

# DESIGNING SUSTAINABLE CLOTHING SYSTEMS

The design for environmentally sustainable textile clothes  
and its Product-Service Systems

Carlo Vezzoli, Giovanni Maria Conti, Luca Macrì, Martina Motta



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## **2. Towards a sustainable supply chain: interviews with stakeholders**

One of the many ways to describe fashion, and the one that is probably the closest to the description of the Italian fashion system, is the one that defines it as the action and interaction of people in the process of making. This means that people are at the very center of this system. In their actions and in the exchanges of raw matters, artifacts, knowledge, expertise relies on the essence and the engine of the entire fashion industry, that is based on what Tartaglione and Gallante (Tartaglione & Gallante, 2010) define as “collective creativity”, a special kind of creativity that has always been linked and exchanged with a myriad of productive realities, in a close relationship that goes far from the veneration of the one-of-a-kind or from the excess of the catwalks. Designers are part of this system, and the more they are involved in and familiar with the dynamics that regulate it, the more they can intervene to bring change and innovation.

As we have read, sustainability is a widely discussed issue for fashion, still searching for a definition not just in terms of words to describe it but also in terms of actions and decisions to be taken and professional competencies to shape. The above-mentioned process of making can be positively considered as a great expression of human creativity and artisanal expertise, but it is also the reason why the fashion industry has become responsible of big wastage and unsustainable practices. A business so full of contradictions – craftsmanship against high volumes – that the notion of sustainable fashion itself “seems to be paradoxical, an oxymoron – how can fashion ever be sustainable, with its focus on novelty and inbuilt obsolescence?” (Black, 2012b).

In the attempt of solving this paradox, the concepts of transparency, environmental, and social responsibility are becoming requirements in the time being, pushed from the broad public on one side and from big brand’s policies on the other.

If design, in its broadest meaning, consists in the understanding of the existing situation and the creation of new ones (Simon, 1988; Simonsen *et al.*, 2014), it comes that today, being a fashion designer cannot be separated from the ongoing spreading and the rising need for sustainability. Fashion designers today are in charge, whenever they design, to face such complexity, to be aware of what sustainability is, what they can do to operate more consciously in a sustainable way, and how each design decision and action impacts people, the fashion system, and the planet. This process of understanding the existing can – and should – be supported by numbers, data, audits, and analyses but cannot stand without the people, without the knowledge that comes from the experience on the supply chain. This knowledge opens up perspectives for designers, highlighting the mutual impact that design decisions have on the supply chain and that the actions of each one of the stakeholders along it have on the work of designers. This makes evident the need to connect objects, environment and meaning (Walker, 2011) and to re-design not just the relations in the system, but also of the rules and goals of the system (Williams, 2020).

The fashion system is, indeed, made of farmers, raw material processors, artisans, garment makers, manufacturers, retailers, and they all have the chance to contribute with their work for a better and sustainable future. They are not just suppliers to be controlled with audits and inspections; they became, with their decades-long efforts, resources to learn from and thus have to be known and deeply understood as the places where sustainability happens. Fashion producers are taking the role – together with designers and users – of primary actors of a change towards what Rissanen envisions as a “community of fashion producers and users who eliminate waste at every instance of fiber generation, yarn spinning and processing, fabric design manufacture, garment design and manufacture, storage and transport, sales, garment use, and the cycling back of resources at the end of the first use life of the garment” (Rissanen, 2013).

The interviews in this chapter shed light on the commitment that the whole supply chain belonging to the Italian fashion system is undertaking and report the multiple voices of privileged witnesses belonging to a variety of people and professionals that fashion designers encounter along their way.

They should be read with an eye on the importance of a reliable relationship with suppliers and clients, at any level of the chain, in any role that might be taken: the will, or the need, to work together as a system towards the objective of a more sustainable future recur in every interview and emerge as the key asset to act for a concrete change.

Among the voices, there are textile and yarn Italian companies with a long history and firm belongings to the Italian industrial clusters; fashion

brands; innovative start-ups with a focus on sustainability; a certificatory body; the country coordinator of Fashion Revolution Italy.

Their words touch all the phases that will be outlined in the following chapters of the book, from pre-production to production, retail, use, and end of life.

List of contributors:

- Fabio Campana, Chief Executive Officer and Pierluigi Biagini, Chief Operations Officer at Lanificio dell’Olivo;
- Lucia Bianchi Maiocchi, CSR Manager at Vitale Barberis Canonico;
- Pierfrancesca Solinas, CSR Manager and Michelle Marzoli, Marketing Communication Manager at Filmar;
- Chiara Bianchi Maiocchi, Chairwoman at Lanecardate;
- Francesco Magri, Regional Manager Continental Europe at The Woolmark Company;
- Enrica Arena, CEO and Co-founder at Orange Fiber;
- Margherita Missoni, Creative Director at M Missoni;
- Alice Zantedeschi and Francesca Pievani, founders of Fili Pari;
- Niccolò Cipriani, founder of Rifò;
- Sara Francesca Lisot, founder of VIC – Very Important Choice;
- Marina Spadafora, sustainability consultant and Country Coordinator for Fashion Revolution Italia.

The first contributions, from the upstream companies on the supply chain, give an overview of the first steps of the fashion process, framing the importance of the commitment of those companies that deal with the raw materials, their sourcing, and their processing. They make the evidence of the opportunity for designers to rely on people’s expertise and hard work. They prove that sustainability is a journey that has been recently given a name, but that used to happen even decades ago, driven by the individual consciousness of enlightened entrepreneurs. The interview with the Woolmark Company offers the privileged perspective not just on the auditing process but also on the wider commission that they have dealing with farmers, raw material processers, brands, and designers. The words of Margherita Missoni shed light on how a creative director and his/her team of designers can review the traditional way of doing fashion to pursue sustainable directions and on how these new ways are going to change the way of thinking of buyers, suppliers, final customers. The innovative start-ups interviewed stress the evidence that design for sustainability does not just belong to the product but can re-design the processes, the circularity, the relationship pf fashion with other productive areas, the interaction with customers, the act of purchasing. Marina Spadafora then explains, with a wide-open view on fashion as one of the higher human

employing industries in the world, how the end customers can pull the significant paradigm change.

All of these are tools of knowledge for designers who are approaching sustainability. To navigate the chapter, here are orientation charts with the topics touched in each interview.

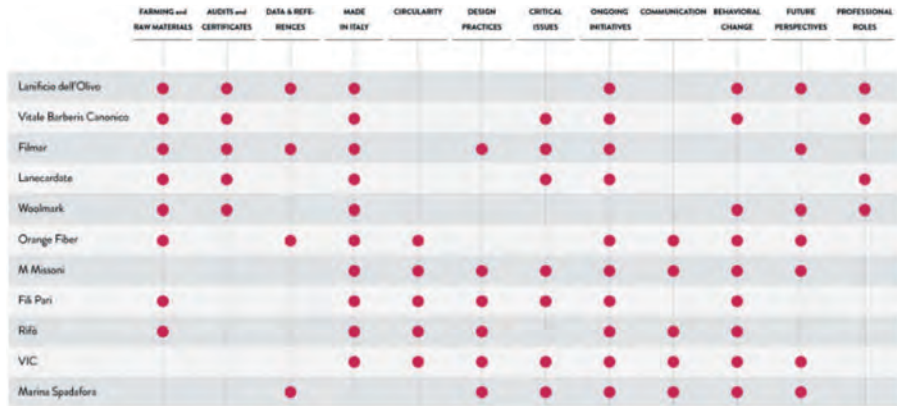


Chart 1 - How contributors/companies are located on the supply chain of fashion. The red dots indicate which of the steps they operate or with which their work is related



Chart 2 - Recurrent issues in the interviews. Red dots indicate in which interview each issue has been covered or touched

From the analysis on the recurrent issues outlined in Chart 2 the author identified seven emerging areas of intervention that recur in the first-hand experience reported by the interviewees. The seven areas, listed here below, represent relevant topics to work with in the near future as levers to activate the paradigm shift towards sustainability.

- Lever 1: A long-term commitment
- Lever 2: The emerging of a sustainable geography
- Lever 3: A demanding audience
- Lever 4: New professional figures
- Lever 5: The sustainable utopia
- Lever 6: In search of common language and practices
- Lever 7: The future of design

Taking into account the seven emerging areas as the groundwork for future intervention, the following part of the chapter reports relevant extracts from each interview that are related to one or more areas. The interviews order follows the sequential role of each interviewee along the supply chain (see Chart 1).

Chart 3 reports the areas emerged in each interview and that can be found in the extracts.

	A LONG TERM COMMITMENT	THE EMERGING OF A SUSTAINABLE GEOGRAPHY	A DEMANDING AUDIENCE	NEW PROFESSIONAL FIGURES	THE SUSTAINABLE UTOPIA	IN SEARCH OF COMMON LANGUAGE AND PRACTICES	THE FUTURE OF DESIGN
Lanificio dell'Olivo	●	●	●	●	●		
Vitale Barberis Canonico	●	●		●		●	
Filmar	●	●			●		●
Lanecardate	●	●	●	●	●	●	
Woolmark	●	●	●				
Orange Fiber			●		●		●
M Missoni			●	●	●	●	●
Filli Pari		●			●	●	●
Rifò		●	●		●		
VIC			●		●		●
Marina Spadafora		●	●		●	●	●

Chart 3 - The seven levers to activate the paradigm shift towards sustainability as they recur in the interviews



## 2.1. Fabio Campana, Chief Executive Officer and Pierluigi Biagini, Chief Operations Officer at Lanificio dell’Olivo

Lanificio dell’Olivo has been one of the leading spinning mills in the Prato textile district in Tuscany for 70 years. They are specialized in making innovative and 100% Made in Italy fancy yarns, and with the integrated Italian production site, they control production, innovation, quality, and service. Their clients are national and international fashion brands, and about two-thirds of the production is sold abroad, with Europe, the United States, and the Far East as primary markets. Their added value is the research on fibers, colors and stitches, and the care of all value chain stages. They show, with products and actions, a total commitment to being responsible and sustainable (*Lanificio Dell’Olivo*, n.d.).

The interview touches 5 out of 7 levers:

Lever 1: A long-term commitment

Lever 2: The emerging of a sustainable geography

Lever 3: A demanding audience

Lever 4: New professional figures

Lever 5: The sustainable utopia

### ***What does it mean for a yarn to be sustainable?***

PB: *We need to define what sustainability is. Sustainable is that set of operations, processes, use of resources brought to a standard that can be kept unchanged over time. That is, they are not going to impact on the environment and to constantly impoverish it. This is a generic definition: with regard to yarns, we obviously start with raw materials, which can have plant, animal, artificial or synthetic origin. A certain degree of sustainability can be obtained for each of these raw materials.*

*For the plant fibers we act trying to make the best use of water and soil resources, with attention to the use of chemical fertilizers for crops [...]; or animal-derived fibers, sustainability concerns the animal welfare, therefore it goes from avoiding cruel practices in shearing and breeding the animal (for example mulesing) to avoid pesticides on the animals themselves, which is common in farms. In concrete terms and despite the certifications, however, sustainability starts a long time earlier: no one can improvise itself in being able to carry out operations of this kind, a company must know the product in depth.*

*The certification is in fact issued by third parties, but it is the company, not the body that takes the responsibility for the product, and for the safeguard of its supply chain, [...] starting from the washing of*

*the greasy wool, the dyes, up to the spinning processes and to the final product that we deliver to the knitwear factory, in charge to continue with the chain of custody.*

***Lanificio dell’Olivo is part of the Prato cluster, traditionally linked to the recovery and regeneration of the textile product.***

*PB: This city started working the rags to regenerate them in 1860 and to this day it has continued to recycle millions of tons of clothes. There was a collapse in the 1980s due to some laws that favored the prices of virgin raw materials and that made the recycled product lose its attractiveness. For thirty years, hundreds of millions of kilos of garments every year have gone to landfills. Today we are back in trend thanks to the widespread interest in sustainable practices.*

*Being part of this cluster is also advantageous for the use of energy and water resources in the production processes. Prato has always had a textile connotation, and started to deal with these problems very early, so much so that, in 1981, the city built an industrial water purifier for all the companies in the area. Here the companies use 97% of recycled water without having to build private plants, that is one of the greatest costs for textile companies.*

***When did you start seeing a positive response in customers for “sustainable” products?***

*FC: The tendency of customers to request a sustainable product has differed greatly from geographies. Initially the requests came from Japan and the United States, mainly regarding the toxicological aspects of the substances used in production; recently the strongest push comes from the countries of northern Europe, which have a great sensitivity in this sense. Germany is demanding, Italy started the process quite late and for a long time talking about sustainability here almost meant scaring the customer towards the possible increase in costs. This gap then recovered and today there is a good alignment of requests from customers.*

*Most of the requests are for certified products, because our customers’ brands want the absolute certainty of the truthfulness of each sustainable aspect. They are increasingly exposed to the judgment of the communities, especially from the younger audience, therefore they need to tell true stories about products, materials and processes. If within a brand’s followers the suspicion that there are no real elements behind sustainability arises, the brand itself has a big issue to deal with.*

*It is interesting how today next to the buyer and the designer we find the new figure of those who follow sustainability full-time and 360-degree:*

*it has become essential to dedicate a person to this, as the time of green-washing, where we told ourselves how “green” we were, is already over; today we have to tell it and prove it.*

***Where do you think this change comes from?***

*FC: Both from the public and from brands. There is a growing sensitivity among the brands, albeit with great contradictions, because careful brands often coexist in the same large group with other brands that still live on a continuous launch of collections at increasingly competitive prices.*

*At the final consumer level, the growing sensitivity involves all segments. [...] Compared to a few years ago when the trend was accumulating for every single season, today we are more and more looking for quality and extension of the life of the product.*

***Is a 100% sustainable product portfolio a utopia?***

*PB: If by 100% sustainable we mean achieving zero impact, I would say it's a utopia. However, the degree of sustainability of the products will certainly grow over the years, not only because of the actual need and request from the consumer but precisely because more and more companies are aware of the need to better maintain our environment. Unfortunately, in some countries is still difficult to achieve high environmental and social standards.*

*FC: To say if there is an ideal point where zero impact will be achieved is difficult, but it is certainly a question of always choosing the best direction.*

## **2.2. Lucia Bianchi Maiocchi, CSR Manager at Vitale Barberis Canonico**

Vitale Barberis Canonico is the oldest woolen mill in the world. Founded in 1663, with headquarters in Prativero in Biella, Piedmont, it is renowned for its pure wool flannel and wool and mohair blend fabrics, favored by the world's most celebrated tailors. Today, the company is still run by the Barberis Canonico family, benefiting from the experience of 13 generations.

During its long history of more than 350 years creating fabrics for formal men's clothing, Vitale Barberis Canonico has always been committed to sustainability and has searched for quality in three fundamental pillars: People, Environment and Product. Sustainability for VBC starts with its close ties to the region, from which it takes its principal

resources and to which it is devoted, to returning economic growth and support to the community while always keeping an eye on environmental issues. In 2019, Vitale Barberis Canonico adopted a voluntary **integrated QSE System (Quality, Safety, Environment)** formalized and certified by a third party (*Vitale Barberis Canonico*, n.d.).

The interview touches 4 out of 7 levers:

Lever 1: A long-term commitment

Lever 2: The emerging of a sustainable geography

Lever 4: New professional figures

Lever 6: In search of common language and practices

***What does it mean to be a CSR Manager, and how did you come to play this role in Vitale Barberis Canonico?***

*I can answer the second question. For the first, I'd take a few more years. I'm learning, because it's a new role that still has no frame. In the history of VBC, since we are a family business rooted in a specific area, sustainability has always existed and has been a way of living with work, with the company and with the local community in which both the company and the family resides. What I did was collect and formalize a story that spontaneously existed over the decades [...].*

***What are the duties of a CSR manager?***

*There is a big problem at the moment which removes the tasks of a CSR manager from concrete actions for sustainability: it is the time that must be dedicated to the many bureaucratic needs of our customers. Each customer has different sustainability tenders that cover a wide range of topics concerning the production management of a company. Therefore, an important part of our commitment is to give answers to customers, while another is to find a common language [...] It is such a new theme that there is still no effective and cohesive communication between the parties.*

*[...] Customers ask us to make our third suppliers sign the same tenders, and this is another big problem. We try to keep the district alive, use external skills as much as possible, and be flexible, as more than everywhere else craftsmanship, quality, and the combination of different skills have an important meaning. However, the small businesses that we rely on do not have staff or skills suitable for dealing with documentation of dozens of pages, almost always in English. We need a sustainability of the supply chain, so that everyone can gradually conform to that.*

***Does being part of a district economy help you in this regard?***

*The district of Biella is a very particular reality, where competitors are fair competitors, always ready to cooperate. Sustainability is a competitive asset, but it is also a common interest factor, and here I see a great collaboration. [...] We try together to spread a culture of sustainability that includes and helps the whole district. Sustainability is a great potential for the territory because here we have always done things well and it is a card that the district must play.*

***Going back to the CSR manager. Who are the figures you surround yourself with?***

*In addition to the chemical engineer and someone with economic skills, I would very much like a lawyer. I would take an environmental engineer. And then someone who can speak to customers.*

*We always return to the problem of language: if a common language were found, the figure of the lawyer would disappear because an interpreter would not be needed.*

*This would be the ideal sustainability office for giving the answers that customers ask for. I believe, however, that we need a task force made up of those who deal with production, those who manage the water, those who deal with communication, personnel, safety... every branch of the company should have its own responsible for sustainability, who works in the company and knows the company's practices.*

***When did the role of CSR manager in the company and the presence of a task force dedicated to sustainability become necessary?***

*In 2018, when we decided to formalize and begin to tell what we do. Vitale Barberis Canonico did not use sustainability as a lever to communicate [...] In the 1980s my uncle invented these "bells" that are used to cover the looms to reduce noise in the departments. That operation had no economic, communicative, or strategic purpose but had the only aim of improving the environmental conditions for workers. This is sustainability, and until 2018 we didn't tell it but it doesn't mean we were not doing it. Setting up the CSR unit helped us put together all the information, coordinate and plan investments, understand how to narrate the company to be transparent. [...] A dedicated CRS unit allows you to better investigate and pay attention to aspects that are overlooked in everyday life in favor of productivity. You have time to stop and understand where and how to put order.*

***What do you foresee for future job positions that will deal with sustainability?***

*When I looked for people to hire, I could not look for them in the “sector” of sustainability because it doesn’t exist; I just found people who had a personal interest in these issues. I myself would need to be trained in some more specific way, but still the possibilities are few.*

**2.3. Pierfrancesca Solinas, CSR Manager and Michelle Marzoli, Marketing Communication Manager at Filmar**

Filmar produces and sells high-quality cotton yarns since 1958. Filmar deals only with the most valuable variety of cotton, which is the 100% Egyptian one, cultivated in the farms acquired by the company directly in Egypt. Cutting edge machinery ensures an annual production of 7 million kilos of dyed yarn, controlled in an equipped laboratory to perform tests and prepare samples. Processes and products are certified, managed and implemented to protect the environment, as well as the health and safety of both employees and consumers (*Filmar*, n.d.).

The interview touches 4 out of 7 levers:

Lever 1: A long-term commitment

Lever 2: The emerging of a sustainable geography

Lever 5: The sustainable utopia

Lever 7: The future of design

***What does it mean for a yarn to be sustainable?***

*Yarns that are fit for the future and go beyond certifications. This is our motto. Filmar is at the forefront of sustainability by being directly involved in the activities we launch and promote. A sustainable yarn is, in our view, a product made by adopting all needed changes today to guarantee that it can be fit for the future. Fit for the environment’s future, by adopting raw materials and processes that preserve precious resources, decrease negative impacts and promote regenerative procedures. Fit for the people’s future by ensuring that persons involved in all our processes are respected, nurtured, and given the possibility of developing knowledge and skills through continuous improvement. Fit for a shared economic growth by enhancing and guaranteeing that our firm’s success fosters social progress, besides providing economic returns to stakeholders, starting from the most vulnerable ones, such as the farmers who cultivate the cotton we use for our products.*

***What does it mean for a company to be sustainable, going beyond the product and thinking about environmental, social and economic sustainability?***

*Now more than ever consumers, hit hard by a global recession brought by the Covid 19 pandemic, will be more cost-conscious. Sustainability, therefore, will need to be grounded in authentic behavior and internal practices that integrate the dimensions of people, planet, and shared prosperity. At Filmar we focus on protecting and valorizing our human resources more and more through knowledge and skills development to equip them with all that is needed for working safely and for the implementation of eco-friendly processes and that can save precious resources. Moreover, we believe that sustainability cannot just be practiced at the company. It needs to become a new normal even in personal lives.*

***Sustainability is not a trend anymore but a given. When did you start working on this? What was the spark that pushed you at the beginning?***

*Since the day of our foundation, quality and technological innovation, combined with sustainable development and ethics, have been the cornerstones of Filmar's business. Therefore, promoting sustainable fashion through a fully transparent, eco-friendly, and socially responsible production chain is the mission we pursue. At Filmar, we think that a sustainable business does not simply mean respecting and protecting the environment. Our core beliefs and priorities are the respect of human rights, workers' and consumers' health. [...] Intending to minimize cotton's environmental impacts, Filmar committed to implementing a set of actions enclosed in the innovative CSR program, Cottonforlife, launched in 2015 and realized by Filmar SpA with the participation of Alexbank of Intesa San Paolo Group. The Initiative intends to promote a fully transparent, eco-friendly, and socially responsible cotton value chain. [...]*

***Sustainable choices: how much have customer requests influenced them?***

*Along with customers' requests, which are certainly a driving factor for every company's production strategy, there are global challenges that we need to consider for the sustainability of our operations. Among these are climate changes and population growth that need to be taken into consideration specially when cotton is the main raw material used. Therefore, we have started business partnerships with our customers to share concerns and define joint action plans to maximize our positive impact.*

***How do customers perceive sustainable and certified products? Which types of customers are most attentive and demanding in terms of sustainable products?***

*Certifications for customers are important as they define the standards of raw materials used, chemicals adopted, and how operations are conducted. Many certifications also make sure social standards are respected along the supply chain. True is that we need to go beyond certifications by engaging ourselves in defining and evaluating our value chains. This means that we cannot just put a label with certification on our products without knowing exactly what is behind it. Remember what happened in Rana Plaza and how many people died? Well, as we all know, garments produced there were then sold in our main cities shops where certifications are a must.*

***The textile sector is a complex system, where a 360° sustainability still seems utopian, due to the large consumption of water, the chemical agents used for cultivation, the process and the finishing, the difficulties in tracing those processing steps that are entrusted to third parties. What efforts does the commitment in this sense entail for the company? Do you think it is possible to reach high sustainability standards? How?***

*As said, sustainability is the integration of environmental, social, and economic dimensions. When we assess the environmental impact of cotton cultivation and its industrial transformation, we should balance it with its social and economic impact. Cotton-Textile industry involves millions of people all over the world and this should be kept under due consideration. This means that we need to improve the way we do things, starting from supporting sustainable cotton production by procuring cotton that has a reduced environmental footprint while ensuring social and economic positive impacts. Filmar directly supports organic and Better Cotton cultivation by engaging with value chain stakeholders and investing in cotton plantations that follow such standards.*

***How can the work of designers in your customers' brands push the entire system towards more sustainable choices?***

*Nowadays, designers' role goes far beyond their classic role of designing collections: their role can be instrumental for the real advent of sustainability. They select raw materials, design shapes, define colours, etc. If they could operate their choices in the light of the environmental, social, and business impact of each step they deal with, I believe things would really change. [...]*



## 2.4. Chiara Bianchi Maiocchi, Chairwoman at Lanecardate

Lanecardate started in 1987 as support of Vitale Barberis Canonico: the woolen spinning department of VBC had been closed in the 40s, but when in the 70s the woolen flannel – which is still a very important product for Vitale Barberis Canonico – was catching on again, Chiara's uncles asked her mother and father, engineer, to move to Biella and to found the company. They started to produce yarn for knitting, and from being a woolen spinning department for textile, Lanecardate became an independent spinner.

Today they produce just 3-4% of their turnover for VBC; all the rest is for third clients. Customers are mainly luxury brands or knitwear manufacturers who work for these same brands, in particular Italian, French, English, and American for the high end of their product.

The interview touches 6 out of 7 levers:

Lever 1: A long-term commitment

Lever 2: The emerging of a sustainable geography

Lever 3: A demanding audience

Lever 4: New professional figures

Lever 5: The sustainable utopia

Lever 6: In search of common language and practices

***What does it mean for a company like yours to be committed to sustainability, from the product's point of view, and the environmental, social, and economic impact?***

*I remember a customer who, one day, when sustainability was still not a widespread theme, but we at Lanecardate were starting to talk about it, asked me “Well, but what does sustainability mean?”. If on the one hand this question would no longer be conceivable nowadays, I think on the other it is still very current, because the topic is so rich that it is a question that you can and must always ask yourself, finding in each answer a new point of view to work on to improve.*

*We started to deal with sustainability without calling it that, since 2004, for a distinctive character of my father who can't tell lies. In 2004, in times when it was not yet discussed, he tried to convince the spinners of the Union [Unione Industriale Biellese] to make a voluntary declaration of traceability. At that time, he convinced very few of them because everyone wanted to somehow keep the “secrets of production”, something that today would no longer be understandable or acceptable.*

*He was a precursor of the times: in 2004 Lanecardate made his first voluntary declaration of traceability, declaring for each phase of our production where and how it was made and where the raw materials came from. This already included the tracing of farms, which was not yet driven by the animal welfare but by quality: my father understood that, since we are one of the very few spinners of woolen yarn that directly buy greasy wool in its country of origin, some farms had a much better product than others, and by knowing the farm from which each batch of wool came, he could indicate to the Australian buyer which farms to stock from by choosing them personally.*

*This has now allowed us to do a similar thing for animal welfare.*

*I am mentioning times and dates to highlight the competitive advantage we got by having traced everything by ourselves, and for a long time: to start today with the intent to reconstruct the traceability from scratch, from downstream to upstream of the process, is complicated, sometimes impossible without “buying” it packed by some service suppliers [...].*

***How have your customers’ perception and demand for sustainable products changed?***

*It is an exclusively growing trend. In the beginning, more than ten years ago, it was a voluntary action, today every customer asks us “What are your sustainable products?”. I find it a strange question, somehow open and incomplete, as it seems they leave the exclusive responsibility of sustainable actions to us.*

***What are the most difficult challenges for a textile company on the path towards sustainability?***

*At the moment the biggest difficulty is to extricate yourself in the jungle of certifications. There are many, very bureaucratic, all very similar and it is difficult to identify which one customers will ask us for in the near future. [...]*

***Is the Italian context a context that favors the sustainable choices of the companies that operate there?***

*I think it is easier to be in Italy than elsewhere. Here the commitment comes at a district level, at a chain level, it is very collective and shared. [...] Being part of the district of Biella is good for the proximity and commonality of approach, but I am also happy to relate to our Italian customer knitwear factories, who are ready for this topic and deal with it as we do, with a concrete commitment that is not necessarily dictated by the bureaucracy of certifications.*

***Do you see a future with a product portfolio entirely made of sustainable yarns, and when products that are not declared as sustainable will disappear?***

*I have to say that the frequently heard question of clients, “Do you have sustainable products?” never made sense to me because it’s the company that must be sustainable. It makes no sense to choose a sustainable product among others because it ends up just being a marketing operation, it must be a whole sustainable process. In this way, companies will progressively reach 100% of sustainable products, and products that will not be that will progressively lose their sense of existence.*

***Do you see sustainability as a future perspective for design education?***

*Education should start to work on sustainability by considering the whole supply chain. [...] We need new experts working with us or with our client brands, that are able to understand the supply chain and the great efforts we are making.*

## **2.5. Francesco Magri, Regional Manager Continental Europe at The Woolmark Company**

The Woolmark Company is the global authority for promoting the Australian Merino wool. Operating worldwide through an extensive network of relationships spanning the international textile and fashion industries, they highlight Australian wool’s position as the ultimate natural fibre and premier ingredient in luxury apparel. They are also committed to the sustainable aspects of wool and its impact on the environment, starting from farmers until the finished product (*The Woolmark Company*, n.d.).

The interview touches 3 out of 7 levers:

Lever 1: A long-term commitment

Lever 2: The emerging of a sustainable geography

Lever 3: A demanding audience

***How can Woolmark define its idea of sustainability, from an environmental, social, and economical viewpoint?***

*For The Woolmark Company, the idea of sustainability is mainly linked to fiber and its natural origin.*

*Our woolgrowers are the keepers of the territory who manage, most of the time, of immense spaces and dimensions. The conservation and*

*defense of the territory is a necessary condition for the sheep breeding that feed on air, water, and grass, and these elements can coexist only in a natural and original environment.*

*There can be no concept of environmental sustainability if it does not start from the beginning, in reference to fashion, it is therefore intended to start from the fiber used.*

***As a certificatory body, how is Woolmark taking the challenge of sustainability?***

*The Woolmark Company certifies the fiber quality in fabrics and yarns of wool garments, our challenge for sustainability is to be able to support a traceability path originating from the farms that allows brands to choose the product they consider most suitable as sustainable for their customers. Our challenge is to help brands to understand the supply chain and how they act on it as much clear as possible.*

***What are the main issues to consider concerning wool environmental footprint?***

*The Woolmark Company is supporting woolgrowers for the adoption of best practices, such as regenerative agriculture and become more than an owner, a “custodian” of the land. That’s our first priority.*

***How important are all the phases of the lifecycle of products for the environmental impact of wool?***

***What is Woolmark doing in this direction?***

*Wool itself is a solution for making fashion a more sustainable market and not an issue, what comes after – as dyeing or treatments as happen for all fibers – can become an issue and that’s why we are investing 25% of our total budget in supporting the research for innovative techniques for the use of more natural treatments on the fiber. This is why we activate numerous partnerships with key players in the supply chain to support them in finding new techniques in the direction of greater sustainability.*

*Wool is much more versatile than any other fiber; a wool garment can be handed down over generations, upcycled for other use in other sectors thanks to its qualities (soundproofing, thermal insulation etc.) or disposed of in a natural way thanks to its natural biodegradability. A full sustainable lifecycle.*

***Woolmark Italy has a privileged perspective on emerging trends and innovations as a certificatory body that works with many different***

***textile and fashion companies. What is the role of sustainability in this very moment?***

*Since it is inevitable for man to interact with nature in whatever activity is carried out, today the real concept of sustainability is understood by us, as consumers, in “damaging the environment as little as possible, reducing our impact and feeling good in taking care”.*

*The absolute concept of sustainability is obviously utopian for humans, so today it is not only a matter of just using natural fibers – that is a must –, but to reduce waste: for this reason, garments must also be versatile and long-lasting, and performance and functionality mixed with natural fibers is the biggest trend textiles companies and brands are now riding.*

*Moreover, sports, well-being, and sustainability are the new pillars in lifestyle, and that’s why wool – the most versatile and performative natural fiber – is living now a golden period and is regaining large areas in sports-wear. It is not a novelty, as until the diffusion of low-cost synthetics in the 70s all sports – soccer, tennis, running, skiing – were practiced wearing wool garments!*

***What kind of evolution do you envision for the future?***

*More and more natural fibers will be used, quality will be synonymous with new luxury, and more and more people will be aware of the impact of their purchases on pollution. This logically will lead to fewer products but higher quality and more natural fibers.*

*Man has been dressing since he was born and always will; fashion will never end but we, as consumers, will be able to buy less and better, and the companies will adapt to it by reducing the collections and increasing the quality of the offer.*

***In your opinion, is the Italian context a context that favors the sustainable choices of the designers and the companies that operate here?***

*The Italian context is perhaps the most advanced in the concept of sustainability, as the sustainability of a product is the result of a process and of many steps that must be all “sustainable”. In Italy, we have the most important districts of fashion fabrics and yarns in the world, and the work that weavers and spinners are pursuing in the sign of sustainability is the cornerstone of the whole fashion process.*

*Without a fiber and a fabric/yarn worked with the chrism of sustainability we can exclude a priori that a piece of clothing can be considered sustainable itself.*

***Do you see the perception of sustainable messages, brands and products has changed in recent years?***

*The global concept of sustainability has evolved by embracing the life cycle of a finished garment (while only a few ago we stopped only at production) and social and work sustainability. These are all elements that today play an equal role in being able to define a sustainable product. It is not an easy game anymore; I would say that it is not a game at all as today sustainability is a proper job requiring high profile professionals and expertise.*

## **2.6. Enrica Arena, CEO & Co-Founder at Orange Fiber**

Orange Fiber is an Italian company that ideated and patented a sustainable material made from citrus juice by-products, pioneering an innovative process to extract cellulose and to transform it into a refined and high-quality fabric well appreciated by national and international fashion brands (*Orange Fiber*, n.d.).

The interview touches 3 out of 7 levers:

Lever 3: A demanding audience

Lever 5: The sustainable utopia

Lever 7: The future of design

***How did the idea of Orange Fiber rise and what has it become today?***

*Our adventure started at the end of 2011 in Milan, when we were finishing our studies and sharing a flat.*

*Adriana Santanocito was studying fashion design and she was focusing on innovative and sustainable products while I wanted to get a job in line with my idea of sustainable development and social entrepreneurship.*

*We had different backgrounds, but we shared the dream of changing the world starting from our country – Italy – and region – Sicily – using our skills and passion.*

*Adriana with her background in design, while writing her thesis, asked the crazy question: what if we could turn citrus juice by-products into an innovative fabric, contributing to solving two problems – the environmental and economic impact of citrus juice leftover disposal and the need for sustainable materials in the Fashion Industry – at a time? She brought me on board, and together we started our journey through sustainability and innovation that in 2014 led us to found Orange Fiber: the world's first and only company to produce sustainable fabrics for fashion from citrus juice by-product.*

***How did you go from the – idea of using waste resources to generate a new material – to its industrialization? How did you manage to transform a concept strongly linked to sustainability into a sustainable production process?***

*Following a collaboration with Politecnico di Milano University, we developed an innovative process that allows to turn virtually more than 700.000 tones of by-product that the citrus processing industry produces every year in Italy. [...] The innovative process was patented in Italy in 2013 and extended to International PCT the following year. Registered as innovative start-ups, the company was established in February 2014 [...] and we presented the first prototypes of our fabrics the same year. On December 2015 – thanks to the funding by Smart & Start Invitalia (Ministero Sviluppo Economico) – we opened our first pilot plant to extract pulp from citrus juice by-products in Sicily. In 2016, thanks to the Global Change Award by H&M Foundation we significantly moved forward with our R&D, implementing our team and deploying our first ever pilot production of more than 10.000 thousand meters of fabric. This first-ever production was pre-booked by the famous fashion brand Salvatore Ferragamo who has used it to create the first-ever citrus clothes collection, the Ferragamo Orange Fiber Collection. This important milestone marked the official entry of our products on the market and the first step of our history as a company.*

***Do you think the Italian territory is a context that feeds the sustainable choices of the designers and the companies that operate on it?***

*In recent years, attention to issues related to environmental sustainability has grown considerably in our country, paving the way for eco-friendly products and projects based on the circular economy model. We believe that the context is rich and favorable to sustainable designers and companies and that there is an ample market space and credibility with consumers and institutions. In this scenario, bold actions need to be facilitated and accelerated through financial support, industrial investments, strategic partnerships, and collaborations between changemakers, universities, private and public sector, and research centers.*

***How important is the role of independent designers and innovative companies like yours to push the entire fashion system towards more sustainable choices?***

*We believe that independent designers, innovative start-ups, and SMEs have a crucial role in widespread awareness of sustainable fashion, accelerating changes and pushing the entire Fashion Industry to move rapidly*

*from words to more concrete actions. The collaboration between emergent designer/start-ups and top fashion brands could be the key to accelerating changes in the Fashion Industry, facilitating the adoption of innovative materials, solutions, and business models.*

***Let's talk about communication: how and to whom a sustainable company is operating upstream of the supply chain told? How much effort does it take and what are the most difficult messages to convey?***

*[...] Communicating effectively on social media and traditional media, our dedicated team works every day to make sustainability “fashionable” to mass-market consumers. And pushing fashion brands and other important supply chain actors to move from words to deeds, really implementing innovation and sustainability in their business models. This is probably the most difficult message to convey.*

***Do you find that the perception of sustainable messages, brands, and products has changed by the end consumer in the last few years? If so, what consequences does this change have on the choices made upstream of the supply chain?***

*According to Lyst, in 2018, there was a 66% increase in web searches concerning sustainable fashion and sustainable materials, such as organic cotton and vegan leather. This number demonstrates a strong interest in sustainable fashion products among consumers. Researches show that this trend is destined to increase, and, in a bottom-up effect, this will involve essential changes in the entire Fashion Industry [...].*

## **2.7. Margherita Missoni, Creative Director at M Missoni**

Missoni is the second line of the Italian brand Missoni, recently redesigned by Margherita Missoni that took the lead as creative director. In the new definition of the brand image and values, Margherita Missoni took sustainability and social responsibility as pillars of the new M aesthetic, with the claim “REMIX REUSE RESPECT”. The brand works to improve and move forward with sustainability in many ways: it builds projects that respect communities, workers, and animals, it geographically relocated part of the production to collaborate with companies that share the same values, it created a network of suppliers to control the impact on the environment, it works in line with the DNA of M at the origins by repurposing disregarded materials and objects to give ulterior life to physical and conceptual scraps (*Missoni*, n.d.).



The interview touches 5 out of 7 levers:

Lever 3: A demanding audience

Lever 4: New professional figures

Lever 5: The sustainable utopia

Lever 6: In search of common language and practices

Lever 7: The future of design

***What does it mean for a fashion brand to be committed to sustainability? From the point of view of the product and the environmental and social impact of the company itself, up to the economic aspects.***

*Sustainability has been a priority and a pillar of M since we relaunched the label. I think it would be inconceivable to launch or start a brand nowadays without considering that aspect. [...] Sustainability obviously crosses all the aspects of the brand, from the product development to communication, to the choice of materials, to the presentation and distribution, so every time we start with a new project, we ask ourselves how can we make it more sustainable, what's the ethical impact, what's the ecological impact.*

*To design sustainable it is clearly a bit more expensive, especially because it is not yet a common practice, but I think the more people and the more brands will embrace it and the less expensive it will be. Every single collection we develop at M, we find more possibilities in terms of yarns, fabrics, treatments that were not available even six months before.*

***Raw materials, yarns, and textiles: you started to use for M collections materials that were in stock inside the warehouse of Missoni. How did you end up with this decision? What are the technical limits that this entails?***

*The knowledge that we had a lot of stocks of yarns and fabrics in our warehouses was always in my head. I knew that even when I was not working on M or even in Missoni, and I kept thinking about how we could put that to good use. As they are special yarns, namely space-dyed, the idea they could be sold for a lower value really upset me – and in fact we never did, that's why we have the warehouses, and we never burned anything not to waste them –, so when I took over M I thought maybe this was the place where I could give new life to that. The limits are clearly numbers: we often have small productions, but that requires just a different set of minds, from everyone in the chain, to adapt to it. People who develop need to know that whatever color they combine with the stock yarns needs to go well, at least with four different space-dyed yarns, because that yarn will change through the production. The people who produce need to be aware that maybe you will distribute different*

yarns to different continents, so it's easier for people who are going to sell to understand they will sell different things. Once you adapt, it gets even better because everything is a limited edition, and it becomes an upcycling in the sense of giving a higher value to something, but it takes a while for everyone to oil well in this new mechanism.

***How does this affect the way of designing the collection?***

Usually, we design without thinking if we are going to use some upcycled yarns in that specific design; and once we approve all the sketches and all the groups, we look at them, and think of where we could use solid yarns or space-dyed yarns we have on stock. In every collection, we have some recurring items where we know we are going to use stock yarns. [...] We started doing for a few seasons stripes fully done with the upcycled solid yarns, and we are re-developing and re-introducing them in every collection.

***How does the way of telling the collection to buyers change? What do you need to insist on most?***

On the whole process, everybody in the chain needs to adapt to the mentality. Once buyers start to understand that those are limited edition garments that are more valuable than other items, they start to appreciate them. Some are more prone to that than others, the more fashion-forward clients only buy the sustainable part of our collection, whether it is upcycled, recycled, or ethically produced.

***For the textile-clothing industry, sustainability is a complex issue, full of contrasts, and true sustainability seems at times utopian. What are the most difficult challenges for a brand?***

True. Consumerism and sustainability contradict each other. My husband, a man of extremes, always says to me that the most sustainable thing I could do would be to stop making clothes at all. But it's a challenging compromise, and we are always leaving on edge. I think we have to choose our side and work in an ethical way, and I think the same will happen with ecological values: in a few years, there will be enough laws to make fashion stop being the second most impactful business on the planet.

***How important is to communicate the brand's sustainable commitment and actions with the end customers? What are today the most effective channels to do it?***

In general, the rules of communication have been disrupted, and I think the Covid situation will push forward many changes in fashion, especially in communication and distribution. Fashion shows, which are very

*impactful from a polluting point of view but also from a financial one, are probably going to change a lot; [...] people will start questioning who are those fashion shows for, who are they trying to speak to. Those events are hybrid; if they were originally created for buyers, now they do not respond to the need of buyers anymore; they are more of an event for the press and for the final clients. So we started from the beginning wondering what our means and our tools are, and how we can use them at their best.*

*For the message that we've been trying to communicate from the beginning, our hashtag #reuseremixrespect has been very helpful in communicating the brand's DNA in all aspects, including sustainability.*

***Do you think the Italian context favors the sustainable choices of the companies – brands and manufacturers – that work in it?***

*Italian production, in general, is much more sustainable than production in any other part of the world, and even if it is more expensive, a higher price means better working conditions, more ecological materials, and practices [...].*

***Do you imagine a future in which “normal” products will disappear from the collections and it will no longer make sense to design without doing it in a sustainable way?***

*Yes. [...] I think this is what we fight for in fashion, and we need to communicate to people that there is a difference, there is a reason why something costs more and it is the dedication of people who worked on it. I believe we will achieve that, and people will buy consciously and accept spending more on something produced following certain criteria.*

***What can fashion designers do to push the whole system towards more sustainable choices?***

*The most important thing we could do is to get together, create a system that decides to work in the same way, pushing the same concept, following the same rules, in order for the general public to start understanding and become aware of what's behind fashion.*

## **2.8. Alice Zantedeschi and Francesca Pievani, founders of Fili Pari**

Fili Pari is an innovative start-up focused on the research and development of unconventional materials for the textile industry, respecting the territory and the environment. They develop cutting-edge technologies to enhance

marble powders, protect the land and valleys from the mountains dismemberment, and encourage by-products as a raw material (*Fili Pari*, n.d.)<sup>1</sup>.

The interview touches 4 out of 7 levers:

Lever 2: The emerging of a sustainable geography

Lever 5: The sustainable utopia

Lever 6: In search of common language and practices

Lever 7: The future of design

***How can Fili Pari define its idea of sustainability, from an environmental, social, and economic viewpoint?***

*Our project is based on the desire to enhance the Italian territory through the use of natural materials, typical of our country, to develop highly innovative fabrics. Our MARM/MORE material is made with both waste and production marble powder, depending on the type. The research started by inserting 10% of marble, then rising to 20% and 30%. Today we are able to use up to 50% of marble in the product, reaching a higher impact on the final composition. [...] For us, sustainability is respect for the territory and circular economy: with our product we recover the waste of a district to transform it into opportunity and raw material in the textile sector, putting the fashion sector in communication with the stone sector, in full respect of the circular economy. We have developed a local supply chain located in northern Italy, optimizing transport and reducing the impact on the environment to enhance the business realities that our country offers.*

***Fili Pari was born with a powerful concept. How the intuition come?***

*Marble is a natural element, an excellence of Made in Italy, which communicates the territory, its history, and its evolutions. The project was born at Politecnico di Milano, during the master's degree course in Design for the Fashion System, by transforming a graduation thesis into an entrepreneurial project with the desire to create a connection between the Italian territory and the textile world: marble, a typical element of our peninsula, has been used since ancient times in art, architecture and is a symbol of the Italian culture and knowledge that are recognized worldwide. It is widely used in the form of powder in the chemical, agri-food, and pharmaceutical sectors, but in textiles, it had never been used except as pure aesthetic inspiration through prints that imitated its*

1. All the interviews were made during the emergency for Covid-19 pandemic. Some of them thus contain references to the ongoing changes and overviews on the incoming perspectives and consequences for the fashion system.

*grain. Continuous experimentation has given rise to a patented membrane containing marble dust [...]*

***Fili Pari has a vision that goes beyond the fashion sector and the fashion product. How does the synergy between different sectors act with a view to sustainability?***

*The circular economy, understood as reuse, efficiency in production processes, and longer life of products or materials, is one of the pillars of our project. This perspective is applied transversely from upstream of the supply chain and working on the reuse of waste material from the stone industry to introduce marble dust into the textile sector. [...] With the development of the MARM/MORE material we have activated a synergy between the textile and stone sectors, two sectors apparently very distant from each other, but which can create a value proposition, connecting and activating a cross-fertilization that allows the transfer of technologies, by-products and know-how between different industrial districts.*

***Sustainability is not a trend anymore, but a given. How important is the role of independent designers and small brands like yours to push the entire fashion system towards more sustainable choices?***

*In recent years, sustainability has become a very important element in all sectors, especially in the textile and fashion sector, one of the most polluting industries in the world. Emerging designers and small brands are more predisposed and reactive in bringing sustainable products to the market, to offer the end customer a more ethical and innovative fashion. The big challenge is that of the big luxury and fast fashion brands, which will have to try more and more to think about the impact that their product can bring to the ecosystem, rather than continuing to carry out mass production. The numbers of these industries are linked to price logic, and the vicious circle between this kind of offer and the final consumers who prefer these products does not allow a real change of course. However, we feel a change downstream; customers are becoming more aware of the products they buy and have developed a greater sensitivity for all that is sustainability and respect for the environment. We therefore believe that it must be a collective movement involving young brands, important fashion houses, and end consumers.*

***How can they do this?***

*Based on our experience, we have noticed how the collaboration between different actors can generate interesting results. An example of this is the Open Innovation operation that we carried out with the Limonta Spa group: on the one hand, a young sustainable-oriented start-*

*up and on the other a historic Italian textile company that for years has been committed to optimizing production processes in a green perspective. The result was surprising: we managed to use marble as a natural dye, replacing the chemical agents normally used in dyeing processes. The sharing of experiences, know-how and intentions is certainly an interesting key to aspire to an increasingly greener world.*

*In the same way, the end consumer will also have to enter into the same perspective and become more responsible in purchasing decisions. The customer has the power to direct the market differently, with small steps, this path has already begun.*

***In your opinion, is the Italian context a context that favors the sustainable choices of the designers and the companies that operate here?***

*The Italian context is full of companies and artisanal realities that have made their belief in the optimization of processes, an ecosystem of virtuous companies in which sustainability has its weight. This type of context facilitates the finding of raw materials and production in general, which have higher costs than foreign productions. The problem is to make people perceive the green orientation on the final product; consumers are very attentive to sustainability in sectors like food and related products, preferring organic products, buying directly from farms, reducing the purchase of special plastic and packaging and so on. The fashion sector is still perceived in a less intense way.*

***Do you see the perception of sustainable messages, brands, and products has changed in recent years?***

*Certainly yes, the sensitivity towards sustainability issues has changed a lot, thanks to the communication that is made. In January 2020, the first “WSM Fashion Reboot” fair was held, the first event in conjunction with White and the men’s fashion week in Milan. It was “The first event dedicated to sustainable innovation and fashion design, to bridge the culture of sustainability, the market, and the public. [...] Being part of initiatives like these is a source of great pride for us and talking about sustainability and innovation is very important to enter more and more into people’s daily lives.*

## **2.9. Niccolò Cipriani, founder of Rifò**

Rifò started as a social and sustainable project, with the idea to create a line of garments made in the textile cluster of Prato, with recycled materials, and to give a part of the profit to local NGOs.

We were born as a project, and we are progressively shifting towards a more design-oriented fashion brand, with the intent to propose products at an affordable price, with a good design development, and with values behind them, cultivating both the social and environmental aspects.

The interview touches 3 out of 7 levers:

Lever 2: The emerging of a sustainable geography

Lever 3: A demanding audience

Lever 5: The sustainable utopia

***You were born in Prato, which is a very particular environment where the recycling of textiles was a common practice even before the idea of sustainability started to be widespread. What does it mean to be part of this reality?***

*I always say that Rifò couldn't exist if it wasn't in Prato. What we do is exactly to take the tradition and all the know-how held in this cluster. For us is crucial to be here, we can follow the production on a daily basis, we can test new products when we have an idea, we can be easily updated regarding all the steps of the supply chain even in terms of sustainability and be well informed of all the innovations on sustainability that the cluster provide to its companies.*

***Recycling has been in the DNA of Prato for more than a century. Did you perceive any change in the latest years, with sustainability becoming one of the major topics of the contemporary?***

*Well, once no one was used to say that something recycled means something sustainable, and they were even used to hide the thing, selling yarns as fabrics as they were virgin fibers. Now, everyone is happy to declare that that yarn and fabric are recycled and make circular economy or green economy. It changed, actually, but just in the last two or three years, when they realized that there is an added value in something that pays attention to the environment.*

***Rifò was born as a start-up and is now growing as a brand. What is the most difficult thing to be communicated to the public?***

*The most difficult thing for us is still to overcome the idea that if something is recycled, it should be very cheap. Many people think that when you recycle the raw material comes at zero cost, so the final garment should be cheaper than one made with virgin fibers. But there are many manual processes all the way through the value chain that make the cost rise, especially if you are supposed to pay them at a fair wage.*

***How much attention do you find in your buyers and in the end customer on the topic of product sustainability?***

*There is a lot of attention and interest in the process and the benefits, even if the end customers are always looking for something well done but at an affordable price. The attention of the final customers is growing faster than the buyers' one; I feel buyers are still traditional in a certain way, they buy sustainable pieces just for a small percentage of their purchases and mainly for a communication strategy.*

***Can you retrace the making process of a Rifò garment?***

*We collect old clothes and sort them by color and quality. We can rely on local organizations that do the collection, we collect them also from other businesses that give us their production wasted or directly from the customers through our website. With cashmere, we have at least one-two contact each week from people who want to donate their old clothes in exchange for a small discount on our new products. Once divided by color and quality, the old clothes are shredded to become fiber and the fiber is twisted to spin the yarn. With that yarn, you can make knitwear or fabrics for tailoring.*

***What are the technical limits when you work with regenerated fibers?***

*Well, you can regenerate fibers for a maximum of three times depending on the kind of fiber. Then since regenerated fibers are shorter, you can spin them into medium gauge yarns, avoiding thinner gauges to reach good quality standards. For example, a 100% recycled cotton yarn will not last, it must be strengthened with virgin fiber or to blended with a synthetic one. For cashmere, the properties of the fiber remain the same but the fibers are a bit shorter, this increases the risk of pilling so it's better to avoid thin fabrics or knits.*

***How do you think the role of small independent realities like yours can push the whole fashion system towards more sustainable choices?***

*I think that together we can create an alternative. I would say that changes start from small movements, so I encourage all designers and everyone who has an idea about products or services for sustainable fashion.*

**2.10. Sara Francesca List, founder of VIC – Very Important Choice**

VIC is an innovative start up that works for social innovation in fashion, with the mission to make sustainable fashion available to all and to propose a new way of purchasing. They have created a selection of the



best sustainable brands that clients can wear for some time and give back, or buy at specific conditions.

The interview touches 3 out of 7 levers:

Lever 3: A demanding audience

Lever 5: The sustainable utopia

Lever 7: The future of design

***Sustainability is a very complex and wide theme, quite difficult to define it. What does it mean to you?***

*To me, sustainability is a container with many different themes in itself. [...] When I founded VIC, it was very clear to me that the impact is not only on one level, not only to create wealth for everybody involved but also to create a positive impact for the environment. I mean having a new business model that saves tones of CO<sub>2</sub> on the environment and has an impact on people's habits because that's what impacts the most on the planet and that's where social innovation comes from.*

***You created a network that includes artisans, workshops, social innovation projects, and you are also into the reuse of textile waste. How do you deal with all of these aspects?***

*VIC commits on many levels to sustainability. The first is to create a new model for consuming fashion: you have an option not to buy and own everything but to use a piece of cloth and give it back, and this is very important as it eliminates the production of waste. [...] The second is to pay attention to how and where things are done: with VIC we decided to collaborate exclusively with the artisans on a different supply chain, completely held in Italy, traceable. The third level is our commitment to transparency: we are an innovative start-up, and we created a software that can help the consumer to understand what is shown in the blockchain label.*

***Can you retrace step by step how VIC works?***

*For the sharing platform, it is very easy: the person just goes on the website and sees our catalog to purchase a service. With that ticket you have the option to buy three, four, five items for a different number of days, so you can decide how many items you want and for how many days you want to own them. Depending on that you have a different price, that covers the costs of the service that includes the shipment – back and forth –, the insurance, the repairing if needed, the cleaning and disinfection of the items which is also done naturally, and all our logistics that are zero-impact on the environment.*

*Then you receive the items at home, in an upcycled and zero-waste packaging, and will wear and enjoy them before giving them back. [...] We are implementing the system to minimize the CO<sub>2</sub> impact of the shipment that would cut our footprint exponentially.*

***It seems that a strong commitment has also to come from the final customer. What kind of response from the public did you get at the beginning and is it rising with time?***

*Our question as a start-up was: “is sustainability enough to create attraction?”, and with sustainability, I also mean the selection of our artisans and brands with criteria based on good design, traceability, ethical production and transparency of their supply chain. These are the values that we had to communicate at the beginning, and when we started, in October 2017, they were not really well perceived. Now things have changed and the interest is raising a lot. Today we communicate a lot on this mental approach to fashion that is using rather than owning, and I have to say that is difficult, but I see an increasing interest in these topics, even if it still doesn't translate automatically in the will to purchase. There is still a long way to go.*

***Do you think the Italian context is helping the sustainable choices of designers and businesses? Do you find fertile ground for VIC?***

*Well, it depends. On the market side, the Italian consumers still suffer a lack of culture on sustainability if compared to the Nordic areas of Europe; on the other hand, the vantage is that here, in Italy, we still have a lot of production sites and real artisans. When VIC selects the brands that are all based in Italy, we can visit their workshops, physically go there, and have videos showing how everything is done. This is the better transparency you can hope for and is a value that can happen only by staying here.*

***Do you feel consumers are becoming more demanding about that?***

*This is another battle we have to bring more mindful shopping to the general public, make them question everything, and make them ready to question products. [...] Every single item you see is not just that item, it has a story behind it. This is something that consumers are not really asking yet, but in the future if we give them this option they will answer.*

## 2.11. Marina Spadafora, sustainability consultant and Country Coordinator for Fashion Revolution Italia

Marina Spadafora is a Fair Fashion Ambassador and the Country Coordinator of Fashion Revolution Italia. Her work is widely known for her experimental knitwear brand and for her role as Senior Design Consultant for Prada, Miu Miu, Salvatore Ferragamo, and Marni.

Since 2007 she has been involved with ethical fashion projects, from Banque to Cangiari, to initiatives of development for Africa with Franca Sozzani. She has also been Creative Director of “Auteurs du Monde”, the ethical fashion brand of Altromercato, and she worked with the United Nations to bring development to emerging economies through fashion. In 2015, she received the United Nations “Women Together Award” in New York for her work with handcrafted textiles in the world.

Author of a TED Talk on the theme of “Consumer Power”, she also teaches Ethical Fashion in fashion academies, in Italy and abroad.

The interview touches 3 out of 7 levers:

Lever 2: The emerging of a sustainable geography

Lever 3: A demanding audience

Lever 5: The sustainable utopia

Lever 6: In search of common language and practices

Lever 7: The future of design

***What is Fashion Revolution, and what are the key topics that you pursue with the organization?***

*I have been involved in sustainability for about thirteen years, and sustainability in fashion is something that I believe in very strongly. Each of us, in whatever career or job we find ourselves, we have a responsibility to do the best that we can to turn whatever we do into a more responsible practice.*

*I became the country coordinator of Fashion Revolution in 2013, when the Rana Plaza complex collapsed in Dhaka, in Bangladesh, killing 1138 people and injuring 2500.*

*Since then, Orsola De Castro and Carry Somers founded this movement in London that is very much consumer-oriented: our hashtag is #whomademyclothes, so with a simple question we make people think about the fact that the textile industry is still a very manual industry with a lot of people involved. In the fashion industry alone, we have more than 70 million people working, and in the textile industry in general, we have 300 million people. It's a lot of people and if we pay attention*

*to our consumption and to where we spend our clothes doing a due-diligence research before we do shopping, at least we can give our money to companies that behave properly and are trying to do something – as far as corporate social responsibility – at least starting to move the first steps towards being responsible and transparent.*

*Saying that, not everybody is absolutely honest about this, we see a lot of companies that are doing little projects, little drops as we call them in the industry, and then they don't do anything more, so they get a lot of press, they get a lot of people thinking that they are sustainable and they are not. This is called greenwashing, and we have to be very aware of this phenomenon as well.*

***As you said, the revolution starts from the consumers, from people. Do you see a raising awareness in them in the latest years? And what can people actually do from the bottom of the supply chain to activate this change?***

*I see a lot more awareness, especially in the younger generation. If we think for a minute about the generation of Greta Thunberg, there is a really big movement around the world right now. Moreover, I think the current Covid-19 crisis has proven that our world is completely out of balance: it took only a few months of non-activity on a global scale for the rates of pollution to drop drastically, so nature has the power to regenerate itself, and that is comforting I think.*

*It is important to go towards a more circular way of production, where everything that is produced and designed is meant to return to its cradle, to design having in mind that that piece of clothing at the end of its life cycle will be regenerated into a new one instead of being thrown away.*

*Things have to change, and the consumers have the power to do it in their wallet: if we decide we do not want to spend money on certain brands because they are not behaving the way they should, then we take away the oxygen – which is money, our money – from the brand. That is how the consumer is vital to this process.*

***Is the dialogue between consumers and brands evolving somehow?***

*It's becoming more and more active. Fashion Revolution has the Transparency Index, a list of companies and brands to whom we ask questions. These brands answer the questions about their impact on the environment and they get a rating. The transparency is online on [fashrev.org](http://fashrev.org) and with that, consumers can evaluate the commitment and the transparency of that particular brand.*

***For how long will it still make sense to talk about purchase and consumption?***

*Well, consumers consume, don't they? I think we still need the economy to move, otherwise, a lot of jobs are going to be lost, so we can't advocate the stop of purchases and the act of consuming: it has to be done more consciously, that's all.*

***Do you think there is a need to redesign places, times, and ways of purchasing fashion?***

*Yes, I think that online and digital selling will become more and more important. There are companies and technologies now that can digitally represent a product that literally looks real, and also for fashion shows and selling campaigns we might move towards that. [...] Companies will have to come up with different strategies and sell the clothes in a different way.*

***There are also some emerging phenomena like renting, what is your opinion on the evolution of those practices?***

*I think they are very good practices. Rent the Runway for example, has become one of the biggest clients of a lot of fashion brands, because these rental services still purchase the clothes from the designers in order to have them on their websites, so now a lot of designers are counting on the orders coming in from these rental services. It can be a way not to stop the industry while pushing the customer to a more conscious consumption.*

## **2.12. Conclusions**

The reported interviews outline sustainability as a very complex and multifaceted theme, rich of contrasts and deserving a serious commitment and actions at all the levels of the supply chain, from manufacturers to design, selling, and distribution. What is also clear is that a paradigm shift happening in the set of minds of whoever operates on the value chain as well as in the public. The seven key aspects recurring in the interviews can indeed be defined as the levers that are driving the paradigm shift towards sustainability.

There is a **geography of sustainability (lever 2)** where some countries emerge more than others, in terms of **demanding end customers (lever 3)** as well as in terms of regulations and demands from clients and suppliers along the chain. In a global industry as the fashion one, the connections between stakeholders are making the more committed areas driving the others, in a step-by-step progression towards sustainable practices.

From the particular perspective of the Italian manufacturers the seed of sustainability emerges as already spread by a **long-term commitment (lever 1)** in doing things well and entrusting reliable suppliers and clients. The Italian context is frequently declared here as a privileged one, with its clusters that own long-lasting relationships among stakeholders, a common belief in the optimization of processes, virtuous companies that are often willing to open themselves in the name of transparency, a deep knowledge of products and of the value chain. By these stakeholders, sustainability is pursued with progressive actions and changes and is seen as a very concrete way of working rather than as a **utopic ideal (lever 5)** to be immediately realised.

In this progression, sustainability is becoming such wide, pervasive, and detailed that companies are more and more in need to hire people that take a full-time care of every aspect of it. These **new professional figures (lever 4)** are in charge not only to bring new knowledge, but to make order in the background that was already there, made of actions and decisions taken during decades without going under the name of sustainability, but being that. Designers themselves become part of a whole system where a sustainable product does not make sense if the companies that work on its supply chain do not operate in a sustainable way. From a designer's perspective, the main task is not to design a product anymore: the **future of design (lever 7)** is to control all the aspects, from the choice of materials to the product development, from communication to the presentation and distribution, until the delivery of values that can bring new habits in purchasing and behavioral changes of the public.

One other big issue is communication: talking about sustainability is still confusing, ineffective, with a lack of common language and clarity inside companies, between companies, between the value chain and the public. In this regard, given sustainability as an issue that concerns the fashion system as a whole, it comes as a shared feeling the need to create synergies – confirming the cited Williams words (Williams, 2020, p. 2) – towards a system that works with **common practices and languages (lever 6)**, pushes the same concepts, follows the same rules, to make the public aware of what's behind fashion.

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The Fashion System is at the center of the international debate as one of the most polluting and most impactful industries on the environment. In the last decade the fashion industry has changed, and is still modifying, its approach, aware of the fact that the attention to the environment can no longer be considered a trend: the entire system needs to find and adopt a methodological approach to the project and to the production of goods and services.

Today all the stakeholders on the supply chain follow a path from upstream to downstream: from the treatment of pollution, to the intervention on the production processes that generate a product, to the redesign of products and/or services to reach the discussion and reorientation of social behavior. This path shows the need to intervene in design terms and that the growth in responsibility and role of design, requiring reference scenarios, knowledge and new tools.

The book defines the features and scenarios of sustainable development, as well as the evolution of sustainability in research and practice of fashion design, addressing the strategies for the design and development of environmentally sustainable products. The authors describe the Life Cycle Design approach and the strategies and guidelines for integrating environmental requirements into product design for sustainable fashion. They present the so-called Systems of Sustainable Products-Services, namely the most promising scenarios and models to make design for sustainable fashion economically convenient. Finally, they provide a method and related tools to support design for sustainable fashion in the evaluation of the environmental impact of products, with particular emphasis on the LCA (Life Cycle Assessment). The text is enriched by a full-bodied review of interviews and case studies, with the dual purpose of making the design options clear and of highlighting their specificity for the different design contexts.