drift for transition

report

The transition to good fashion

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Contents

Foreword

The deeply rooted issues in the global fashion industry need solutions and collaboration that can disrupt the status quo. Significant positive momentum has emerged, for example, in innovative materials with lower environmental footprints, in small-medium sized companies breaking the traditional mold of linear business models and in multi-stakeholder collaboration to improve working conditions.

We all share a desire to create a fashion industry that allows people and ecosystems to thrive. But, what pathways have the most power to disrupt and transform, and does this include circular fashion?

We posed this question to the systems change research institute, DRIFT, because we wanted to stress test our hypothesis that a transition to circular fashion is indeed necessary and that we have the right strategies in place to foster this transition.

The analysis by DRIFT shows that circular fashion does have a critical role in transforming the sector, but it also shows that there is room to improve our strategies. C&A Foundation has responded by increasingly focusing on facilitating the implementation of circular business models, as well as by thinking beyond the apparel sector in policy advocacy. In addition, Fashion for Good will build more processes that connect mainstream and niche players, so that innovation has a better chance of moving beyond experimentation in the margins.

But, this report has also raised further questions:

1. How can we strengthen our collaboration with other actors to create the conditions for transformational alternatives to scale?

2. What positive dynamics of change are happening outside of the European context that we can learn from and utilise?

3. How can circular economy promote equity and inclusion in the fashion industry?

All of these questions have a common theme - additionality. We have an opportunity to build bridges between different areas of sustainability, in different geographies and in different parts of the value chain. We hope that this report provides inspiration to find more ways to work together to accelerate the transition to good fashion.

Katrin Ley
Managing Director Fashion for Good

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Head of Circular Transformation, C&A Foundation

drift for transition

About DRIFT

DRIFT is a leading research institute in the field of sustainability transitions. We develop and share transformative knowledge to support people, cities, sectors and organizations to engage proactively with transitions. DRIFT has four main activities that complement, ground and inspire each other: academic research, consultancy, education and public dialogue. Together with the many people and institutes we collaborate with, we aim to accelerate transitions towards more just, sustainable and resilient societies.

www.drift.eur.nl

C&A Foundation

About C&A Foundation

C&A Foundation is here to transform the fashion industry. We give our partners the financial support, expertise and networks so they can make the fashion industry work better for every person it touches. We do this because we believe that despite the vast and complex challenges we face, we can work together to make fashion a force for good.

www.candafoundation.org

FASHION FOR GOOD

About Fashion for Good

Fashion for Good is the global initiative that is here to make all fashion good. It's a global platform for innovation, made possible through collaboration and community. With an open invitation to the entire apparel industry, Fashion for Good convenes brands, producers, retailers, suppliers, non-profit organisations, innovators and funders united in their shared ambition.

www.fashionforgood.com

> “We built our business models based on infinite growth. There needs to be a new model that sells something different.”

Edwin Keh, Hong Kong Institute of Textile and Apparel

Introduction

The global fashion industry has developed into a highly complex system entrenched in economic and physical structures, cultures and practices that enable fast and large-scale production of apparel and provides employment to millions across the world. Within this system, a myriad of persistent challenges has emerged over the last few decades resulting in negative environmental impacts and severe social issues. Private, public and civil society actors have condemned these issues, and the movement towards a more sustainable fashion industry is growing with increasing pre-competitive collaboration and a broadening variety of alternative practices, materials and business models that pave the way for the fashion industry of the future.

So far, however, sustainability efforts in the industry have not yet managed to add up to a transformation of the fashion system, and the fashion industry shows signs of initiative fatigue and slow progress. There is a need to understand how initiatives are reinforcing or challenging the status quo and how collective efforts in the industry can more effectively add up to transformative change.

The deeply-rooted issues in the global fashion industry call for solutions that fundamentally challenge the current status quo. For this reason, C&A Foundation and Fashion for Good asked DRIFT to develop a systems change map to better understand the dynamics of change from a transitions perspective and to provide recommendations for transformative change towards a regenerative and restorative fashion industry. This report provides a number of strategic perspectives to accelerate the fashion transition in the form of transition pathways, levers for change and suggested interventions (see Chapters 5 and 6). The transition pathways build on the dynamics of change that already exist in the industry (and other sectors), and by convening actors around these pathways this energy can be leveraged to accelerate the transition.

APPLYING A TRANSITIONS PERSPECTIVE

Transitions are large-scale shifts in societal systems that emerge over decades. They occur in societal systems that face complex and persistent problems due to historical path dependencies and lock-ins. Based on scientific research on transitions, we can see transitions as non-linear and relatively uncontrolled structural shifts resulting from the interaction between increasing societal pressures, internal crises and competing alternatives. It usually takes decades for such pressures to build, after which, in a relatively short period of time (a few years), the status quo is disrupted, a fundamentally different way of thinking, doing and organizing becomes dominant and the system reaches a new equilibrium.

A current and well-known example of this is the energy transition, which has been gradually building momentum since the 1970s in countries in the global north. Only with the large-scale diffusion of renewable energy technologies and the pressures of climate mitigation policies of the last decade has real acceleration started to take place. Understanding how such transitions evolve and develop offers possibilities for achieving the desired large- scale societal changes

more quickly than following business-as-usual scenarios does. From the study of past and ongoing transitions, insights have been gained into how actors can make use of the dynamics in transitions to influence their direction and speed. From these insights, methods of *transition management* and *transition governance* have been formulated, elements of which we used for this study.

Transitions cannot be predicted, planned or managed with management approaches, as they emerge from complex adaptive societal systems. However, it is possible to anticipate upcoming opportunities, create fruitful conditions for change and reinforce developments that together can influence the direction and speed of a transition. In order to do this successfully, we have to be careful not to isolate or over-simplify either the persistent problems the fashion industry faces or the strategies used to address them. To understand where and how to intervene to foster transformative change, we must first acknowledge the complexity of the system. This was the starting point of our analysis.

APPROACH

A systems analysis needs to address the root causes of persistent problems and identify the potential patterns, pressures and levers related to transformative change. Therefore, we have used transition tools to map, explore, analyze and strategize 'elements of transition': those dynamics, actors, innovations, opportunities and contexts that when combined could build towards a desired future of the fashion industry. We used four mapping tools based on the scientific theory of transformative change (transition studies):

- **The Multilevel Perspective:** the multilevel perspective allows a snapshot mapping of macro-trends, meso-level industry change (or lack of it) and micro-level initiatives (niches). This provides a better understanding of the interactions between these different levels of change.
- **The 'X-curve' of transition dynamics (transition curve):** this model of transitions shows that transformative change requires not only the breakdown of existing structures, cultures and practices but also building up a new system. It allows for a more nuanced understanding of different phases of systems change and how the patterns of build- up and break-down co-evolve. It allows more specific and targeted interventions to be developed throughout desired transitions.
- **Envisioning and back-casting transition pathways:** a collaborative method to envision narrative pathways towards an alternative future by back-casting from a guiding vision and shaping principles, through paths to breakthrough interventions.
- **Actor analysis:** collaborative mapping of relevant actors and their position on the transition curve and the transition pathways as developed using the previous tools.

The systems analysis using these tools was done in three steps, each enriching the findings of the previous step: desk study, interviews and participatory sessions. The literature review mainly used primary and secondary sources (see references) to inform the analysis of the current system. Eight semi-structured interviews were conducted with experts from different parts of the world and different types of organizations. We facilitated three participatory sessions for which we invited small but diverse groups of change agents, both from within and outside the fashion industry, who are committed to a transition in the industry. The sessions focused on describing the current situation and developing ways forward to increase the transformative power of the fashion industry (using the tools mentioned above). In total, 15 external participants joined our collaborative sessions, and another 14 external people provided feedback during a presentation of preliminary results. We want to thank

everybody who participated and provided input throughout the process (including all the people at C&A Foundation and Fashion for Good); this report is the result of our collaborative efforts.

We recognize the myriad of single- and multi-actor initiatives in the fashion sector working towards a more sustainable future. In developing this report, we built upon various recent publications regarding circular fashion including (but not limited to) *A new textiles economy* by the Ellen MacArthur Foundation and the *Pulse of Fashion* reports and *CEO Agenda* by the Global Fashion Agenda. We built upon these efforts and placed emphasis on transformative change from a transitions perspective.

STRUCTURE OF THE REPORT

In the next chapter, we analyze the three levels of the current fashion system: the landscape, the regime and the niches. In Chapter 3, the dynamics of build-up and breakdown of the fashion transition are described. We explore the guiding vision and shaping principles underlying the desired future in which fashion is a force for good in Chapter 4. In Chapter 5, we introduce six transition pathways that inspire moving from the current system to a good fashion future, including an exploration of levers of change, milestones and interventions for each pathway. Finally in Chapter 6, we highlight some of the key interventions from all pathways that we feel are essential for fostering transformative change in the fashion industry.

“The fashion system leaves capacities of people underutilized while exhausting natural resources. Humanity is smart enough to change this.”

Femke Groothuis, Ex’Tax

1. A systems analysis of global fashion

This chapter outlines the analysis of the current global fashion system from a transitions perspective. The fashion system is analyzed on three levels: the **regime** or dominant culture, structure and practices, including the root causes of persistent problems; **landscape** influences that reinforce or challenge the status quo; and **niche** developments experimenting with alternative ways of doing, thinking and organizing. The relations are summarized in Figure 1.

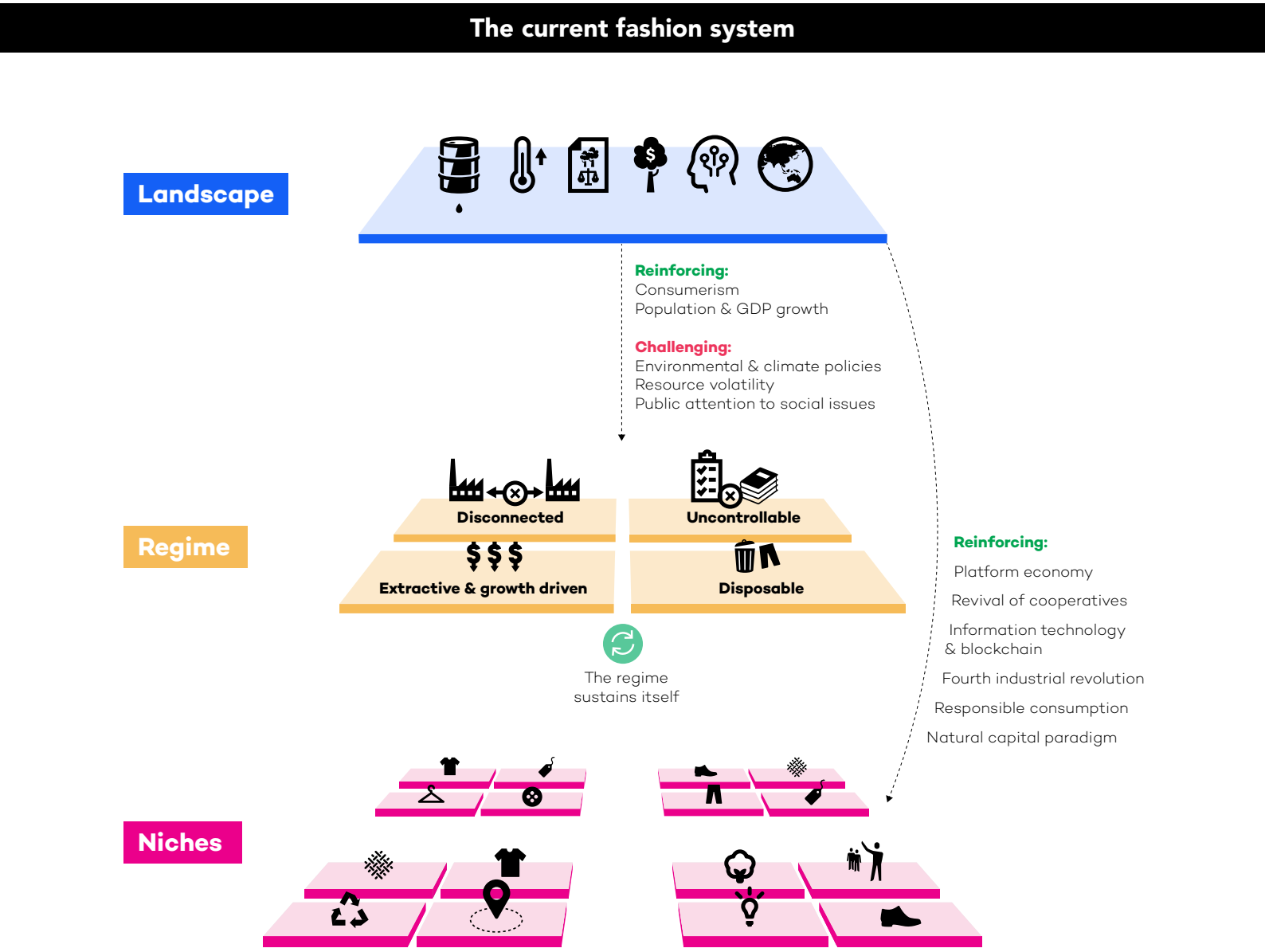

Figure 1: The landscape, regime and niches of the current fashion system

DOMINANT CULTURE, STRUCTURE AND PRACTICES (REGIME)

The fashion industry is a huge economic engine and its supply networks span the globe. It is the third biggest manufacturing industry (after automotive and electronics)[1], generates over 1.5 trillion euros annually[2] and employs an estimated 60 million people worldwide. Furthermore, over 100 million households depend on the cotton industry for their livelihoods[3]. If the textile industry were a country, it would be the seventh largest based on GDP.[4] Because the industry is relatively easily accessible to low-income countries and generates employment opportunities and income, it is often described as 'an engine for global development'[2]. Furthermore, global clothing production and sales have doubled between 2000 and 2015, with the number of garments produced annually surpassing 100 billion in 2014[5]. In other words, the fashion industry is not only large, it is also growing rapidly.

The dominant regime can be broken down into three elements: culture, structure and practices. These three aspects of the regime include institutions, social conventions, socially accepted behavior, laws, policies and infrastructures, which together compose and define the fashion system.

Culture

The fashion market is highly competitive and demand is growing for increasingly low-cost products in large quantities. This results in a continuous and accelerated race to the bottom. Yet company profits must grow, which for a large part of the industry, means the number of items sold must increase. To meet these demands, a significant part of the industry has developed and perfected the 'fast fashion' model over the last decade, which has transformed the seasonal turnover in fashion into a constantly changing stream of trends and new products. The dominant business model builds on the assumption of infinite growth.

Many brands and retailers argue that the inertia of the industry is due to the lack of consumer willingness to pay for sustainable products, and the rising demand for affordable clothing supports this claim[2]. On the other hand, some observe a latent demand for guilt-free consumption, and international surveys report that 55% of people are willing to pay more for more sustainable clothing[4]. However, research also shows that there is a considerable gap between sustainability intentions and behavior[6].

From a consumer perspective, clothing transcended its function as a basic need centuries ago. The way we dress and where we shop both signify and shape personal and group identity and culture. At the same time, consumer choices are influenced by marketing images that brands and retailers publish across a wide variety of media and in public spaces, promoting new products and trends. The short time horizon of trends and style-driven purchases leads to the consumer 'need' to continuously renew products. Producers and consumers treat garments as disposable products, which is shown by the trend of declining clothing utilization[5].

Structure

The fashion industry is characterized by mature production technologies[1] and its physical infrastructure is based on a linear production and consumption process. The industry extracts a large amount of natural resources, and products mostly end up in landfill or incineration after use. Less than 1% of apparel waste is recycled into material for new apparel[5].

The fashion industry is highly fragmented, anonymous and globalized. The 10 biggest brands and retailers have a joint 10% global market share, and the top 10 suppliers in China have 8% national market share[7]. The fashion industry involves numerous small and medium-sized enterprises (SMEs) throughout the value chain. This fragmentation

problematizes collective action. Furthermore, traditional retailers are increasingly struggling to compete in the current market (especially compared to online retailers[8]), leading to an estimated closing of almost 10,000 stores in 2017[9].

Power imbalances exist within the supply chain, between governments and companies, and between the global north and the global south. However, the levels of consumption in the global south are soon expected to outgrow those in the global north[10]. In other words, the north-south divide of consumers versus producers no longer holds. Nevertheless, the knowledge-intensive part of the value chain is still largely concentrated in the global north, while the labor-intensive part is based in the global south[4]. In recent years, manufacturers and suppliers in Asia have consolidated (especially in China), thereby growing more powerful within supply chains. According to one of our interviewees, most Asian manufacturing entities are multinationals that manufacture in very large volumes. They are in a position to invest and differentiate themselves. Some manufacturers even purchased their customers and are selecting who they do business with.

However, some other nations in the global south – such as Bangladesh and Cambodia – depend largely on the garment industry for employment and economic opportunities. There is lack of regulation on environmental standards and little enforcement of labor regulation of the industry in most (consuming and producing) countries. Although there is increasing EU regulation in the health and safety domain, such as in the use of chemicals[2].

In response to the lack of enforcement or regulation, the private sector and civil society are working more closely to create, non-binding and in some cases, binding agreements to address the issues. The most notable example followed the Tazreen and Rana Plaza factory tragedies where brands and local trade unions formed the legally binding 'Accord on Fire and Safety in Bangladesh'[11].

Practices

The short-term business strategy in much of the industry is one of lower prices and higher turnover. As a result, manufacturers have to be increasingly flexible in switching from one product to another. The traditional design-to-sales process needs almost two years, but the fast fashion model needs four months[12]. This leads to manufacturers subcontracting and making excessive overtime. This business model is prone to the exploitation of manufacturing workers resulting in issues like poverty-line wages, severe health and safety issues and worker repression.

The production of garments depends heavily on the intense use of non-renewable resources (e.g. fossil fuels) and intensive farming practices (e.g. using GMOs, fertilizers, pesticides and high volumes of water). There are also many externalities produced throughout the value chain (e.g. greenhouse gas emissions, freshwater contamination, over-extraction of groundwater) that are partly a result of meeting the prices demanded by much of the market.

THE FASHION REGIME IN CONTEXT (LANDSCAPE)

The fashion industry does not operate in isolation. The system is subjected to global and autonomous developments and trends. These macro-developments are either reinforcing or putting pressure on the regime. Some trends strengthen the persistency, contributing to a further 'lock-in' of the system. However, these landscape developments could also, as counter-movements, offer opportunities for transformation and provide the building blocks for pathways to a better future.

Demographic developments such as population growth and increasing global wealth are global trends that lead to a growing demand for clothing and increased

consumption and thus further reinforce the current regime. As a result of these demographic trends, geopolitics and the global economy, the power dynamics in the industry are shifting. The market shares of brands and retailers in the global north are declining as competitors in other parts of the world grow[7], and SMEs and online retailers gain momentum[8]. At the same time, they are losing their leadership role as suppliers grow and consolidate, pulling power in their direction.

Due to the global consumption increase, the strain on resources has also increased. The modes of production in the fashion industry contribute to the depletion and pollution of natural resources, thereby posing a threat to the natural capital on which it depends[13]. The increasing global urgency to deal with environmental issues and climate change is pushing governments to take measures to minimize the emissions of greenhouse gasses (symbolized by the Paris Agreement)[14] and implement strict environmental regulations, including policies that integrate measures related to circular economy (e.g. waste management legislation in the EU[15], China[16] and India[17]). These policies increase the pressure on the industry to address its environmental footprint.

Consumerist culture is also expanding around the globe[18]. The values and behavior of most people feed the current business model of the fashion industry because they demand high quantities of new products and affordability drives purchasing decisions more than durability. This trend is not limited to the fashion industry, but apparel takes a central place in consumer culture. On the other hand, there is also growing attention to social and environmental injustices[19], not just in the fashion industry, but across industries and consumer goods. This public attention puts a spotlight on the issues of the fashion industry and creates pressure for change.

EMERGING FASHION ALTERNATIVES (NICHES)

The term 'niches' refers to initiatives that experiment with new and/or alternative ways of doing, thinking and organizing. The experimentation that is happening in the fashion industry is very diverse, but can be broadly characterized into three categories:

- **Technology and Fibers**
  Recycling innovations (e.g. automated sorting, chemical recycling); 3D-printing; virtual prototyping; robotic or AI automation; design for circularity; use of new materials (e.g. fruit leather or algae); rediscovery of existing materials (e.g. hemp, flax); innovations that reduce the impact of the dyeing process and water, energy and chemical use (e.g. with enzymes and nanotechnology)

- **Business Models and Customer Relations**
  Fashion as a service and longer-term or personalized relationships with customers (e.g. lease/rent models, reuse, remake, repair, resell, personalization, on-demand production); customer behavior and social media customer trends (e.g. minimalism, capsule wardrobes, zero waste, slow fashion, sharing initiatives, vintage[20])

- **Value Chain Models and Partnerships**
  Ethical brands working closely with manufacturers; short supply chains; local for local (or regional) production and reshoring; radical transparency initiatives; IT-based traceability initiatives using blockchain (e.g. Bext360); environmental profit and loss accounting (e.g. Kering)

The 2018 Pulse of Fashion report[21] contains an overview of disruptive innovations throughout the fashion supply chain, including many of the ones listed above. The report Service-based Business Models & Circular Strategies for Textiles by SITRA and Circle Economy[22] showcases case studies of a wide variety of niche innovations and initiatives, including many (SME) companies working on new business models or circular products.

Often niche initiatives also encompass new and/or alternative (power) relations, roles, narratives and words. This becomes especially clear in niches on the consumer side. Vintage clothing and the use of alternative natural fibers show that niches are not a synonym to new, in that alternatives could also be old solutions reinvented. Niches (or upcoming alternatives) harbor the arguments for change and thus offer the building blocks for pathways (see Chapter 5).

UNSUSTAINABILITY OF THE CURRENT FASHION REGIME

In spite of improvement efforts to turn the fashion industry into a force for good, it seems that the mainstream industry's development pathways remain along the lines of expansion, optimization, growth, low-cost production and high consumption. This is largely due to the industry's path dependency: the established structures, networks, routines, technologies and production processes keep the fashion industry locked in. Rather than looking at the symptoms of unsustainability of these processes, we need to look at the underlying structural characteristics of the fashion industry that keep it locked in. Only when these fundamental persistent problems are structurally addressed (e.g. in a transition) can the fashion industry secure a future where people can thrive.

Emerging from the transition perspective and our analysis of the fashion regime, we have identified the following four characteristics at the root of the unsustainability of the fashion system. These characteristics of the regime – combined with some of the landscape pressures – reinforce each other and create a cycle of persistency:

• **Disconnected**
The transactional relationships, fragmentation and unequal power relations that characterize the industry lead to collective irresponsibility, conservatism and risk aversion (with manufacturers and suppliers carrying a disproportionate amount of social and environmental risk).

• **Uncontrollable**
The industry operates in an unregulated global market where negative externalities can be produced freely, becoming a 'footloose' industry that moves production to wherever it is cheapest, with strong vested interests to keep practices opaque.

• **Extractive & growth-driven**
When price is the major point of competition between companies in the supply chain, margins and externalities are squeezed to maximize profits, and sustainability is often considered a costly additional feature. The supply chain relies heavily on non-renewable fossil resources and virgin resource inputs.

• **Disposable**
The culture in the global north and increasingly in the global south values consumption and individualism and often at the expense of durability. Customers demand quantity and novelty and they dispose of items quickly.

These four characteristics combined help explain both the relatively marginal effect of many attempts to move towards sustainability and the longer-term inevitability of structural change. The marginal effects of interventions and sustainability efforts relate to the complexity and incumbent nature of the fashion regime: small changes are absorbed by the regime as it continuously adapts to changing contexts through, for example, the geographical movement of manufacturing, the invention of new materials and chemicals that are not yet regulated or illegal practices (e.g. forced labor or discarding untreated wastewater into the environment). However, a lock-in is also the early phase of a future transition: society will increasingly push for structural changes and provide a fruitful context for it, and entrepreneurial actors will develop new alternatives. We have described a number of the niches, but we can also point to a number of broader landscape

developments that gradually increase pressures for transition.

While the above landscape trends influence the regime, other landscape influences can offer inspiration for niche developments in fashion. The growing importance of social media and digitalization are changing the face of the fashion industry[23], pushing retail online and creating new interactive platforms for communication and interaction between consumers and producers and within the supply chain. The emerging availability of IT innovations, for example data tracking and sharing technologies such as blockchain, has the potential to change traceability in the industry. The growth of the platform economy and the sharing/renting economy in other industries (including fast-growing service platforms such as Uber, AirBnB and Deliveroo) is transforming the way value chains operate and how customers find suppliers.

Other innovations such as 3D-printing and automation could change the nature of manufacturing. Besides the opportunities that the 'fourth industrial revolution' has from a business perspective (to lower production costs and change the quality of work, for example), it could also mean the loss of many jobs in textile and garment manufacturing if the disruption is unmanaged[24].

There is a revival in cooperatives and other structures of decentralized local ownership and governance[25]. These cooperatives are popping up in agriculture, energy, healthcare and manufacturing. It could offer opportunities for the circular fashion industry, for instance through worker-owned factories or local closed-loop systems. This trend ties in with a growing undercurrent of unsatisfied citizens who are disillusioned by the capitalist structures and use bottom-up organization and social media to explore alternative, more sustainable ways of living, producing and consuming, including the 'prosumer' movement[26] in renewable energy and agriculture.

An emerging policy and academic discourse on natural capital solutions[27] is trying to develop assessment and reporting standards for ecosystems and natural resources to aid the limitation of environmental degradation. On top of this, geo-political developments – such as the currently strained China-USA relations and 'trade war'[28] – affect economic policies (i.e. increased protectionism) and trade relations within markets or industries. Should this trend continue, it will likely change the geography of production and consumption as well as the resources used (and wasted) in the fashion industry.

“Money doesn’t buy the lead. A lot of bottom-up, unexpected companies will make the change.”

Orsola de Castro, Fashion Revolution

2. Transition dynamics in the fashion system

The analytical framework used in Chapter 2 provides an overview of the multiple levels that together constitute the fashion system. In this chapter, we will focus on the dynamics displayed in the current system by looking at the change efforts in the sector using the x-curve model of transition dynamics (represented in Figure 2).

In a transition, the flaws in the current regime are challenged by niche developments and exacerbated by landscape pressures, usually over a period of several decades. During this time, an alternative system gradually matures in the margins. This alternative regime emerges from the niches during a period of acceleration in which it is scaled up until it reaches a tipping point and replaces the old regime. These transition dynamics are visualized using a transition curve[29].

In this simplified model of a transition, niches develop along an upwards curve from experimentation to acceleration, emergence, institutionalization and stabilization. Simultaneously, the existing regime moves along a downward curve from a first optimization stage to destabilization, chaos, breakdown and phase-out. The transition curve represents the patterns of build-up and breakdown that coincide and interact in a transition, and they can reinforce or counteract each other. In reality, these transition dynamics are chaotic and non-linear, with actors moving in different or opposing directions and developments in the system occurring at different points of the transition curve simultaneously. Furthermore, these dynamics are not necessarily a conscious process in which actors are aware of the ongoing transition[30]. Transition dynamics can be mapped along (roughly) ten stages of transition, five on the downwards "established" curve and five on the upwards "emerging" curve[31] (see Figure 2). This chapter is a snapshot of the transition dynamics in the current fashion system.

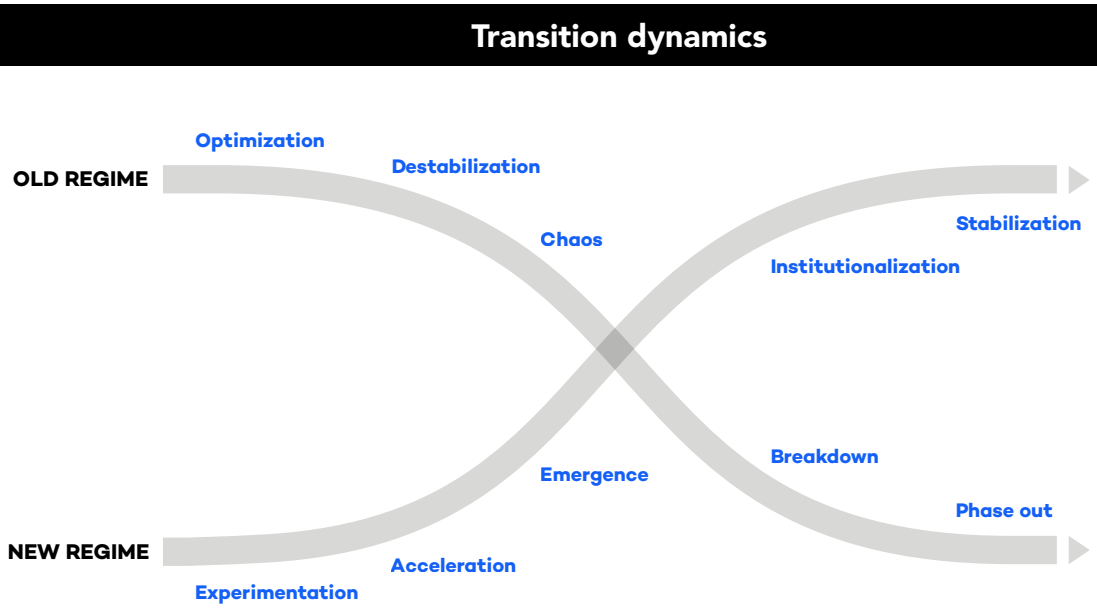

Figure 2: The ten stages of a transition, mapped on a transition curve (adapted from Avelino, Frantzeskaki & Loorbach, 2017[32])

OPTIMIZATION

The fashion system shows the dynamics of the early stages of transition because many activities focus on optimization of the current system. This means actors are mainly focused on improving the status quo through efficiency measures and efforts to minimize flaws in the regime.

Many forms of compliance fall into this category – from company Codes of Conduct to workplace safety standards– though research has shown that industry-led compliance and auditing have limited results as tools for scalable change[33]. Multi-stakeholder initiatives have been cropping up for over two decades to either tackle specific issues, such as chemical discharge or child labor, or to stimulate improvements across themes by promoting continuous improvement and reporting with standardized tools. While some of these have the ambition to make radical changes in the industry, their focus is not to inspire fundamental change in the way the system functions[34]. In some buying countries, governments are trying to take the reins. The Netherlands[35] and Germany[36] have drawn up agreements with industry players, but they mimic performance standards. This compliance dynamic has led to a situation where sustainability is mostly dependent on the willingness of leading companies to improve their practices. This does not create a level playing field that pushes the laggards forward.

Snapshot transition dynamics

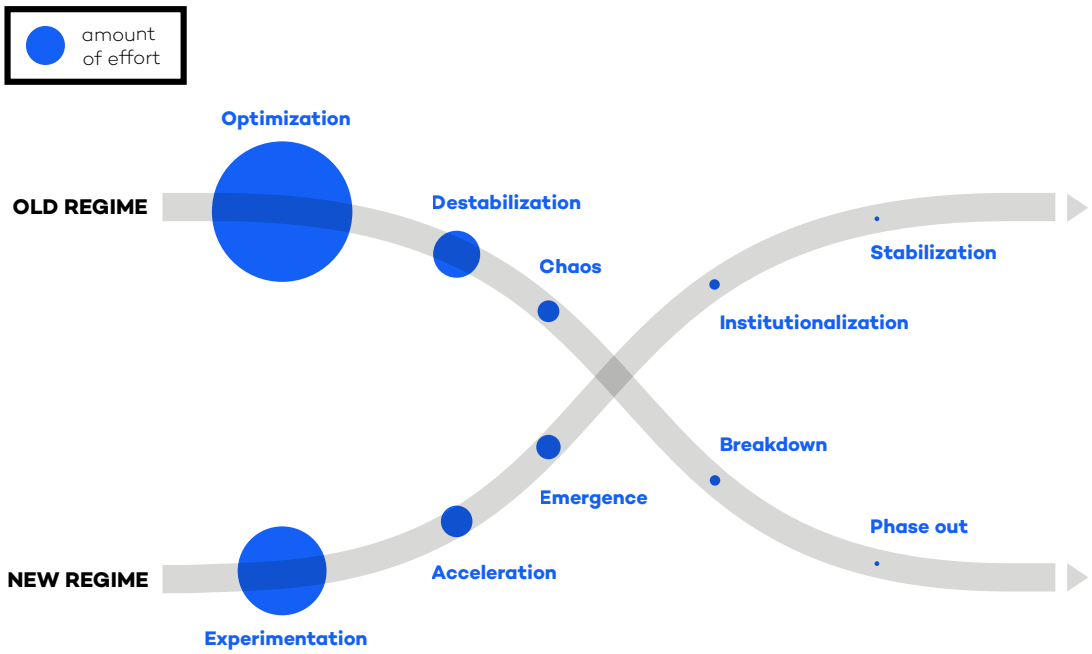

Figure 3: Snapshot of the transition dynamics in the current fashion system

Furthermore, actors are talking about circularity as a new model for fashion[37], and there are many experiments that are developing safe production alternatives. However, most established companies direct very few resources to producing for closed loop systems (within and across industries), which is underscored by the data that shows that less than 1% of fibers are upcycled[5] and the fact that only 23% of targets set by the signatories of the 2020 Circular Fashion System Commitment relate to using recycled inputs[38],[39].

Products that are made from recycled content are often produced with synthetic (polyester) fibers that rely on other waste streams, like plastic bottles. This is not so much an example of an upcycled or circular product, but rather delayed discharge of single-use plastics, especially since these polyester garments cannot be recycled into new, high-quality fibers with the current technology. This issue is not helped by current waste management policies that often contribute to the lack of high-quality recycling of textiles because it promotes low value recycling like energy recovery or down-cycling textiles to insulation materials, contributing to a lock-in of the linear supply chain model[40].

Governments and businesses are investing in improving the recycling capacities of current waste management systems. While investment in material management technologies is much-needed and valuable, focusing attention on the current (linear) waste system without tackling issues at the beginning of the product lifecycle reinforces the waste management regime.

Meanwhile, while a variety of actors try to tackle persistent sustainability problems with optimization, the industry keeps growing and operating within the same model it has been for decades. For instance, as government oversight increases in China, there are instances of Chinese companies setting up apparel factories in Ethiopia[41], where regulation is less conducive to a sustainable industry. Labor is cheap and regulations scarce. The past shows that unless the sector fundamentally changes, the supply chain will continue to be fluid, chaotic and ever-changing.

These dynamics show that the sustainability efforts of the industry are largely reactive because they focus on reducing risks to business as usual. The fashion industry remains one of the most polluting industries in the world producing 8% of global greenhouse gas emissions[42]. Production and business as usual continues to grow, and this will eclipse sustainability efforts that focus on optimization.

Experimentation

While this analysis has categorized most efforts as optimization, others (people, companies and initiatives) are experimenting in the margins with radically different visions, structures and practices. Niches in the fashion industry are often entrepreneurs, SMEs and innovators who choose to opt out of the regime, operate independently and try to build something new from the ground up. For instance, many fashion entrepreneurs from the global north directly hire (and sometimes train) workers and artisans for fair wages to sell small-scale lines of products (e.g. Mayamiko). In many of these niches, small companies and entrepreneurs are pioneering alternative business models, technologies and value chain models. However, experimentation also takes place within more established companies. Examples include the Gold level Cradle to Cradle Certified™ t-shirt and jeans developed by C&A in partnership with Fashion for Good, IKEA partnering with Industree in India, and in-store retake and resale initiatives by companies such as Eileen Fisher and The North Face.

Although experimentation is happening across the value chain and in many different organizations, most experiments lack the transformative capacity needed to make

an impact on the status quo. It is difficult to disrupt the regime and move beyond optimization and experimentation if niches do not find their way into the mainstream. There is a lack of adoptive capacity by larger brands, limited industry-wide collaboration and insufficient investment to bring disruptive innovations and niches to scale. Some successful innovations are forced to take a backseat to second-best alternatives due to risk aversion, lack of investment and a general reluctance to move away from business as usual[43].

Destabilization

Incidents in the destabilization phase make the unsustainable nature of the dominant structures and practices explicit and increase the urgency for change. These events or changes can lead to disruption of the status quo if they build on each other, which pushes the system into chaos and breakdown. It is difficult to judge these events objectively, because their interpretation depends on the position and ambitions of the actor experiencing them.

In the fashion industry, signs of disruption in the current system have been adding up over the years. The sweatshop controversies were among the first, but other factory disasters, most notably the tragedy of Rana Plaza, forced many actors and citizens to confront some of the unsustainable practices of the industry. Public pressure on brands has also increased due to consumer-facing campaigns focusing on the social and environmental issues in the industry, such as the Greenpeace Detox campaign. Climate mitigation policies shake the industry from the outside in, as do more localized policies regarding hazardous chemical use or discharge and waste production.

A disruptive force that has already changed the face of the industry over the last few years is the rapid rise of online retail. In recent years, not only have consumers bought more clothing online from existing brands and retailers10, SMEs and individual designers also have a leg up in the market because they can reach consumers directly and without needing retail space. Online platforms such as Amazon, eBay, Zalando and AliExpress make it possible for any manufacturer – whether a large Chinese company or an amateur tailor at home – to sell their products online and reach numerous potential customers. This trend is disrupting the traditional status of brands and retailers.

Acceleration

As mentioned above, most of the activity in the emerging regime is still in the experimentation stages and is not yet accelerating. Many of the niches in the fashion industry are still in the early stages of development and find only a limited market, especially compared to players in the global industry. There are, however, a few initial signs of acceleration.

Increasingly, brands and retailers have more invested and long-term relationships with their suppliers, making it possible to negotiate on more than price and speed of product delivery. Transparency efforts are also gaining support throughout the industry, although the transformative capacity of these initiatives lies in what is publicly disclosed.

Actors such as Fashion for Good, Patagonia, Levi's and Nike are trying to accelerate niches through funding, innovation labs and accelerator programs. In a few niche markets, like the Dutch workwear industry, circular production has accelerated over the last few years[44], leading to new supply chain coalitions and creating space for the development of recycling technologies and radical traceability initiatives[45]. However, this effect still sits between the niche and regime space, as only a few players are providing innovative alternatives.

Overall, policies and investments in the circular economy and clean energy are increasing across sectors. Climate and energy

policy is more mature, but circular economy policy is gaining traction and reaching the acceleration phase. This will also have an effect on the linear production (and waste) model of the fashion industry because these transitions overlap. On top of this, awareness-raising initiatives such as Fashion Revolution and NGO campaigns are getting attention in mainstream media. Both in traditional media and on social media, there is more attention on sustainable fashion, which seems to be going hand in hand with increasing customer support for sustainability. People are increasingly looking for bigger ethical statements from brands and retailers, and brands in turn are realizing the importance of values-based business.

Chaos

At this stage, the dominant structures, patterns and routines become unstable or even partly disappear. It is apparent that change is necessary, but the resistance hardens against the threatening degradation of the status quo. There is not much activity in the chaos stages of the fashion transition yet, although the problems with waste and the volatility of cotton[46] and fossil fuel prices are pushing into this category. However, these span industries. A sign of increasing chaos in the fashion industry is the ban on the import of second-hand clothes that the East African Community is enforcing by 2019[47].

Emergence

In this phase, new solutions and structures surface. The direction of change becomes clearer, though there are opposing interests and views on the future. In the fashion industry, a few initiatives have emerged as new industry standards, such as forced labor regulations, eco-labelling and standards for organic and non-toxic materials (e.g. the Global Organic Textile Standard). Public disclosure of supply chains, gender justice and circular fashion are also emerging as a shared vision for the largest players in the industry.

Influencing transition dynamics

After the transition tipping point, old structures are abolished and practices unlearned in the breakdown stage. Certain routines, professions, connections and patterns disappear. At the same time, institutionalization renders the change to the new system irreversible; new rules and structures emerge and new power relations form. In this phase, the change becomes self-evident and gradually a new stability is created. Afterwards, the last remnants of the old system are removed in the phase-out stage and the new system is broadly accepted as the 'new normal', around which institutions and structures form and processes are optimized (stabilization). The fashion system still has a long way to go before actors can work on these stages of the transition.

A high-level mapping we did of over 200 non-profit initiatives from the fashion industry in this model indicates that most are active within the optimization or experimentation spheres with signs of moving towards acceleration. Only some are making efforts in the destabilization space of transition. The high-level mapping did, however, reveal that many initiatives have the potential to move towards destabilizing the current system and even working on the emergence of a just and regenerative fashion system. In other words, if they can be inspired to take on these roles, especially in collaboration and distributed over build-up/breakdown and the various levers and pathways, they can have more transformative power.

This transition perspective helps to understand how momentum for deep systemic change develops and thereby provides a basis for governance, policy and strategic intervention. However, it also points to the inevitability of such changes in the long term: if a system is unsustainable, its future demise is inevitable. When niches and regimes do not interact systematically, as in this industry, it is very difficult to disrupt the regime and move beyond optimization and experimentation. But with enough pressure from the landscape level, the regime will

eventually destabilize. At this point, if there are enough tried and tested alternatives, regime actors can reach out and adopt these to avoid collapse. Therefore, it is in the best long-term interest of all actors to work on accelerating niches. The future course and outcomes of a transition are, however, inherently uncertain. Following the perspective on increasing systemic pressures, emerging niches and the growing willingness of regime actors to help accelerate and guide systemic change, the question arises: what type of industry would we like to transition to?

The challenge now is how to play into the emerging transition dynamics and mobilize the transformative power of maturing alternative discourses, business models, technologies and practices to help guide and accelerate the fashion industry's sustainability transition in this direction.

> We need a large company to disrupt the market with rental, triggering others to move to new business models.

Andrew Morlet,
Ellen MacArthur Foundation

3. Fashion as a force for good

As described in Chapter 2, the fashion industry has had a major impact on the world and has contributed to shaping our economies, communities and cultures. The industry has brought obvious benefits to many workers and economies around the globe. Apparel touches the life of every single person on the planet and many people experience joy in self-expression through clothing. At the same time, the industry has caused or exacerbated environmental and social problems on a grand scale, most of which are only increasing. Efforts to mitigate such negative impacts have so far only resulted in marginal improvements and have not led to the increasingly urgent structural transformation of the industry. How can the fashion industry transition to becoming a force for good?

GUIDING VISION FOR THE TRANSITION TO GOOD FASHION

The search for a broader transition of the industry has been emerging from sustainability initiatives in the industry for some time. From previous envisioning done by the C&A Foundation[48], Fashion for Good[49] and the Ellen MacArthur Foundation a number of recurring elements arise. Together these values represent an inspiring vision to help guide and accelerate the fashion transition. While such an enormous and complex transition will take decades to materialize, this guiding vision can help facilitate, stimulate and connect short-term transformative actions. This vision can therefore inform short-term decision making, investment and action. Fashion can only be a force for good when it meets the following five conditions.

Fashion as a force for good

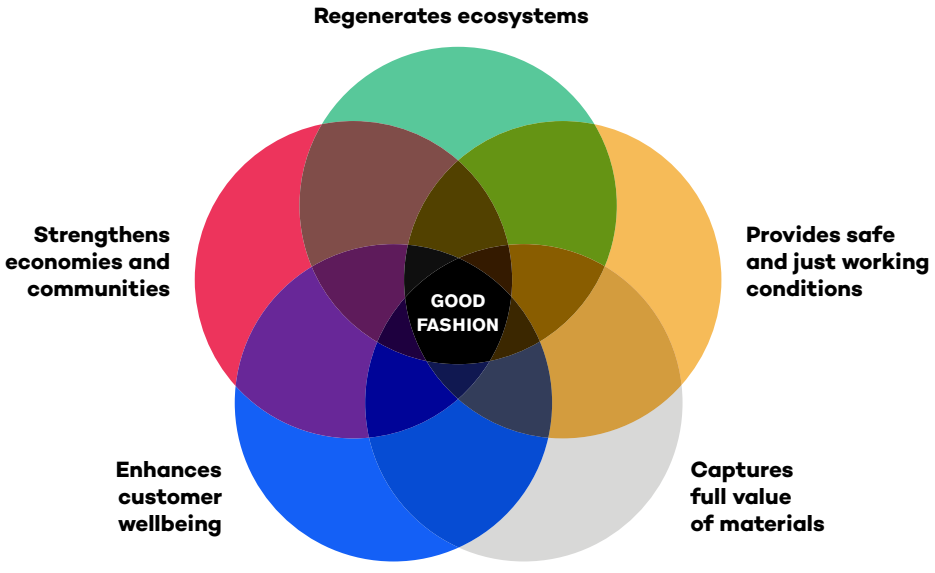

Figure 4: A vision of fashion as a force for good

Enhances customer wellbeing

The fashion industry enhances the wellbeing of people by providing them with clothing that is accessible, of good quality, functional, safe and healthy. The industry enables customers to thrive because the products and services are tailored to their needs and wishes, and they in turn act as agents using their purchasing power for good fashion.

Examples of milestones:

- Fashion provides comfort, functionality and protection;
- Fashion enables people to express themselves, shape their identity and feel good;
- Fashion is accessible to everyone (diversity, affordability);
- Fashion is safe and does not negatively impact health;
- Customers feel good about contributing to the fashion industry, because they trust that the supply chain has not harmed people or the environment and has positively contributed to people's lives and even the planet.

Provides safe and just working conditions

The fashion industry provides workers with good livelihoods through fair wages and just working conditions. The industry enables workers to thrive, because they live and work in safe and dignified conditions in which they are respected, and able to make changes in their work and lives.

Examples of milestones:

- There are no human rights violations, no child labor, no slavery and no emotional or physical harassment from farm through to retail;
- Workers of every gender and background are treated with respect and dignity in their (work) environments;
- Every worker in the industry can support a family on their wages;
- Every worker has the ability to use their voice and influence working conditions (through unions or other forms of participation);
- Working conditions in the industry are safe, healthy and free from environmental or constructional hazards.

Captures the full value of materials

The fashion industry captures the full value of garments. They are designed for circular use and the materials flow from one product to the next. The price of fashion reflects the true cost of the production process and resource use.

Examples of milestones:

- The majority of apparel items go through several use cycles before returning to the materials flow;
- The majority of materials used come from recycled sources, the rest is from renewable resources;
- All fashion products are designed for technical and biological product cycles;
- No use of substances of concern;
- Zero waste in production processes, no overstock;
- End of use is a new beginning for the raw materials through redesign, recycling/upcycling and biodegradation;
- Infrastructures and systems are in place to enable take-back.

Regenerates ecosystems

The fashion industry only uses renewable energy and materials as inputs, and treats 'waste' as resource streams in materials management. It regenerates natural ecosystems by cleaning the water, air and soil.

Examples of milestones:

- Production facilities are located and designed in harmony with surroundings and are regenerative where possible;
- Production facilities run on renewable energy and support clean energy systems in the surrounding communities;
- Water and soil are conserved, used sparingly, purified and regenerated;
- No negative environmental impacts are produced locally or globally.

Strengthens economies and communities

The fashion industry promotes strong and diverse economies that generate benefits for all parties involved, while every party adds value. Benefits are distributed between partners in the supply chain and within communities.

Examples of milestones:

- The fashion industry contributes to the diversification of economies in production regions by deploying business activities with higher added value, educating workers and enabling them to develop within or beyond fashion production;
- The fashion industry deals with automation with workers in mind – through proper mitigation processes, retraining, reskilling – so that ultimately, everyone benefits;
- Artisan skills are conserved, taught and valued;
- The fashion industry contributes to services for the communities of their workers (education, child care, health services, housing).

SHAPING PRINCIPLES THAT ENABLE A GOOD FASHION FUTURE

The vision above describes the aspired functioning of the fashion industry. But which underlying conditions have to change to enable the industry to transition? By definition, this transition implies a fundamental change in the underlying structural relations and the economic exchanges of the industry. Incumbent interests and power dynamics sustain the status quo, and the prevalent economic model based on profit growth and efficiency works against internalizing environmental costs and social justice.

The necessary fashion transition needs to shift the systemic power relations and the value model of the industry. We identified four shaping principles as underlying conditions that enable the fashion system to transform into a force for good. They are the reverse of the four root causes of the persistent problems in the industry, as described in Chapter 2. The first two – connected and accountable – are linked to power; the other two – internalized and valued – are linked to value.

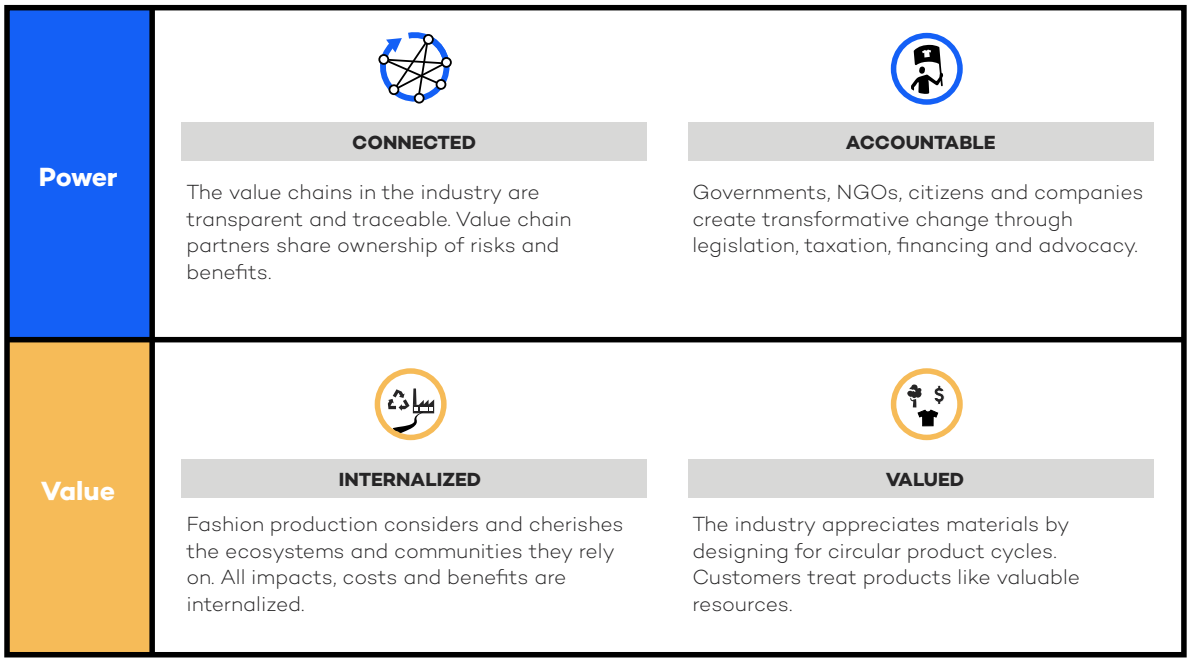

Figure 5: Shaping principles for a future in which fashion is a force for good

Connected

The value chains in the industry are transparent and traceable. They are characterized by reciprocal and long-term relationships between value chain actors, who treat each other as partners, and across geographical regions. Value chain partners share ownership of risks and benefits in their value chain.

Internalized

The activities, processes and products that make up the fashion industry consider and cherish their context: the ecosystems and communities they interact with and rely on. 'Externalities' are something of the past as all impacts, costs and benefits are internalized in design, decision-making and price setting.

Accountable

The industry is less free to seek the path of least resistance in environmental and social issues because it is held accountable by other actors. Governments, NGOs, customers and companies create transformative change through legislation, taxation, advocacy and financing. Workers are emancipated through living wages, equality, education and freedom of association. Their communities are equipped with the skills to stand up for their wellbeing and for the environment.

Valued

Society values the materials that go into making fashion. The industry appreciates these materials, by designing for technically and biologically circular product cycles, whether long-lasting or quickly dissolving. Customers respectfully use the fashion products, by maximizing their use and treat the materials as the valuable resources that they are.

“Governments have the possibility to become powerful actors in the fashion industry; they can ask for a different future.”

Jason Kibbey,
Sustainable Apparel Coalition

4. Moving towards good fashion

TRANSITION PATHWAYS

In the previous chapter, we have sketched what a good fashion industry could look like and what underlying shaping principles enable the industry to function in this way. The next question is: how to move towards this aspired future state? To answer this, we have developed six pathways that contribute to transforming the sector through a collaborative process (see textbox). These pathways present inspiring storylines rather than scenarios or roadmaps: they are meant to help actors recognize the broader context in which they can connect to other change agents working on this transition. They serve as an inspiration to move beyond optimization strategies, where currently significant effort is concentrated, and towards system transformation.

Each pathway is developed around subthemes and levers for change on which a variety of actions are being taken across the industry. By synthesizing such actions in these transition pathways, we can start to think about improving coordination, strategy building and acceleration through shared goals and interventions in the short, medium and long term.

The pathways can and should develop alongside each other, since each covers different aspects of the fashion system that need to transform. They can however, overlap at times, for instance because a certain element of a good fashion system (e.g. circular product cycles) works as a key feature of several pathways.

Many of these pathways are not exclusive to the fashion industry, but are part of other, larger transitions in various industries. Examples of this are innovation for the circular economy and the energy transition (core of pathway 4: Product and manufacturing innovation) and natural capital approaches (pathway 5). Many actors in other industries can be found innovating, investing and experimenting in these spaces. This can provide the fashion industry with valuable lessons and partnerships if it is willing to look outside for transformative power and connect with others.

Transition pathways towards good fashion

Figure 6: Six transition pathways towards good fashion

Developing pathways towards good fashion

The six transition pathways described in this chapter were created through a collaborative process, in a series of workshops and consultations with experts from business, sustainability, research, policy and innovation, both within and outside the fashion industry (see chapter 1).

Initial pathways were developed using back-casting methods starting from the vision and guiding principles (see chapter 4). These were linked to the landscape trends and niche developments with transformative potential that emerged from the current fashion system (see chapter 2).

This way, the pathways can leverage transition dynamics (see chapter 3) and build on the strategic efforts of many actors.

LEVERS FOR CHANGE

The transition pathways are narratives of transformative change that give direction and can be used to coordinate strategic action, mobilize change and contribute to transformative capacity in the industry. We illustrate the pathways with a set of specific interventions. In developing these interventions, we first identified more generic levers for change in the fashion industry:

- **Proof of concepts:** Developing and testing new solutions for the fashion industry of the future (i.e. business models, value chain models, products, technologies, innovations, services), and demonstrating their effectiveness, profitability and appeal.
- **Pre-competitive collaboration:** Convening potentially competing actors (from across the value chain) around shared systemic issues to set a collaborative strategic agenda, without encouraging anti-competitive measures.
- **Increasing & bundling demand:** Encouraging the supply of alternative products or services by stimulating the demand of value chain actors (B2B) or consumers (B2C) through marketing, bundling demand or connecting supply and demand.
- **Capacity building:** Increasing skills, knowledge and the network of individuals or organizations to facilitate the adoption of new practices that can facilitate change.
- **Worker & community voice:** Equipping workers in the supply chain (i.e. factory workers, subcontractors, farmers) or communities with the skills they need to advocate for their rights and better living and working conditions.
- **Transparency & accountability:** Increasing the availability, traceability, accessibility and comparability of data about materials, products, processes, supply chains and production conditions. Reporting on this data to increase the ability of actors (i.e. NGOs, public actors, citizens) to hold companies accountable for their impacts.
- **Advocacy:** Lobbying, campaigning, commissioning and publishing research, and other activities intended to influence decision making by policy-makers and financial institutions that may bring about systems change.

Figure 7 depicts the described levers and where they intersect with the transition pathways.

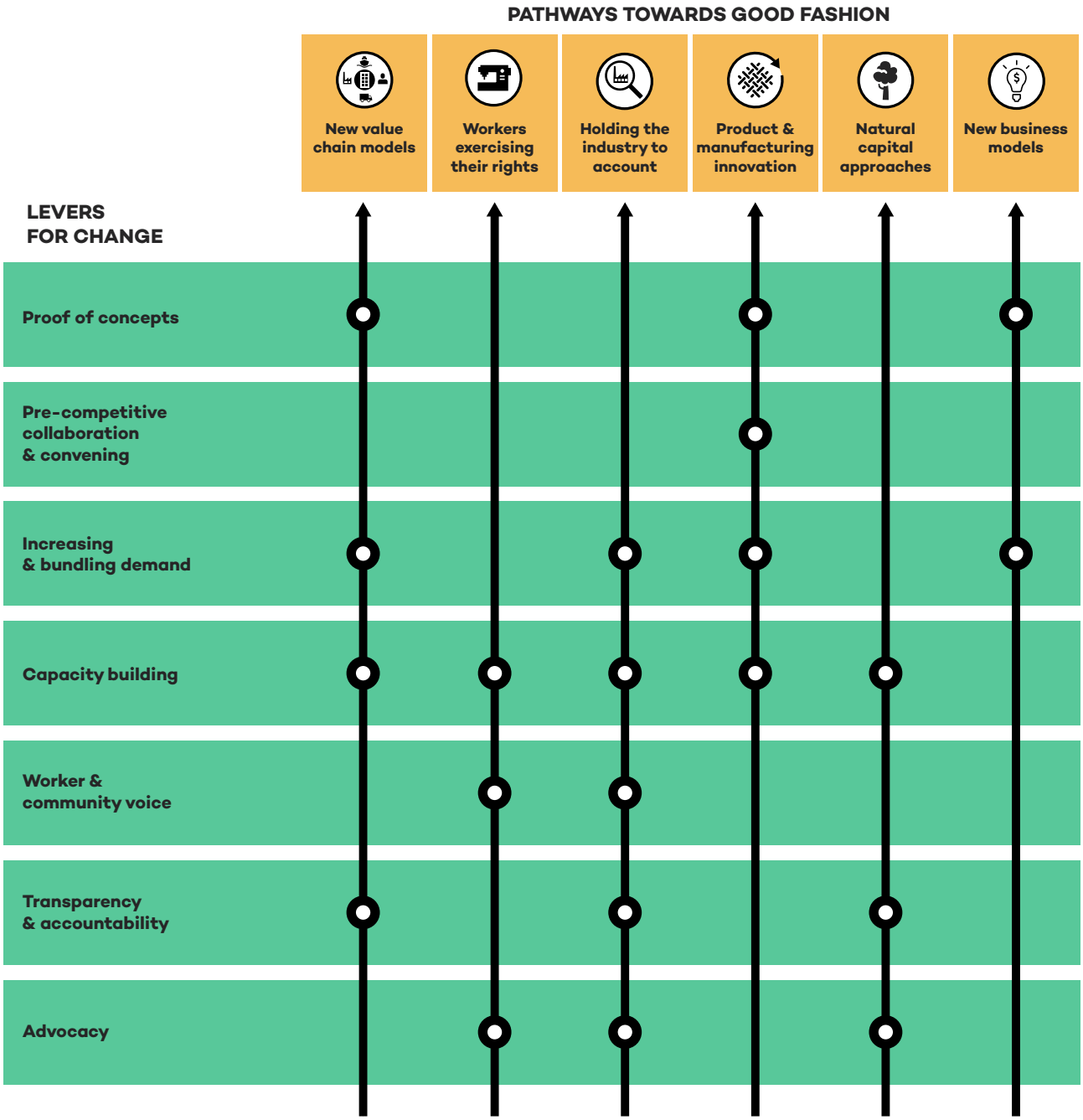

Figure 7: Levers for change and the pathways for which they are relevant

In the description of the pathways below, a set of suggested interventions is presented to illustrate how these levers can be used to accelerate the transition pathway. These are not new initiatives per se. Since there are many actors and initiatives already working on mobilizing these levers, there is no need to duplicate efforts or re-invent the wheel. However, the suggested interventions, levers and pathways below can build upon existing efforts to direct them towards a shared narrative and accelerate transformative change.

Pathway 1

New value chain models

The supply chain moves from disconnected, fragmented and opaque to new models in which supply chain actors go beyond a transactional relationship towards a partnership based on connection, mutual understanding and reciprocity. This pathway is about the transformation of business-to-business relationships, for example by co-investments in supply chain innovation, long-term collaborations and capacity building for high sustainability performance. Supply chain partners share in the risks, investments, benefits and losses, and work together to improve their joint performance. Resources are allocated by supply chain partners to increase capacity for strategic investment, far-reaching collaboration and radical innovation, to enable all actors to change their business as usual. It is key that this effort extends beyond the usual suspects (i.e. the top 100 brands and retailers) to engage players globally and across the supply chain, including small- to medium-sized enterprises (SMEs).

Indicators of progress for this pathway are the duration of supply chain partnerships; the power balance in supply chain partnerships (in terms of dependency or distributing the sales price throughout the chain, for example); the transparency of production chains; and changes in how materials are owned and managed throughout product lifecycles.

Levers for change and interventions:

- **Proof of concepts**
  - Design and experiment with short, transparent supply chains in which all actors involved, from fiber supplier (sourcing circular materials) to retailer, know the other partners. Some SME retailers are already demonstrating this proof of concept, which needs to be scaled by larger retailers.

- **Increasing and bundling demand**
  - Tap into local campaigns for circular economy. Major cities such as Amsterdam and London are promoting circular economy. A model similar to Rockefeller Foundation's 100 Resilient Cities could be launched in these cities to gain critical mass for successful (local) circular fashion projects, including engaging local actors now handling textile waste.

- **Capacity-building**
  - Build capacity and access to finance (provided by civil society and financial institutions) for suppliers, workers and their communities to develop new (co-)ownership models and profit-sharing models.

  - Develop leadership programs for companies (brands, retailers, suppliers) that increase the leadership abilities of buyers, designers and key strategic decision makers to engage with supply chain actors in a more collaborative fashion and to co-invest in innovation with manufacturers.

- **Transparency and accountability**
  - Value chain partners use standards for environmental and social performance beyond the classic audit and compliance model to start a dialogue about shared values and to determine joint actions to improve performance[50].

  - Large-scale introduction of a ledger system of materials[51] and materials passports using blockchain or other decentralized, open information technologies. This is a critical enabler for a circular economy because information about material flows will be available. It could even serve as a starting point for moving beyond ownership of materials towards a duty to maintain and return them after a completed lifecycle, which could disrupt the way products are handled[52].

Pathway 2

Workers exercising their rights

Workers and community members exercise their rights to negotiate for the priorities they choose, including higher (living) wages, better labor conditions, opportunities for growth and a healthier environment for themselves and their communities. The industry respects workers' freedom of association and collective bargaining, entering into good faith negotiations with workers' elected representatives and advocating with governments to uphold these rights. Supply chains, working conditions and purchasing practices are publicly disclosed, so employers and upstream buyers can be held accountable for respecting these rights.

Indicators of progress for this pathway are the number of specialized jobs in the industry; the share of fashion industry workers united in unions or other forms of worker collectivity; and the number of successful court cases with which communities prevent environmental degradation.

Levers for change and interventions:

- **Capacity-building**
  - Training programs in factories to upskill workers by teaching them a larger variety of increasingly complex manufacturing tasks, new circular technologies and methods, and artisanal techniques, so they develop high-value skill sets to produce quality garments, adapting wage levels accordingly.

  - Contribute to the diversification of economies in production regions by deploying business activities with higher added value, educating workers and allowing them to work beyond apparel manufacturing. This might include joint educational programs (PPP) to train factory workers for other professions and micro-credit funds to boost entrepreneurship and innovation.

- **Worker and community voice**
  - Civil society supports workers to establish/strengthen resilient organizational structures (such as unions and community support) and includes, as part of their training, aspects of circularity such as substance use in relation to health, environmental degradation impacting their communities and propagating a positive footprint of facilities (e.g. production of clean water and energy).

  - Connecting unions and other worker collectives to large-scale international consumer-oriented campaigns or initiatives to give workers a platform to share their experiences about working in fashion manufacturing and address environmental issues in their communities.

- **Advocacy**
  - Civil society (and potentially government or private) actors facilitate advocacy by workers and their communities to demand that governments implement and uphold legislation that respects their rights and benefits their communities, not only at national and regional levels but also at the international level.

Pathway 3

Holding the industry to account

The industry is no longer its former ever-shifting, 'footloose' self because there is increased oversight and control by governments who protect their environment and citizens against pollution, waste, health hazards and exploitation. In producer countries, this means stricter environmental regulations for farming and manufacturing practices as well as facilitating good labor conditions and wages for workers. In consuming countries (and these overlap), this includes implementing minimum standards for garment import and sale regarding environmental and social impact as well as health and environmental hazards during use.

Transparency and traceability tools are used to measure progress and prosperity, through a company's contribution to job creation, living wages, social security, employee training and other socioeconomic issues. NGOs, investigative journalists and citizens take on a watchdog role. This is enabled by the movement towards industry-wide radical public disclosure that provides public, free and reliable access to details on the impact, origins, processes, costs and value of products to customers, governments, NGOs and the supply chain. This 'taming' of the industry will shift power relations in the sector away from companies towards a more shared power dynamic in which governments, businesses, NGOs and citizens are all able to induce change.

Indicators of progress for this pathway can be measured by looking at the presence of apparel production measures in strong environmental policies; the decrease of the number of companies moving to (or threatening to move to) other countries because of more limited regulations; the decrease of connectedness between industry stakeholders and policy makers; and change in consumers' attitude towards bad practices in the fashion industry.

Levers for change and interventions:

- **Increasing and bundling demand**
  - Engage with new media (e.g. social media content creators, online tools or apps) to raise awareness about the issues in the fashion industry, mobilize citizens and celebrate alternatives. This will fuel 'innovative anger' in society and can inspire positive shifts in consumer demand.

- **Capacity-building**
  - Funders, civil society and frontrunner brands/ retailers support advocacy groups (such as Fashion Revolution or Clean Clothes Campaign) to increase 'rebellion capacity' in society, by offering platforms, advocacy training, access to funding, or access to influencers and media.

- **Worker and community voice**
  - Civil society (and other actors) builds capacity for communities affected by the fashion industry and amplifies their voices, to prevent, for example, ecological degradation and gain access to clean water and energy.

- **Transparency and accountability**
  - Transparency initiatives embrace open standards as a powerful way of directing current efforts for transparency in a more radical direction. NGOs, government agencies, funders and citizens can access public data and use it to demand accountability.

- **Advocacy**
  - Leading companies in the fashion industry address aspects of the current regime that need to be phased out. They propagate a shared agenda for government intervention in production and consumption countries in order to change the 'rules of the game' and halt the race to the bottom. For example, they advocate changes in the pricing and taxation of labor and natural resources, the free production of externalities and policies that encourage a linear production model. Policy makers play their role by creating and enforcing binding legislation to phase out these issues.

Pathway 4

Product and manufacturing innovation

Existing and upcoming technologies and practices that support a circular production model are adopted and scaled to enable the industry to work with clean materials in clean production processes. Companies work on building capacity for transformative change within their organizations by allocating resources to increase capacity for sustainable design, radical innovation and knowledge about alternative practices, and they use performance metrics to enable a change in business as usual. This pathway leads to a circular system in which material loops are closed and the end-of-use stage of a product is part of the design process. Garments are designed and made with a longer duration of wear in mind and with regard for the materials and their full lifetime, making them viable assets in an economy that fosters re-use. Fibers and chemicals that cannot be part of a closed no-impact loop that upcycles materials are phased out. Production processes such as farming and manufacturing regenerate rather than pollute the physical environment. The industry is independent of fossil fuels for energy use and no longer contributes to micro-plastic pollution. Breakthrough technologies and processes that facilitate material recycling phase out the demand for unsustainable sources of materials.

Indicators of progress for this pathway are the pace of uptake of (formally) innovative and transformational technologies in the production chain; the amount and extent of collaboration between innovators and traditional regime actors; the accessibility of expertise, technologies and finance for circular fashion innovation; the percentage of R&D budget for radical innovation (as opposed to incremental innovation); and the cost of recycled fibers versus the cost of virgin fibers.

Levers for change and interventions:

- **Proof of concepts / pre-competitive collaboration and convening**
  - Intermediary organizations (CSR organizations, sector organizations, NGOs) facilitate large-scale pre-competitive collaboration and joint implementation of common design and material selection standards, in line with the relevant efforts of the Sustainable Apparel Coalition and Zero Discharge of Hazardous Chemistry.

  - Develop a shared technological innovation program with a supply chain perspective that forges partnerships between innovators and frontrunner companies (brands, retailers, suppliers, manufacturers), select key innovations and initiate joint, large-scale projects in transformative innovations to create a critical mass (e.g. in product traceability, recovering fibers, green chemistry R&D). Fashion for Good is already working on this, as they convene brands and retailers around the incubation and acceleration of innovators.

- **Increasing and bundling demand**
  - Actors in the fashion industry pool demand for market-ready or close-to-market innovations, to overcome the chicken-and-egg problem of lack of supply hampering demand (and vice versa).

- **Capacity-building**
  - Companies (brands, retailers, manufacturers) reward circular design and minimized negative impact by their employees, and individual performance KPIs are adjusted accordingly.

  - Develop training programs and campaigns for SMEs (especially small brands and retailers) and design schools to build knowledge and capacities around circularity and innovation.

  - Frontrunner innovators temporarily work in-house as 'frontrunner in residence' strategists for mainstream companies to show them the needs and opportunities of change. This brings niches to the regime players and enables companies that are not (yet) 'frontrunners' to contribute to a good fashion industry.

Pathway 5

Natural capital approaches

The sector moves towards natural capital assessment and radical transparency that provides public, free and reliable access to details on the true cost of environmental impact, origins and materials. These metrics are used to value natural stocks and flows (resources, ecosystems) in the industry. Material and economic flows are combined in assessment and reporting tools. This data is captured by decentralized, open information technology. Financial actors also use these standards for their investment strategies, and governments use them for their environmental policies, import limitations and taxation. Alternative tax mechanisms and other financial incentives can be used to stimulate change. At every step in the value chain, the physical presence of the fashion industry (e.g. factories) is embedded in its local ecological context, contributing to biodiversity, building natural assets and leaving a positive footprint.

Indicators of progress for this pathway are the market share of companies that report on natural capital impact throughout their supply chain; the extent to which data is shared transparently; the range of policies introduced that support natural capital accounting approaches; and the taxation of labor relative to the taxation of natural resources and capital.

Levers for change and interventions:

- **Capacity-building**
  - Intermediary organizations in civil society train supply chain actors to use standardized natural capital measuring and reporting (e.g. Natural Capital Protocol[53], Environmental Impact Evaluation[54], Environmental Profit and Loss accounting[55]).
  - Develop programs for companies (brands, retailers, suppliers) that increase the leadership abilities of buyers, designers and key strategic decision makers to use natural capital accounting and adapt KPIs accordingly.

- **Transparency and accountability**
  - A large number of companies map their supply chains and impacts using natural capital and transparency standards and make this available to third parties. Garments are linked to publicly accessible information (tags or digital) about environmental impact and labor conditions.

- **Advocacy**
  - The finance sector demands the use of natural capital approaches, shifts financial incentives and thus supports the institutionalization of valuing natural capital, similarly to how (parts of) the finance sector currently accelerates the energy transition by taking the CO2 footprint of investments into account.
  - Brands, retailers, suppliers and manufacturers initiate joint advocacy towards governments in buying and sourcing countries to shift taxes from labor to capital, natural resource use and the production of externalities. This will stimulate job creation and incentivize the industry to value materials and create clean, circular cycles. Advocacy can also direct a ban on landfilling or incinerating textiles.

Pathway 6

New business models

The industry moves away from the current take-make-waste model, which encourages short-term use of products and places the responsibility for garments with consumers. In fact, consumers become 'users' of fashion services, and help keep materials in circulation. In this sense, this pathway transforms the dominant business-to-consumer model of the industry. In the 'next circular economy', people value ownership less than the use, quality, adaptability and convenience of products. Brands, retailers and manufacturers in this economy not only work with new revenue models but also take on new roles. Local production and customization enable brands and manufacturers to sell designs and (recycled, clean, high-quality) raw materials directly to citizens and SMEs. Tailoring, repair, remaking and customization, by both retailers and specialized, local professionals, make a return. Renting and resale are also common business models for brands. New service models turn supply chain actors into asset managers rather than just producers. Service models induce producer responsibility for their products throughout their lifetime. Products are more likely to be designed to perform (for longevity) and to be updated to fit future trends.

Indicators of progress for this pathway are the share of fashion services revenues relative to total revenues; the accessibility of fashion services; the rate of clothing utilization and resale; and a decline in new garment production and sales.

Levers for change and interventions:

- **Proof of concepts**
  - Igniting the large-scale introduction of fashion as a service. Fashion as a service is one of the most promising niches and a stepping stone for valuing materials throughout the whole value chain. Major brands – or other large companies such as Amazon or eBay – could move into fashion as a service, triggering others to invest in new business models and fashion services.

  - Stimulating and scaling innovation by fostering start-up companies that work on disruptive technologies and processes that facilitate new business models.

- **Increasing and bundling demand**
  - Using branding, marketing and media to leverage consumer demand for guilt-free consumption and new fashion services, tapping into the potential of new media, high fashion and (social media based) trends in sustainable consumption (i.e. minimalism, zero waste, capsule wardrobes, vintage/ thrifting).

> “Data becomes exponentially more useful when it is released into the public domain. It is a strong accountability mechanism.”

Kate Logan, China Institute of Public & Environmental Affairs

5. Fostering the transition towards good fashion

Throughout this report, we have used insights from transition studies, first to gain a better understanding of the status quo and the current change dynamics, then building upon this analysis to sketch a future direction and corresponding pathways. In this final chapter, we use perspectives from transition studies to inform strategies, to effectively influence the transition towards good fashion.

As stated above, transitions cannot be planned. The issues at hand are persistent problems deeply embedded in society and the economy, and therefore require fundamental changes. Such changes cannot be brought about by isolating the issues from their context, outlining pre-defined targets for incremental improvement and implementing step-by-step roadmaps – as is often attempted. While the dominant practice, such approaches will fail to effect permanent, large-scale change that transforms the status quo. To effectively contribute to a transition, one needs to acknowledge the systemic complexity, the myriad of interrelated actors and scale levels, and the fact that too often the solutions we are working on now are part of the problem.

While it is not possible to predict the future, it is still possible to anticipate opportunities. It might not be possible to steer a transition, but one can still nudge the direction of changes and strengthen specific developments. No single actor can dictate the pace of transition, but one can trigger activities and mobilize other actors. Fostering transitions is about acupuncture interventions that play into existing dynamics of change, using a guiding vision of the long-term direction as a compass.

Reflecting on the current fashion system and its transition dynamics (Chapters 2, 3 and 4) helps in understanding why current interventions are too often not effectively contributing to the transition towards good fashion. They indicate that:

- The current fashion system is unsustainable: disconnected, uncontrollable, disposable, extractive and growth-driven;
- Given societal pressures and emerging alternatives, this is a situation that is impossible to sustain in the longer term;
- If we do not organize transformation more systematically, the fashion system will experience major shocks and disruptions;
- The sector mostly puts effort into optimization, in particular non-binding standards or agreements that reinforce the current situation;
- Experiments do not effectively challenge the status quo, as radical initiatives develop in isolation from the regime;
- The fashion industry as a whole is yet to systematically address which aspects of the current system should be broken down and phased out.

We have suggested a range of acupuncture interventions to influence the transition along the pathways in Chapter 5, to inspire various types of actors to play their role in the transition towards good fashion. Many of these interventions are already happening in niches or among individual actors, but they have the potential to transform the sector when brought to scale. More specifically,

we encourage actors to seek and develop interventions and strategies that shift efforts in the industry to the next phase in the transition curve and/or create interactions between the established regime and emerging niches. Figure 8 shows this dynamic with a selection of transformative interventions from the pathways (Chapter 5), to illustrate how to develop interventions that nudge the industry along in the transition.

Interventions shifting transition dynamics

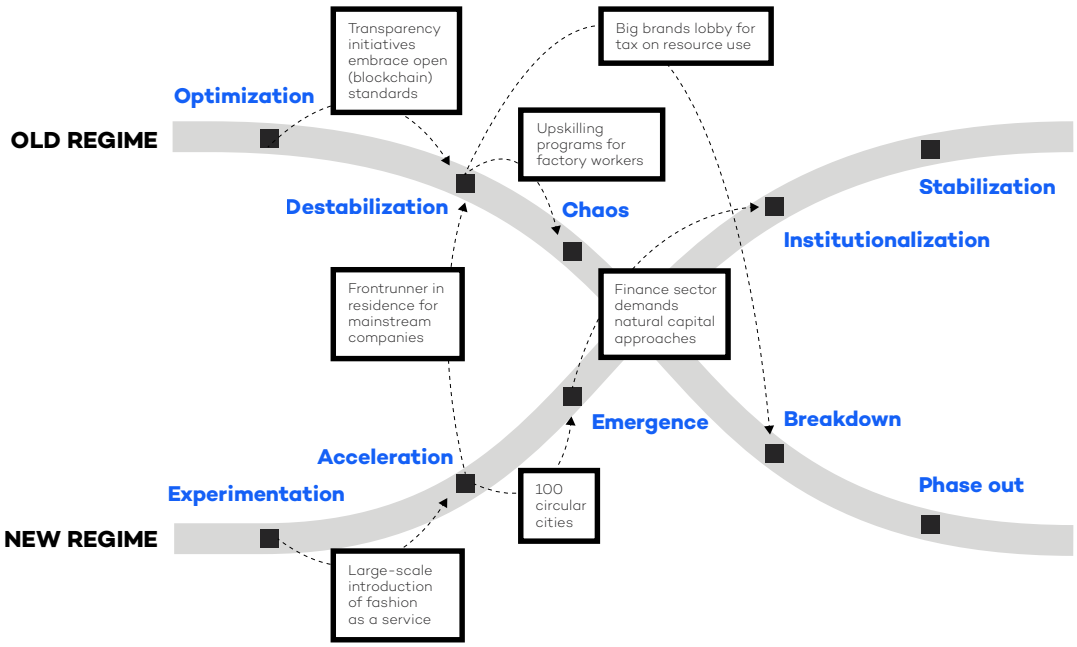

Figure 8: Examples of interventions that facilitate movement along the transition curve

These interventions are examples of how strategic interventions (using levers for change) can leverage existing dynamics in the industry and move them along the transition curve towards a good fashion future. For instance, scaling a radical alternative practice and business model such as fashion as a service challenges the incumbent regime and can serve as a stepping stone for valuing materials throughout the whole value chain. Existing large-scale transparency initiatives can trigger disruptive accountability when they embrace open standards and traceability. While circularity might be difficult to embrace for the fashion industry, in broader societal debates the idea is getting traction. The expected growth in demand for circular alternatives, combined with the ambition to utilize the collected textile 'waste' in the participating cities, can give a boost to circular fashion.

Mainstreaming emerging niches asks for changing the boundary conditions in favor of these niches. The financial sector can play a key role by demanding natural capital approaches and thus institutionalizing the valuing of natural capital. An intervention such as 'frontrunners in residence' ensures companies are confronted with the needs and opportunities of change. This is breaking through the isolation of niches, not by engaging regime actors in niche developments but the other way around. One of the 'chaos' factors on the horizon for the industry is automation.

The current industry depends on (cheap) labor, and if automation in the industry takes flight it could mean the loss of millions of jobs. Upskilling programs for factory workers form a key intervention to be ahead of this development. This allows workers to develop high-value skills that cannot be replaced by machines, or skills that can help diversify the economies of their countries. It should, however, be noted that this intervention alone (like any of these interventions in isolation) will not be sufficient to address the issues of the industry.

Transition is not only about growing and mainstreaming alternatives but also about letting go of established structures, cultures and practices. The fashion industry should address what aspects of the current regime need to be broken down. Businesses need to speak up in favor of changing the rules of the game. A starting point is that companies form a coalition of the willing to jointly start a lobbying agenda for taxes on resource use or mandatory living wages, for instance.

It should be clear that accelerating and steering the transition requires a combination of interventions: from scaling innovations to obstructing current practices. Similar interventions along the lines of the examples mentioned in this chapter, or the suggestions in Chapter 5, can be equally impactful – and will be very much needed to provide a strong impetus to move towards 'good fashion'. Based on the observations listed at the beginning of this chapter, we formed these recommendations to the fashion industry as a whole:

- Break out of the 'inner circle' of brands, retailers, suppliers and sustainability initiatives to move beyond optimization efforts. Connecting to niches, policy makers, financial institutions or actors in other industries in transition (e.g. energy, transport or packaging) systematically along the transition pathways will help bring creative energy for solution development in new spaces;

- Many practices in the fashion industry are not acceptable, including supporting activities that contribute to the root of unsustainability of the fashion system (being disconnected, uncontrollable, extractive and growth-driven, and disposable). More work needs to be done to shift the industry from non-binding pledges and unverified adaptations alongside business as usual to binding efforts to transform;

- Innovation in the fashion system is currently used as a tool to tweak current practices and keep experimentation in the margins. Actors need to invest in transformative innovation and scaling that disrupts and radically challenges current business models and common practices;

- Take an active role in breaking down structures, incentives and institutions that reinforce the persistent problems in the regime. Working towards sustainability implies phase-out and destruction as much as it requires innovation.

Fortunately, the movement towards a good fashion industry is strengthening. Using a transitions perspective, collective efforts in the industry can more effectively add up to transformative change, both by adding and scaling up existing efforts that have transformative potential (such as the example intervention in Chapter 5) and by pushing optimization and experimentation efforts towards more disruptive forms (as illustrated by the examples above and in Figure 8). Isolated innovations and initiatives need to find connections to others that can accelerate more systemic change, so that, for instance, a product is not just pushing circular design boundaries, but will find its way after end-of-use into a system that enables the product to be disassembled, harvested and remade into new fibers and products. We do not suggest starting another platform or initiative, but rather to build on existing efforts in a direction of greater scale, ambition and disruptive capacity. We hope that the systems analysis and transition pathways developed in this report provide a framework for actors and initiatives to push the industry into more transformative efforts, which will accelerate a transition towards a good fashion future.

> “In the circular economy you phase out anonymity in the supply chain. Everything needs to be traceable.”

Michiel van Yperen,
CSR Netherlands

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