

# The Fashion Collection Recalibrated – a Design Tool Furthering Sustainable Strategies

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At present the fashion and textile industries are under political and environmental pressure to make their business models more sustainable. In response, transformative thinking within the industry is pushing forward a sustainable paradigm shift. One consequence is that traditional design tools are challenged to incorporate and contribute to the solutions. In this paper, we focus on the fashion collection, which is traditionally understood as a range of garment designs, that are seasonally determined. As the notion of the fashion collection is under-researched, the aim of the paper is to investigate ways in which the fashion collection may be recalibrated as a design tool furthering sustainable strategies. Therefore, we studied collection building practices at three companies, representing different sustainable business and design strategies. The main contribution of the study is insights on how the collection as a design framework is applied by the companies. The collection transpires as a transformative design tool that aids designers and companies in different ways to fulfil their strategy and maintain their business.

*transformative design tool; fashion collection; sustainable design strategy; circular thinking*

## 1 Introduction

At present the fashion and textile industries are under political and environmental pressure to make their business models more sustainable. This is common knowledge that appears in popular and research literature, the news press, practice and education. As a consequence, the traditional design tools are undergoing changes that can incorporate the challenges and contribute to the changes. In this paper, we wish to investigate if the fashion collection as a design tool is still relevant. Therefore, we set out to explore ways in which the notion of the fashion collection is possibly recalibrated in three Danish clothing companies.

Traditionally the fashion collection is understood as a range of garment designs that are seasonally determined (Renfrew & Renfrew, 2016). However, the collection as a design tool is still under-



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researched since a majority of the literature on fashion collections can be found in text books serving as guidelines and inspiration for design practitioners. At the same time, the companies in the industry are adopting new business strategies. This is not only pointing towards more sustainable strategies since the fast fashion system itself is also moving away from seasonally tied collections towards a continuous flow of collections over a year and more 'day-to-day' design and production. However, we find that there is a need for knowledge about how companies in the fashion and textiles industry conduct this transformation – or as we prefer to call it: recalibration – from the context of a linear system into other, more sustainable systems. The aim of the paper is therefore to discuss ways in which the collection may be recalibrated as a design tool furthering sustainable strategies.

In this paper, we study three companies and their endeavors challenging the fashion collection as a design tool in a sustainable context. In a previous paper, we investigated how the collection, as a particular design framework, functions as a strategic driver for garment longevity furthering sustainable fashion design (Ræbild & Bang, 2017). The paper was based on a single case study of Vigga, a highly-segmented company in the garment industry focusing on baby clothing. We compared the case of Vigga with a thorough study on the traditional linear way of applying the fashion collection conducted by one of the authors (Ræbild, 2015). In order to give a broader and more consolidated perspective we add two cases: Aiayu, which is a small-scale high-end company focusing on women's clothing and home accessories and Selected, which is a mid-price fast fashion brand offering clothing for women and men. Our aim is to demonstrate three different strategies for recalibrating the collection as a tool for furthering a sustainable business strategy.

We have chosen the companies as they are representing different levels of circular business models within the range of product life-extension, recovery and recycling and circular supply-chain (Lacy & Rutqvist, 2015: xxii-xxiii). Firstly, Vigga offers a subscription service of clothing for babies and young children, as well as maternity wear. The company explicitly wishes to further sustainable development through garment longevity, re-use and ecological materials. Secondly, Aiayu focuses on garment quality, local craftsmanship, ethical production and ecological materials as a sustainable business strategy along with a repair service. Finally, Selected is an individual fashion brand under the Danish fast fashion concern Bestseller. Selected designs for a minimalistic and yet trendy expression. The company has a material approach to sustainability i.e. their strategy is to source new or recycled materials with low environmental impact.

In the discussion, we exemplify how some of these changes are due to a transformative thinking pushing the dominant fast fashion paradigm towards an ecological based mode of thinking and doing.

## **2 Theoretical Framework**

The paper addresses ways in which the fashion collection as a design tool, can further sustainable strategies in the fashion industry. We therefore set out from the current discourse on design and sustainability in the fashion and garment sector, i.e. how design and designers can take part in changing the way we make and use textiles and garments, in order to lower negative social and environmental impact (see e.g. Niinimäki, 2011; Fletcher & Grose 2012; Gardetti & Torres 2013; Fletcher & Tham 2015). Moreover, we align with the notion that design has developed its perspective on sustainability from being primarily an activity at a product level to expanding to service and socio levels and beyond, as Ceschin and Gaziulusoy (2016) make evident. Hasling (2016) similarly sees sustainable design as a broadening of interconnected sustainable perspectives in fashion and textiles design, from materials and processes, to products and use, services and systems, businesses and strategies, and culture and experience. Thus, in exploring the interconnection between collection building and sustainability, we look broadly at effects beyond the material and product level.

The included company cases use different types of approaches to sustainability in their design strategy and practice. In order to understand these approaches, we draw on a wide range of knowledge. Aiayu's approaches generally fall under the umbrella term Slow Fashion (Clark, 2008), as for example local production (ibid.), repair and maintenance (Gwilt, 2015; Laitela, Boks & Klepp, 2015) aesthetic sustainability (Harper, 2015), embedded storytelling (Clark, 2008, Fletcher, 2016), Zero waste (Rissanen & McQuillan, 2016) and transparent product history (Niinimäki, 2013). Vigga's approaches are based on a circular system thinking (e.g. Botsman & Rogers, 2011; Lacy & Rutquist, 2015) and includes rental service (e.g. Fletcher & Grose, 2012; Petersen & Riisberg, 2017), technical durability (Annis, 2012), aesthetic longevity (Clark, 2008), mono-material (Gwilt, 2014; Vezzoli & Manzini, 2010), customisation (Niinimäki, 2013, Pine & Gilmore, 2011), and environmentally friendly materials (Fletcher & Grose, 2012). The last case, Selected, is still in the early stages of implementing more sustainable production practices into their fast fashion business model. As H&M, they are working with a primary material focus including the sourcing and use of environmentally friendly materials (ibid.), mono-material design (Gwilt, 2014; Vezzoli & Manzini, 2010) and labelling (e.g. Aspers, 2008), but have not yet developed any product/material take-back systems.

Lastly, the concept of the fashion collection plays a key role in the paper, as we investigate the collection as a potential transformation tool that can aid designers and companies to shift from linear business models based on fast shifting trends and aesthetic obsolescence, towards more sustainable models. The collection as design phenomenon appears relatively under-researched. From a practice-based 'how-to' perspective Renfrew & Renfrew (2016) define a collection as 'a range of garments brought together to tell a story' and 'designed for a season or particular occasion' (ibid:9). They offer guidelines tied to design and manufacturing processes, but do not address how the specific content of the collection is decided upon. The notion of the collection has also been argued as part of a particular fashion thinking methodology (Nixon & Blakley 2012) where temporal and spatial sampling practices builds a collection. Yet, how the concrete collection content is developed and decided on by the designers is less described. In this paper, we set out from a number of collection strategic design parameters identified in a larger empirical study recently conducted on linear fashion design practice (Ræbild, 2015).

### **3 Methodology**

The paper builds on three cases. They are all Danish companies with design activities situated in Denmark. The data, derives from three semi-structured interviews (Kvale & Brinkmann 2009) of approximately 60 minutes each. The Vigga interview took place in November 2016. It was conducted with one of the founders at the Vigga premises in Copenhagen, Denmark. It should be noted, that the data produced in the Vigga case, has been key in building the first part of the Collection Framework (Ræbild & Bang, 2017), which we here aim to expand. The Aiayu interview took place in October 2017. It was conducted with the company's main designer in the Aiayu showroom in Copenhagen, Denmark. The Selected interview was conducted October 2017 via skype in Denmark with two employees, the sustainable sourcing manager and the design and buying manager. The interview data has been supplemented and in Vigga's case updated by information on company websites. Interviews have been followed up by email correspondence, when we have needed further clarification of interview data.

The questions in the interview guide centred on main collection-practice related topics:

1. The concept of the collection. Do the company use the term collection in the design practice, and if so, how? If not, then what stands instead?
2. Design development. How do the company develop, structure and maintain collections (or other forms of garments series)? Trend influences. Types of garments, functions, materials, price levels or other influencing factors? How and when do the company change content in the collections e.g. temporal pace.

3. Feedback including user feedback. Do the company receive/collect feedback? If yes, how do the company handle the information? Does it influence the design development? If yes, how?

We have deliberately refrained from asking questions to do with sustainability, but kept focus on the collection concept. This decision is made, in order to let any potential connections between collection practices and sustainability strategies emerge from the interviewees themselves. In this way, we have tried to avoid a particular direction in the answers, i.e. foreseeable bias in the data.

The data from each case has been analysed individually and categorised against collection building parameters used in linear fashion design practice (Ræbild, 2015). In terms of means, we have applied tables and manual color-coding, rather than a computational approach, as our focus has been on contextual meaning (Tanggaard & Brinkmann 2010; Schembri & Sandberg 2011). The outcome of the analysis has informed the proposed framework for sustainable collection practices (see section further below).

#### 4 Collection Practice and Sustainability Strategies



Figure 1 Vigga. Subscription package and maternity wear. Source: Press images from the Vigga website

The Vigga company (figure 1) was founded in 2014 and launched in 2015 as a product service system based on subscription and ecological materials. The CEO and the designer are co-owners and co-founders. The business model is highly dependent on the designed garments, in terms of durability and aesthetic longevity, as each item is expected to be used by different consecutive subscribers. The total length of time each item is active was in 2016 estimated at 82 weeks. Vigga designs clothes for babies and young children up to the age of 2,5 years as well as maternity wear. They offer 8 sizes for boys, girls or unisex. The packages contain 8, 16 or 24 items and they can be individually edited. The range is developed so the package depending on size covers a certain percentage of the basic needs of a child – i.e. 20%, 70% or 100%. Each size is estimated to be in the subscribers' possession between 1 – 6 months. Including maternity wear, the company holds 500 styles in their garment portfolio. Vigga works with a slow and fluent replacement of styles in their collections, as items are renewed when worn out, as opposed to the linear system, where items are replaced by fixed temporal systems, often seasonally tied. Thereby, focus in the collection building lies on how to allow for a slow adjustment of the garment design, incorporating feedback from users as well as the returned garments themselves concurrently. In terms of individual user needs, Vigga has developed an add-on service, where individual extra packages can be rented. These can be packages of i.e. wool garments or outerwear. Vigga stresses two things as vital for their success: long-term relationship with manufacturing partners, holding similar values in terms of sustainability, and a high level of user/company interaction in many forms.



Figure 2 Aiayu. Bolivian llamas and hand knitted production. Source: Press material provided by Aiayu

Aiayu (formerly Aymara) (figure 2) was established in 2005 as a knitwear design company with an uncompromising intent not to put profit over ethics and generally act in a holistic way (Fashion Forum 2011). The company began by collaborating with Bolivian manufacturers, using local craft, know-how and materials (lama wool). Aiayu has since expanded on types of materials following the strategy from Bolivia of combining a locally produced material, with local knowhow and production. Currently they work with two yearly collections, named Volume 1 and Volume 2. Each collection has a knitted part (wool) and a woven part (cotton). The Lama wool is still produced in Bolivia. It has been supplemented with yak wool produced in smaller workshops in Nepal. The cotton part is ecological, and is manufactured in India. Each Volume holds approximately 40 items in wool and 40 in cotton. Aiayu strives to work with non-seasonal collections but have a slight decrease of wool styles in the summer Volume. The company has developed an additional 'Home' line, containing bedlinen, pillows and other interior design products. According to designer Maria Wolf, this line was created to aid their manufacturers in keeping a steady workflow in the production and eliminate strong fluctuations in the production facilities. As with Vigga, also Aiayu places strong emphasis on building solid and respectful company/manufacturer relationships, and they have kept the same partners throughout. With a focus on high-end quality material and craft, the items are not cheap. The company therefore aim for a long product life, and offers a repair service. Users can send or hand in broken knitwear and have it repaired by a specialist. It is also possible to have a repair kit sent home. The repair service provides the company with insights on actual product longevity. They get knitwear sweaters in for repair which are 7 years old or more. Another add-on in the product-line that has evolved over time, are the ad hoc designs made from production scraps. This can e.g. be patchwork quilts or woven rugs. Aiayu's primary market is Scandinavia and Europe, but they also have retailers in USA, Taiwan and Australia.



Figure 3 Examples from SELECTED's collection working with sustainable fibres. Source: images provided by SELECTED.

Selected (figure 3) was introduced in 1997 as a men's brand integrated in the Danish Bestseller concern's brand Jack & Jones. In 2008, the women's line was launched and Selected became an individual brand with stores worldwide and a web shop. In 2016, it was decided to transform Selected into a brand with a strong focus on sustainability. The first collection building on this strategy will be launched in Spring 2018. Selected launches 6 yearly collections for men/women. 50% of the turnover comes from the collections. 40% comes from 'never out of stock', which are popular models such as jeans, t-shirts or other basic garments. The remaining 10% of the turnover comes from 'day-to-day' business to continuously secure that the brand is up to date. Day-to-day business refers to express collections and exclusive collaborations with big key accounts etc. The company has adopted an ASAP-ASAP strategy to reach the goal about moving in a sustainable direction – As sustainable as possible, as soon as possible. The primary goal for the moment is an intensive focus on the fibre sourcing. The company has a specific strategy for cotton preferring certified organic cotton or recycled cotton. Included in the strategy is an aim to substitute virgin polyester with recycled polyester. Wood based fibres must be FSC or PEFC certified (responsible wood sourcing certification system) with LENZING as the preferred supplier for Modal and Viscose. Another goal is to increase the amount of TENCEL®, which is based on the fibre lyocell. Finally, there is an effort on increasing the amount of recycled wool and an expressed interest in sourcing organic wool. As the sustainable sourcing manager Camilla Skjønning Jørgensen says, "We are always on the look for new innovative more sustainable fibres with proven less impact on the environment. At current stage, we source for non-leather alternatives with less impact on the environment and we are trying to source recycled nylon. All more sustainable fibres must be certified, and certifications must be sent to the buyers."

## 5 Framework for Sustainable Collection Practice

In this section, we have placed findings in terms of collection practices in a table (table 1). The first column from the left lists the linear collection parameters as defined by Ræbild (2015). The following three columns holds practice examples from the three cases that refer to the same parameters, as well as new emerging parameters within each company. The second column from left lists identified circular collection practice examples from Vigga (Ræbild & Bang, 2017). The third column lists identified slow fashion collection practice examples from Aiayu and the fourth column lists collection practices from Selected, i.e. with a focus on sustainability through material sourcing.

Table 1 Framework for Sustainable Collection Practices.

<b>Linear</b> (Seasonal collections and fast fashion)	<b>Circular</b> (Subscription service)	<b>Extended lifetime</b> (Slow fashion, repair service and fair trade)	<b>Sourcing</b> (Environmental friendly materials)
1. <b>Inner to outer</b> Grading of range with regard to proximity to the body.	Inner to outer proximity to the body, but in this case outerwear is an optional add-on choice.	Middle proximity to the body, e.g. sweaters, tops, dresses, shirts and trousers. No outer-or underwear. No skin-tight styles Cotton shirts considered inner layer.	Middle and Outer proximity to the body, e.g. trousers, dresses, shirts, t-shirts, sweaters, suits and outerwear. Shoes and accessories. No underwear.
2. <b>Cool to warm</b> Grading of range with regard to temperature: Material properties/ Shifting seasons.	Temperature is regulated through cotton garments that can be layered and supplemented with seasonal add-ons, which can be either a material, say wool, or a garment type, say outerwear.	Temperature is mainly regulated through thickness of the wool knit. Cotton styles for less warm elements.	Temperature is regulated through layering and garments made of materials with different properties. All collections and day-to-day deliveries mirror the actual season.
3. <b>Basic to complex</b> Grading of range with regard to level of design complexity.	The collection is made up by relatively 'classic' and basic design, that is interpreted in the current time spirit. The right balance between aesthetic longevity and in the moment relevance play a big role.	The collections are characterised by simple shaping and subtle details. Complexity can be added through the textile knit design.	The collections are characterised by a minimalistic expression with a focus on quality. Quality lies in the 'classic' silhouettes and the choice of materials.
4. <b>Colour range</b> Defining colour range with regard to: a. newness /continuity b. colour scales/expression	The colour range is continuously developed in an organic process, in which company aesthetics, user wishes and the longevity perspective is weighed against each other.	The colour range is 'fluent' i.e. follows the fluent collections. Avoids trendy colours. Use 50 % natural colours in the knit (no dyes). Limited colour range with few new colours per collection.	The colour range is 'classic', e.g. white, black, grey, brown, blue and primarily 'subdued' colours, with a few accent colours such as a bright orange.



<p>5. <b>Material range</b> Strategize material use with regard to: a. newness/continuity b. Material properties/expressions</p>	<p>The material range is built with a focus on longevity. i.e. a choice towards 'classic' materials of high quality, durability and Eco certified (GOTS). Materials that has high flexibility combined with form stability (of shape).</p>	<p>The material range is limited. Focus on simplicity, local knowhow and fair-trade. Novelty through yarns and surfaces. Hand knit as aesthetic expression. All cotton is ecological. Focus on sensorial experiences.</p>	<p>The material range expresses the brand strategy, e.g. classic, &amp; minimalistic. Materials of a relative high quality (according to price level). Some mixed materials e.g. wool mix and the use of elastane.</p>
<p>6. <b>Price range</b> Boundary price grid used to negotiate 1.-5. In every style within range during the design process.</p>	<p>Not specifically addressed in the data. The packages are set at a specific price level that reflects the price range.</p>	<p>Mid to high price-level. Hand knit lies at the top due to labour. Added thinner knit to lower price on knit and stretch the price range.</p>	<p>Mid-price level.</p>
<p>7. <b>Style role</b> a. Strategize types of garments to be included (collection typology). b. Define role of each style within the collection.</p>	<p>Basic garments for specific basic wardrobe needs. Each style has to fit into a package solution. Each style role must be easily understood by user, Optional add-on roles such as outerwear.</p>	<p>Basic garments that are not completely basic. Fit and cut must suit and flatter many body types Small quantity of trend-aware styles that secure interest from buyers.</p>	<p>Classic styles are mixed with trend based styles. Timeless design with surprising details.</p>
<p>8. <b>Temporal role</b> Define lifespan of each garment design: Quick trend-based special delivery, 'carry over' or stable basic?</p>	<p>All styles are developed from a 'longevity' perspective, with an overall 'fluent' temporal loop within the same universe/style. Styles are replaced with new styles when the old ones are worn out. Design elements can 'carry over' between styles and sizes.</p>	<p>All styles are developed with a focus on material and aesthetic longevity. Fluent seasons to prolong both use and sales window. Many stable basic styles. Many long-term best-sellers that works all year round. Carry minimal stock. Do not hold sales.</p>	<p>All styles are developed as trend-based special delivery using as sustainable fiber/fabric as possible. There are 6 yearly collections, never out of stock garments and day-to-day products.</p>
<p>9. <b>Material groups</b> Organise design &amp; production around larger material groups: e.g. Jerseys, Heavy wovens, Denim.</p>	<p>There are two main material groups: Cotton for basic packages and wool for add-on choice. It is basically knitwear. Weave and print is used to a lesser degree.</p>	<p>Two groups described as Knit (lama, and yak wool) and Cotton (woven, ecological). Material groups are based in geography/origin of material and accompanying knowhow. Reduces carbon footprint due to minimised transport.</p>	<p>The goal is to implement organic or BCI cotton, TENCEL®, FSC/PEFC certified Viscose and/or recycled polyester, and recycled wool and certified down. There is a long-term emphasis on lowering the use of acrylics and elastane.</p>



10. <b>Performative groups</b> Organise and develop range with regard to various strategic needs e.g. directional, show, continued basics.	Singular strategic focus: To develop garments for longevity, circulation and re-use. Sub-groups pertaining to basic subscription packages. Sub groups pertaining to add-on options.	All product groups have developed from the ethical production and fair-trade strategy. Weight: cotton brings aesthetic 'lightness' to the heavier wool styles in retail. Hand knitted items perform storytelling.	The strategic focus is to develop garments for men and women with a Scandinavian, classic and timeless expression.
11. <b>Feedback loops</b> Strategize information feedback loops from e.g. Shops, buyers, sellers, users, manufacturers and implement in design.	Multiple strategic feedback loops, e.g. manufacturers, material tests, user surveys, user workshops, social media communities etc. Feedback information from studying the garments themselves, in the flux between company and user.	Feedback from sales. Feedback from repair service: 'reading the garment' and talking to users. Feedback to costumers through website and labelling: They must also make an effort in maintenance and use phase.	Main feedback between sourcing staff and suppliers and between Selected and their customers through a marketing, communication and consumer facing strategy. Labelling is a part of the communication strategy (from spring 2018).
<b>Emerging attention points</b>	1. Flexibility in fit and function (performative groups).	1. Production: Ethical workflow, fair-trade, social responsibility, zero-waste (material groups; performative groups).	1. Sustainable fibres/fabrics (material range).
	2. Technical durability (material range).	2. Design for user-body diversity (style role).	2. Communication strategy about sustainability (feedback loops).
	3. Balance logistics vs. user wishes (style role; feedback loops).	3. Design for repair (temporal role).	
	4. Package range (performative groups; style role).		

## 6 Discussion

In the discussion, we have decided to look at the specificities for each company with a certain focus on instances where the collection plays a role. In a sustainable perspective Vigga's intention is to build a subscription service, Aiayu's main focus is to make use of the production opportunities and Selected's strategy is to source as sustainable as possible. Thus, the Vigga and Aiayu companies was built on ideas trying to challenge the traditional business model for fashion brands, whereas Selected is 'born' as a traditional fashion brand aiming to change it from within. In this respect, it is interesting to investigate and discuss the possibilities for a brand within the fast fashion in comparison with brands that are started on a more or less idealistic idea yet still with an expectation of conducting business on the existing market.

Looking at the framework and the way the three companies build their collections, we can first and foremost see that they all use the same parameters as found in the linear practise. By studying the table further, differences and commonalities begin to emerge in terms of how the collection parameters are calibrated towards the individual company strategies. As example the 'Basic to Complex' parameter comes forth as a way for all three companies to direct their design towards aesthetic longevity. Simplicity, basic and classic are key and common descriptions, even if the companies have very different sustainability strategies and very different aesthetic expressions. On the other hand, a parameter such as 'Material Range' surfaces the inherent differences in sustainability approach. For an ecologically based subscription service such as Vigga, materials are organised around possible logistics and maintenance, technical durability and user desires. For the slow fashion brand Aiayu, the material groups depend on local global collaborations with manufacturers and craftsmen, and an overall wish to minimise range, but increase material quality in terms of technical durability and sensorial properties. Conversely, Selected, has many material groups sourced globally in their search for more sustainable alternatives, to previously used materials. Another place where differences flag up in the way the collection is recalibrated, has to do with time. The 'Temporal Role' shows that Vigga design styles as a general rule are meant to be used non-stop by consecutive users for approximately 1,5 years. This is a relatively short lifespan, but with maximum usage. Thereby the design needs to cater more for shifting users' taste, than shifting trends. Aiayu also aim for product longevity. All their styles are meant to transcend seasons and in-the-moment trends. Selected still apply to a linear thinking in terms of temporal style roles, and develop in a span between stable basics and quick day to day trend based items.

Interestingly is that both Vigga and Aiayu claim that they are not working with collections. However, they still use parameters from collection building referring to the traditional fashion system when branding and positioning themselves in the garment sector. The way in which they are different from the traditional system is an important part of their story telling. Thus, they are in a need to constantly make a standpoint towards the traditional way of thinking and working with collections even if they can still use and apply aspects of it. Selected, on the other hand has identified a market for sustainable fast fashion and they use labelling and information to tell their story. Thus, they are not in the same need to position themselves outside the established fashion system.

Analysing the cases, we can identify a continuum between a radical and a traditional approach to collection building. Vigga is not working with a linear system at all, since the garments (due to the subscription service) has an expected lifetime that extends the normal lifetime of garments in the shop. Aiayu claims that they are working with non-seasonal volumes rather than collections. This is, in their view totally different from traditional collections. The fact that they (to some degree) need to be able to compete in a fast fashion world building on a linear collection system causes the volumes to appear as two yearly collections. They basically still need to have a collection-like framework when communicating with retail and manufacturers. Finally, Selected does not try to break with the existing system as such. Instead they work inside-out, aiming to minimize environmental footprint through material sourcing. Hence, we can see that the three companies use the collection as a transformation tool in different ways and in a way so they can fulfil their strategy and maintain their business.

The strategy towards more sustainable business models has caused development in all companies. Vigga is extremely good at using user-feedback to develop the subscription service. Since we made the study in 2016 they have implemented a high freedom for the customer to edit the package composition. Already when we made the study they had added more units to the collection (wool) and launching new product lines (maternity clothes) due to user feedback. Aiayu has experienced radical development due to local production opportunities and has launched a home collection. Furthermore, they have added an ad-hoc product line based on zero-waste, whereby leftover materials are used for rugs and blankets. They have also opened a flagship store, which has caused an increase in the repair service. Even Selected is highly flexible within the linear model where they

constantly need to find ways to integrate another way of sourcing materials in a way that allows the designers to design and meet the brand goal of identity, aesthetics and function. As such we believe that the collection is serving as a flexible framework, that can include and support new initiatives. The question is if the notion of the fashion collection step by step is on its way out as a design tool as the more sustainable business models are implemented.

However, in this study and for the moment being we can clearly see three different ways where the collection plays a role as a potential transformation tool that can aid designers and companies to shift from linear business models based on product obsolescence, towards more sustainable models.

## **7 Conclusion and further Perspectives**

Taking a starting point in three companies within the clothing sector our aim was to investigate if we could demonstrate three different strategies for recalibrating the collection as a tool for furthering a sustainable business strategy. Analysing the interviews, we were able to identify how they challenge and change the parameters that are identified as the traditional ingredients of working with a linear collection. In the discussion, we have been able to identify the parameters which played the most significant role for recalibrating the fashion collection as a design tool.

With only three cases it is not possible to generalise. However, we argue that there are some indications of ways in which it especially makes sense to focus on the fashion collection as a design tool leading towards a more sustainable strategy.

We can see that even though it may not be explicitly addressed (Vigga), addressed as something else (Aiayu) or addressed as a traditional way of working with the collection (Selected) all companies are working with the notion of the fashion collection as a framework for designing. Interestingly, all the companies have experienced a need to recalibrate the fashion collection, and adapt it to their needs. This is especially clear looking at the parameters: Basic to Complex, Temporal Role and Material Groups. We therefore argue, that at present the collection is still useful as a driver for the transformation of the fashion and textiles industry into a more sustainable one. We can also see that the way the collection is recalibrated is strongly dependent on the strategy and goal. To conclude the paper, it is interesting to see how flexible the fashion collection appears to be. It can be adjusted by the use of the parameters, e.g. change the focus, concentrate on selected parameters, turn up and down for the means, developing them etc. It will be interesting to follow the use of the fashion collection in the coming years. It might turn out that the notion of the fashion collection may be obsolete and that something else will take its place as an important design tool.

Discussing the impact of using the fashion collection as a design tool for furthering sustainable strategies there are some issues worth considering. Sustainable impact depends not only on the type of material or production, but also on how we can generally lower the total number of garments produced and consumed. This is naturally a paradox to most companies striving for sustainability, (unless they are based on a circular take-back system as e.g. Vigga), because they live of selling new garments. As designer at Aiayu Maria Wolf puts it: “we want the costumer to only buy what she needs, because it is not sustainable to buy something and then only use it twice. But at the same time, we live of selling”. The framework informs us on how the collection parameters can be calibrated to support different sustainable strategies, but it does not inform us on people’s behaviour in terms of consumption.

For example, we know that consumers are beginning to buy more sustainable garments, but what we don’t know is whether the buying is on top of or instead of former purchasing habits. Maybe they buy the same amount – just Eco certified or in another way with a sustainable stamp. Maybe many of the sustainable garments ends in the wardrobe being rarely or never used due to some not yet identified parameters. We do not know if the consumers are happier and more content with the more sustainable commodities. Do they experience better fit, wellness, comfort or pleasure? On the other hand, what we do know is that the more sustainable materials have a lower impact on the

environment and for several of the certified materials count that they are healthier to wear close to the body. We also know that there is a higher degree of supplier driven innovation in the case of Viggas and Aiayu and thereby (and hopefully) a better and more healthy life for the material suppliers. In Selected's case it is close to the same that it must be healthier to produce more sustainable materials, but since it is more traditional sourcing (just after another type of materials than usual) it is in a more indirect way than direct supplier driven innovation.

The question is what will happen if the fashion business moves from trend-based design to a higher degree of user involvement? Furthermore, we lack knowledge about use over time. There are a vast amount of studies pointing towards longevity as one of the main solutions, but in reality, there are only few studies about this.

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