för profession [Science for the Professions], No 11, Borås, Sweden: University of Borås, 19-30.
- Ekström, Karin M. (2012), "Mode på Röhsska museet; samlande, marknadsföring och varumärkesbyggande" [Fashion at the Röhsska Museum; Collecting, Marketing and Brand Building], in *Modets bildvärldar; Studier i Röhsska museets modesamling [Visual Images of Fashion; Studies of the Röhsska Museum's Fashion Collection]*, Bia Mankell and Per Dahlström eds. Göteborg, Sweden: Röhsska Museet, 158-191.
- Ekström, Karin M. (2013), "Om behovet av konsumtionskritik i ett konsumtionsamhälle" [The Need for Critique of Consumption in a Consumer Society], in *Vägsfäl, 43 kapitel om politik, medier och samhälle, SOM-undersökningen 2012 [Crossroads, 43 Chapters About Politics, Media and Society, The SOM-survey 2012]*, Lennart Weibull, Henrik Oscarsson and Annika Bergström eds. Gothenburg, Sweden: SOM-Institute, University of Gothenburg, 369-385.
- Ekström, Karin M. and Kaj Glans (2011), "Introduction," in *Beyond the Consumption Bubble*, Karin M. Ekström and Kay Glans eds. New York: Routledge. 3-14.
- Ekström, Karin M, Eva Gustafsson, Daniel Hjelmgren, and Nicklas Salomonson (2012), *Mot en mer hållbar konsumtion: En studie om konsumenters anskaffning och avyttring av kläder [Towards a More Sustainable Consumption: A Study of Consumers' Acquisition and*

- Disposal of Clothing*], Vetenskap för profession [Science for the Professions], No 20, Borås, Sweden: University of Borås.
- Ekström, Karin M. and Nicklas Salomonson (2012), *Nätverk, trådar och spindlar: Samverkan för ökad återanvändning och återvinning av kläder och textil* [*Networks, Threads and Spiders: Cooperation for Increased Reuse and Recycling of clothing and textiles*], Vetenskap för profession [Science for the Professions], No 22, Borås, Sweden: University of Borås.
- Fletcher, Kate (2008), *Sustainable Fashion and Textiles, Design Journeys*. London: Earthscan.
- FTI (Förpackning- och tidningsinsamling) (2013), Statistic. (accessed August 7, 2013), [available at <http://www.ftiab.se/180.html>].
- Förtroendebarmetern [The Barometer of Trust] (2013), Gothenburg, Sweden: MedieAkademin.
- GfK (2008), *Press Release*. (accessed March 7, 2014), [available at http://www.gfk.com/imperia/md/content/gfk_hungaria/pdf/press_eng/press_20080129_eng.pdf].
- González, Ana Marta (2007), “Fashion, Image, Identity,” in *Fashion and Identity: A Multidisciplinary Approach*, Ana M. González and Laura Bovone, eds. New York, Barcelona: Social Trends Institute, 39-66.
- Gustafsson, Eva and Karin M. Ekström (2012), “Ett växande klädberg” [A Growing Mountain of Clothing], in *Framtidens skugga, SOM-undersökningen 2011* [*The Shadow of the Future, SOM-study 2011*], Lennart Weibull, Henrik Oscarsson and Annika Bergström, eds., Gothenburg, Sweden: University of Gothenburg, SOM Institute, 285-296.
- Gregson, Nicky and Louise Crewe (2003), *Second Hand Cultures*. Oxford, UK: Berg.

- HUI Research and Blocket.se (2012). *Begagnatbarometern [The Barometer of Second Hand Goods]*. Stockholm: HUI Research and Blocket.se. (accessed November 1, 2012), [available at <http://www.hui.se/nyheter/begagnatbarometern>].
- Jackson, Tim (2009), *Prosperity Without Growth: Economics for a Finite Planet*. London: Earthscan.
- Jacoby, Jacob, Carol K. Berning, and Thomas F. Dietvorst (1977), "What About Disposition - What Do Consumers Do with Products Once They Have Outlived Their Usefulness, and How does this Relate to the Purchase of Replacement Products?," *Journal of Marketing*, April, 44 (2), 22-28.
- Kilbourne, William, Pierre McDonagh, and Andrea Prothero (1997), "Sustainable Consumption and the Quality of Life: A Macromarketing Challenge to the Dominant Social Paradigm," *Journal of Macromarketing*, 17 (1), 4-24.
- Kilbourne, William E. (2004), "Sustainable Communication and the Dominant Social Paradigm: Can They Be Integrated?," *Marketing Theory*, 4 (3), 187-208.
- Kozinets, Robert V. (1999), "E-Tribalized Marketing?: The Strategic Implications of Virtual Communities of Consumption," *European Management Journal*, 17 (3), 252-264.
- KKR (Statens Kvalitets- och kompetensråd) (2003), *Nätverk för lärande och utveckling; Den här boken ger några svar på frågan: Varför nätverk. [Networks for Learning and Development; This Book Gives Some of the Answers to the Question: Why Networks?]*. Stockholm: Statens kvalitets- och kompetensråd.
- Lincoln, Yvonna S. and Egon Guba (1985), *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- Lipovetsky, Gilles. (2011), "The Hyperconsumption Society," in *Beyond the Consumption Bubble*, Karin M. Ekström and Kay Glans, eds. New York: Routledge, 25-36.

- Littlefield, John and Julie L. Ozanne (2011), "Socialization into Consumer Culture: Hunters Learning to be Men," *Consumption Markets and Culture*, 14 (4), 333-360.
- Lodziak, Conrad (2002). *The Myth of Consumerism*. London: Pluto Press.
- Madsen, Jacob, Bryan Hartlin, Shahila Perumalpillai, Sarah Selby, and Simon Aumônier (2007), *Mapping of Evidence on Sustainable Development Impacts that Occur in Life Cycles of Clothing: A Report to the Department for Environment, Food and Rural Affairs*. London: Environmental Resources Management (ERM) Ltd., (accessed August 6, 2013), [available at http://randd.defra.gov.uk/Document.aspx?Document=EV02028_7073_FRP.pdf].
- Mannetti, Lucia, Antonia Pierro, and Stefano Livi (2004), "Recycling: Planned and Self-Expressive Behavior," *Journal of Environmental Psychology*, 24, 227-236.
- Martens, Susan and Gert Spaargaren (2005), "The Politics of Sustainable Consumption: The Case of the Netherlands," *Sustainability: Science, Practice and Policy*, 1 (1), 29-42.
- Martin, Diane M. and John W. Schouten (2009), "Engineering a Mainstream Market for Sustainability: Insights from Wal-Mart's Perfect Storm," in *Explorations in Consumer Culture Theory*, John F. Sherry, Jr. and Eileen Fischer, eds. London: Routledge, 150-167.
- McDonagh, Pierre (1998), "Towards a Theory of Sustainable Communication in Risk Society: Relating Issues of Sustainability to Marketing Communications," *Journal of Marketing Management*, 14 (6), 37-41.
- Morgan, Louise R. and Grete Birtwistle (2009), "An Investigation of Young Fashion Consumers' Disposal Habits," *International Journal of Consumer Studies*, 33 (2), 190-198.

- Morley, Nicholas, Stephen Slater, Stephen Russell, Matthew Tipper, and Garth D. Ward (2006), *Recycling of Low Grade Clothing Waste*. Aylesbury, UK: Oakdene Hollins Ltd., the Salvation Army Trading Company Ltd. and Nonwovens Innovation & Research Institute Ltd., (accessed March 4, 2014), [available at <http://www.inno-therm.com/wp-content/uploads/2013/10/Recycle-Low-Grade-Clothing.pdf>].
- Morrissey, Anne J. and Jim Browne (2004), "Waste Management Models and Their Application to Sustainable Waste Management," *Waste management*, 24, 297-308.
- Nielsen, Kurt A. and Lennart G. Svensson, eds. (2006), *Action Research and Interactive Research - Beyond Practice and Theory*. Maastricht, Netherlands: Shaker Publishing.
- Piacentini, Maria and Greig Mailer (2004), "Symbolic Consumption in Teenagers' Clothing Choices," *Journal of Consumer Behaviour*, 3 (3), 251-262.
- Prothero, Andrea, Susan Dobscha, Jim Freund, William E. Kilbourne, Michael G. Luchs, Lucie K. Ozanne, and John Thøgersen (2011), "Sustainable Consumption: Opportunities for Consumer Research and Public Policy," *Journal of Public Policy & Marketing*, 30 (1), 31-38.
- Prothero, Andrea, Pierre McDonagh, and Susan Dobscha (2010), "Is Green the New Black? Reflections on a Green Commodity Discourse," *Journal of Macromarketing*, 30 (2), 147-159.
- Roos, John M. (2010), *Konsumtionsrapporten 2010*. [*The Consumer Report 2010*]. Gothenburg, Sweden: Center for Consumer Science, University of Gothenburg.
- Schaefer, Anja and Andrew Crane (2005), "Addressing Sustainability and Consumption," *Journal of Macromarketing*, 25 (1), 76-92.

- Shultz, Clifford J. II (2007), "Marketing as Constructive Engagement," *Journal of Public Policy & Marketing*, 26 (2), 293-301.
- Slater, Don (1997), *Consumer Culture and Modernity*. Cambridge, UK: Polity Press.
- Sörensen, Eva and Jacob Torfing (2008), *Theories of Democratic Network Governance*. New York: Palgrave Macmillan.
- Tojo, Naoko, Beatrice Kogg, Nikola Kiørboe, Birgitte Kjær, and Kristiina Aalto (2012), *Prevention of Textile Waste: Material Flows of Textiles in Three Nordic Countries and Suggestions on Policy Instruments*. Copenhagen: TemaNord.
- Trentmann, Frank (2007), "Citizenship and Consumption," *Journal of Consumer Culture*, 7 (2), 147-158.
- Ungerth, Louise (2011), *Vad händer sen med våra kläder? [What Happens Then with Our Clothes?]*. Stockholm: Stockholm Consumer Cooperative Society.
- Wattanasuwan, Kritsadarat (2005), "The Self and Symbolic Consumption," *Journal of American Academy of Business*, 6 (1), 179-184.
- Wells, William D. (1993), "Discovery-Oriented Consumer Research," *Journal of Consumer Research*, 19 (4), 489-504.
- Woodward, Sophie (2005), "Looking Good: Feeling Right – Aesthetics of the Self," in *Clothing as Material Culture*, Susanne Küchler and Daniel Miller, eds. Oxford: Berg, 21-39.
- Yan, Ruoh-Nan, Karen H. Hyllegard, and LaVon F. Blaesi (2012), "Marketing Eco-Fashion: The Influence of Brand Name and Message Explicitness," *Journal of Marketing Communications*, 18 (2), 151-168.

Author Biographies

Karin M. Ekström is Professor of Marketing at University of Borås, Sweden. Her research concerns family consumption, consumer socialization, collecting and the meaning(s) of consumption. She has edited several books (most recently *Beyond the Consumption Bubble* with Kay Glans) and published in *Journal of Consumer Behaviour*, *Journal of Macromarketing*, *Journal of Marketing Management*, and *Research in Consumer Behaviour*. Current research projects concern reuse and recycling of clothes, culinary tourism, and marketing of art museums.

Nicklas Salomonson is Associate Professor of Business Administration at University of Borås, Sweden. His research concerns communicative interaction in service encounters, technology in services, customer misbehavior, and sustainable consumption. He has published in journals such as *Industrial Marketing Management*, *Marketing Theory*, *Journal of Business Communication*, and *International Journal of Quality and Service Sciences*. Current research projects concerns different aspects of customer misbehavior in areas such as public transport and retail.