LOCALISM AS FLOURISHING: A VISION FOR THE FUTURES OF THE FASHION SECTOR

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I am deeply grateful to all the people without whom this project would not have been possible. Although it is my name on the cover, all of you have contributed to this project in your own particular ways.

First, my principal advisor Greg Van Alstyne, who created an invaluable space for me to do this research and grow as a student. I greatly appreciate the freedom you have given me to find my own path while also guiding and challenging me. I would also like to thank all the members of the SFI faculty and my peers, from whom I have learnt a tremendous amount over the past two years. This project would not have been possible without the insights and feedback from my secondary reader Laurentina Junestrand Leal. And, Grayce, who so patiently worked on designing the visuals of this project and bringing it to life. I am indebted to all the experts who graciously took the time to speak to me and shaped this project through their wisdom and experience. Finally, I would like to thank my family and my partner – you have truly been a backbone through this project.

ABSTRACT

Fashion is an age-old method of reflecting who we are as individuals, while connecting us to wider social groups and providing a sense of both individuality and belonging. Fashion is a connector, linking people across demographics, socio-economic groups and nationalities; and an attractor, drawing people into a system of commerce. Yet, fashion also has a complex relationship with the larger system structures of economics, ecology and society within which it exists. It is into this stirring space at the intersection of fashion, persistent global challenges and a growing awareness of costs and benefits, that I offer this exploration of localism as an alternative vision for the future of the fashion sector.

While in the field of fashion, there has been, and continues to be, a reluctance to confront consumerism in the sustainability discourse, this exploration aims to address explicitly, the social and ecological costs of consumerism, materialism and the 'growth logic' that govern production and consumption practices in the contemporary fashion sector today. It puts forth localism as an alternative vision for the futures while exploring how this paradigm might enable human and ecological flourishing in the fashion sector. Lastly, it offers pathways to bridge the gap between prevailing models in the sector and localism as a vision for the futures.

This project invites change-minded fashion makers and takers along this journey, with the hope that it fosters a desire for a sector that prioritises human and ecological well-being over economic gain.

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Research Question: How might localism enable human and ecological flourishing in the fashion sector?

> *The original, preindustrial definition of fashion was to make things together – a collective that is a convivial, sociable process we use to communicate with each other. The current definition is the production, marketing, and consumption of clothes – an industrialized system for making money.*
>
> *– Dilys Williams, Fashionopolis, 2019*

Fashion is a socio-economic force that occupies a space at the heart of contemporary culture. Its purposes persist at the intersection of the provision of livelihoods, fundamental human needs, creative expression and personal pleasure. The multifaceted nature of fashion demands that it be viewed as a cultural instrument, while simultaneously acknowledging its negative effects.

The fashion sector of today is shaped by economic and cultural processes and a market-driven cycle of consumer desire and demand. It is interwoven with systems of economic growth and consumerism that depend on product obsolescence and an increasing throughput of resources (Fletcher, 2016). Each stage within the lifecycle of fashion, from fibre procurement to the eventual disposal of physical products, entails environmental and social costs.

At the same time, the fashion industry is a vital contributor to livelihoods and communities. Fashion can create a dynamic and innovative economic and sociocultural space that offers values at individual, community, and national levels. The power of fashion, through its complex and alluring emotional language, and its integral role in identity expression and communication, position it as a potential agent of change (Fletcher & Tham, 2015).

In the fashion sector as with other designed systems, "problems" are situations that favour some stakeholders and cause unforeseen consequences to others (Jones, 2014). The social and ecological impacts of burgeoning fashion production and consumption are maintained by social agreement and tend to reinforce over time, thereby resembling an autonomous, complex adaptive system. This problematic manifestation may be deemed a problem system within the fashion sector.

The multicausal and multilayered nature of this problem system necessitates a deep systemic inquiry. In the context of the fashion sector, this means addressing not only the ecological and human impacts of fashion production, but also the psychology behind fashion consumption, the systems of economics, finance and trade, and the global and local infrastructures that reinforce conditions over time.

New ideas emerging from existing economic systems and social constructs are likely to be efficiency-focused and incremental (Fletcher, 2016). Rethinking fashion outside the traditional growth logic invites concepts beyond the confines of fashion as a commodity, into ideas of new relationships between people, the natural environment, artefacts and technologies.

This exploration begins by recognizing and accepting that humans are "merely a node in an interconnected web of life" (Ehrenfeld & Hoffman, 2013, p. 91) and that flourishing is an emergent property of the complex system we inhabit. This complexity lens demands a belief about reality that is in conflict with the current objective view of the world. In tandem with this notion of complexity, the concept of wicked problems (Rittel and Webber, 1973) is acknowledged, for, the complex problem system in question cannot be reduced and analyzed with the techniques of classical problem solving and decision making.

Moving away from existing ways of thinking, and toward an appreciation of complexity and wicked problems, this project explores localism as a vision for the future of the fashion sector. In doing so, it addresses without timidity, that which determines the flourishing potential of the fashion sector: the scale, pace and nature of production and consumption.

FOREWORD

As I write this, I am wearing a white T-shirt, with a 'Made in India' tag. I can't remember when or where I bought it, and before today, I hadn't bothered to think hard about where it came from, or why it cost so little, or if I needed it. I am not alone. Every day, billions of people buy clothes without a thought or any remorse about the consequences of their purchases.

For over five years, I have been researching the sustainability potential of the fashion sector. Both from within the industry, and from outside it. I started because of an insistent belief that the production and consumption of fashion matters. And I continued as my understanding of practices in the sector began to grow, and as I developed new aspirations for the sector, in an era of resource scarcity, climate change, and consumerism.

This project recognizes the fashion sector as a complex social system, the scale and breadth of which offer an arena of change within the system. The multifarious stakeholders and subsystems involved in the sector mean that changes within it have the potential to serve as influences that drive changes beyond itself.

The business case for environmental and social responsibility has influenced the discourse about fashion and flourishing for over two decades and has often guided my understanding of, and ambitions for the sector. When I worked to improve the flourishing potential from within the industry, an approach I was confronted with was 'more of the same, but more efficient'. This involved making incremental changes to existing patterns of production. Now, exploring the sector from outside the industry, I realize the potential of a 'something different' approach. This is characterized by something different to greater efficiency, a stabce that involves fundamental personal, social and institutional change at the intersection of different ideas and actors, paradigm shifts, and metaphorical leaps to understand and analyse systems in different ways.

None of the concepts presented in this project deal with entirely new ideas. All of them already exist to some extent in the fashion and textile discourse today. This project aims to draw them together into a wholistic, multilayered and flourishing vision for the sector, with the aim that it fosters human and ecological well-being in dynamic balance.

I don't know if the ideas in this project are going to be stirring, repulsive or visionary, but I hope they evoke a re-configuration of these thoughts and feelings.

Adopting a decolonizing lens

Linda Tuhiwai Smith in her seminal work Decolonizing Methodologies articulates, "Decolonization is a process which engages with imperialism and colonialism at multiple levels. For researchers, one of those levels is concerned with having a more critical understanding of the underlying assumptions, motivations and values which inform research practices" (Smith, 1999, p. 20).

In an attempt to avoid limiting this project to Western ways of knowing, I have adopted a fuzzy ontology and epistemology. According to Reiter (2019, p. 105), a fuzzy logic is "not binary, not exclusionary, and not discrete, allowing for "this and that," instead of Aristotle's exclusive "this or that."" Much like a complexity lens, fuzzy explains that our world is fuzzy and as a result, our ontologies and epistemologies aimed at examining phenomenon in the world ought to be fuzzy as well. This is in contrast to the Western Aristotelian logic which assumes a well-ordered world. Human experience, including that in the fashion sector, is not reducable to a binary format, to black or white, either/or. Instead, it is gray, fuzzy, and always, at least in part, driven by human action and interaction. Thus, it is not explainable by 'hard' laws. Moving away from the objectivity and neutrality often put forth in Western epistemologies and ontologies I attempt to engage the 'bigger questions' including, how did we get here? and how can we change it?

Adopting a fuzzy epistemology means that I am acknowledging human unpredictability, motivations and values through the construction of a research methodology that accounts for them. This includes a systematic engagement with participants from various backgrounds, places and worldviews.

METHODOLOGY & FRAMEWORK

The Three Horizons Model

This exploration of localism is concerned with structures, drivers and paradigms that shape a vision for the futures of the fashion sector and is framed within the Three Horizons model proposed by Sharpe & Hodgson (2007) and Curry & Hodgson (2008).

As seen in Figure 1 (Sharpe and Hodgson, 2007, p. 137), three regions are plotted placing Chronos and Kairos as a fundamental dilemma of time. The labels H1, H2, H3 refer to three horizons of time which together create a timescape (Selin, 2006) and which separately are described as three different orientations to the future.

According to Sharpe and Hodgson (2007, p. 137), Horizon 1 (H1) thinking is "that which governs the continuation and extension of the current societal systems that define our culture." A Horizon 1 orientation grounds the future in the present reality, extending current systems out towards the fauture. It entails a manner of thinking that regards current ways of doing things as 'entirely appropriate' to emerging conditions as long as current practices are extended and developed (Sharpe and Hodgson, 2007, p. 137).

Horizon 2 (H2) thinking is inherently ambiguous. Here, changing circumstances present constraints and new opportunities. This mindset is "an orientation to the future that is fundamentally entrepreneurial. It looks at all the potentials for change and seeks to harness them to introduce something new to the world that will grow and thrive" (Sharpe and Hodgson, 2007, p. 139).

Horizon 3 (H3) thinking entails an alternative pattern or paradigm as a set of principles, a vision of a different world or an alternative reality. Here, time is the opportunity to "take a stance and make a step" (Sharpe and Hodgson, 2007, p. 139) in the current world dominated by H1 and H2. The time of fulfillment in this horizon is both in the now and the extended future; and events are left to unfold, interpreted from the values chosen. H3 selects those innovations of H2 that support its principles and rejects those that are seen as perpetuating H1. This Horizon "exists as possibilities brought forth by values and beliefs that we feel have a better fit with the future. They are a commitment to a destination over the horizon of the known, guided by a compass rather than a map" (Sharpe and Hodgson, 2007, p. 140). Thus, the Horizon 3 mindset involves seeing beyond current systems, motivated by vision, values and beliefs.

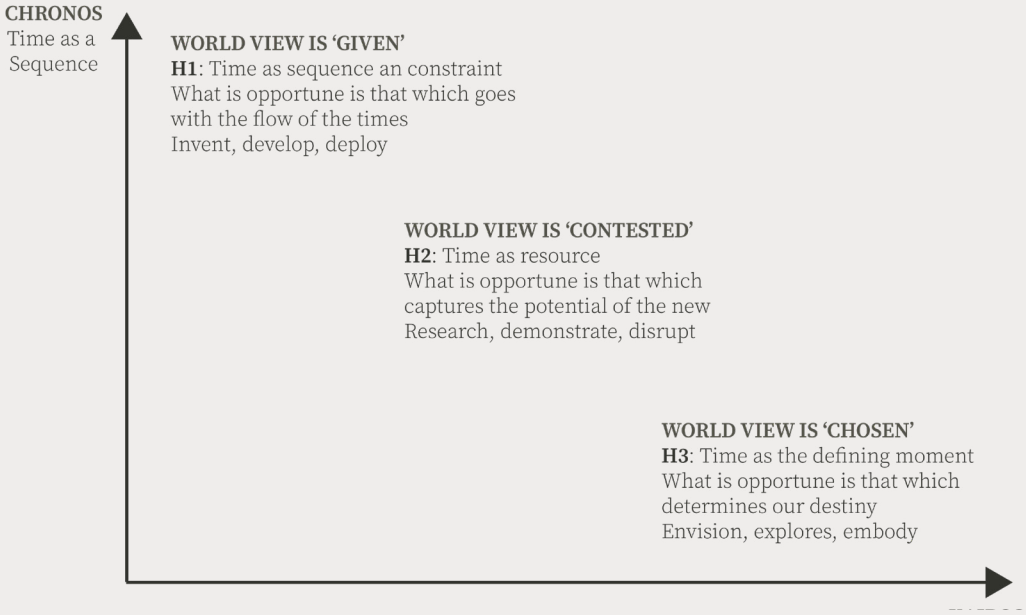

Figure 1 | The Horizons of Time (Sharpe and Hodgson, 2007, p. 137)

Additionally, the Horizon 3 orientation looks at the values that underpin the dominant system and takes the stance that they should be different, and that change is the precondition for a desired new system. Horizon 3 is, in some ways, outside 'time' as understood in Horizon 1 and Horizon 2 (Sharpe and Hodgson, 2007).

Curry and Hodgson (2008) present a version of the Three Horizons framework that connects the present with the desired or espoused futures and helps identify the divergent futures which may emerge as a result of a conflict between the embedded present and the desired futures.

Curry and Hodgson's (2008, p. 2) futures-oriented version of the Three Horizons model (Figure 2) comprises:

'1st Horizon': the current prevailing system as it continues into the future, which loses "fit" over time as its external environment changes;

'3rd Horizon': ideas about the future of the system which may be marginal in the present, but which over time may have the potential to displace the world of the first horizon.

'2nd Horizon': an intermediate space in which the first and third horizons collide. This is a space of transition which is typically unstable. It is characterized by conflicting values.

This project uses Sharpe and Hodgson's (2007) ideas to situate localism within the 3rd Horizon of Curry and Hodgson's (2008) futures-oriented Three Horizons framework.

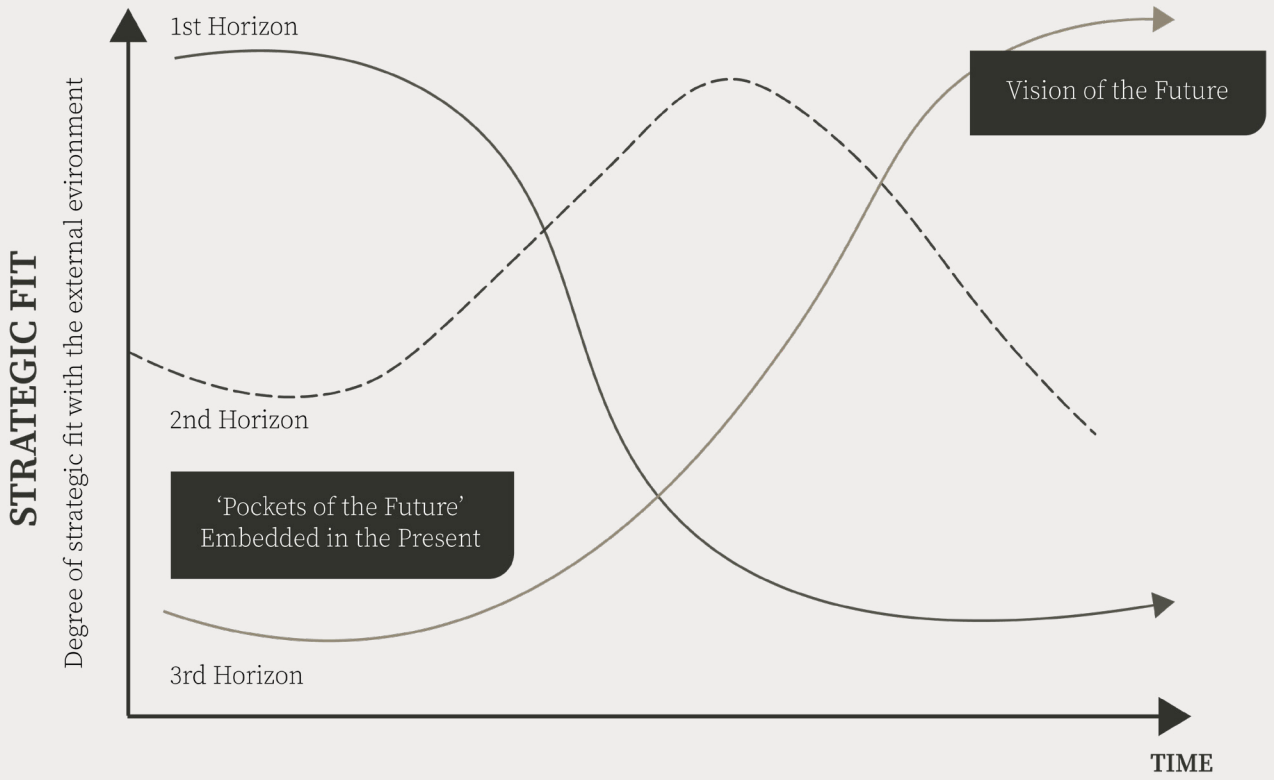

Figure 2 | Schematic of the futures-oriented Three Horizons model (Curry and Hodgson, 2008, p. 2)

The values and vision of localism rest on a simple hierarchy that promotes society (the local community and the local ecosystem on which it is reliant) above the economy. The emancipatory aims of localism entail practices that go beyond priorities of contemporary capitalism (current dominant system). Additionally, localism in this study presents a challenge to the dynamics of the growth logic in the fashion sector, regardless of timeliness, with the intention that the values of localism may drive broader adoption. It is for these reasons that localism is placed within Sharpe and Hodgson's (2007) Horizon 3 mindset.

While Curry and Hodgson (2008) explain that the third horizon generally consists of several arguments or ideas of a vision for the future, this study explores one such paradigm – localism. Here, localism may be considered a normative scenario that outlines a partially prespecified vision for the future, that presents "a picture of the world achievable (or avoidable) only through certain actions. The scenario itself becomes an argument for taking those actions" (Ogilvy, 1992).

Drawing on the structure of Curry and Hodgson's Schematic of the futures-oriented Three Horizons model (2008, p. 2), this project is divided into three parts:

01

Chapter 01: The Fashion Sector

Chapter 01 is a values-explicit and systemic exploration of production and consumption in the contemporary fashion sector and consequently the multicausal environmental and social costs that govern its flourishing potential.

In this section, an era analysis highlights causal connections and broader contexts within which the fashion sector exists. It sets the stage for the sector's transition into the present and the future, providing a temporal bridge.

Here, system archetypes function as standalone analytical representations that identify and capture recurrent systemic patterns identified in the present state of the fashion sector and the problem system within it.

02

Chapter 02: Localism for Flourishing Futures

Chapter 02 adopts a futures lens to explore the potential of localism to enable human and ecological flourishing in the fashion sector. Here, Dator's Four Generic Images of the Future (2009), are used to contextualize localism as a vision for the futures.

In tandem with the Three Horizons Framework (Curry and Hodgson, 2008) signals and trends are used to present 'pockets' of the futures seen in the present. This is followed by an exploratory discourse of localism through its emancipatory aims of long-term well-being and diversity.

03

Chapter 03: Bridging the Gap

Chapter 03 applies systems thinking to opportunities for change in the sector, this contextualizes present-day choices and their effects. Here, case studies are presented as an exercise in imagining what different applications of localism in the fashion sector might look like and how they form a pathway to change between the fashion system as it exists today and localism as a vision for its futures.

A wholistic and interconnected treatment is given to material and social systems. Principles of systems thinking, design thinking and futures thinking are adopted in Chapters I, II and III, to explore opportunities for human and ecological flourishing in the fashion sector. Insights from primary and secondary sources are integrated throughout the project to develop a multilayered and varied discourse.

Methodology

The challenge for this research project is employing a research philosophy that reflects the epistemology of localism. Through the integration of human interest in the study, I attempt to understand phenomena in the fashion industry and localism through the meanings that people assign them.

Secondary data is collected from books, published journals and industry reports as well as grey literature sources in order to satisfy the aims of Chapters 1, 2 and 3.

Purposive sampling is used to recruit industry experts for the collection of primary data through semi-structured interviews. Participant selection is based on the theory of Requisite Variety (Christakis & Bausch, 2006). Here, the requisite variety in participants aims to mirror the variety of different stakeholder groups in the fashion sector. Additionally, I consider social variety (including the values, positions and stands, affiliations, perspectives, level of power and vulnerability) while selecting participants.

The experts interviewed are:

- Dhruv Kapur
  Director, Global Sourcing, Bodyline Impex Pvt. Ltd., India
- Valeria Rubina
  Comme des Garçons Merchandiser, DOVER STREET MARKET (INTERNATIONAL) LIMITED, United Kingdom
- Dr. Francesco Mazzarella
  Research Fellow, Centre for Sustainable Fashion, University of the Arts London, United Kingdom
- Stuart Walker
  Chair of Design for Sustainability, Lancaster University, United Kingdom
- Anela Dujsic
  Founder, Considerate Goods, Canada
- Dr. Anika Kozlowski
  Assistant Professor of Fashion Design, Ethics & Sustainability, Ryerson University, Canada
- Sumeya Abdalla
  Warehousing Team, Nordstrom, United Kingdom

01 THE FASHION SECTOR

INTRODUCTION

Fashion brings together creative authorship, technological production and cultural dissemination associated with dress, drawing together designers, producers, retailers and all of us who wear garments.

– Fletcher and Grose, Fashion and Sustainability: Design for Change, 2012

The fashion sector has an impact on nothing short of the entire world and almost all of its natural and designed systems: the behaviours and psychology of everyone who wears clothes, the well-being of the world's 60 million plus garment workers, farmers, the farms and forests that provide raw materials, the oilfields that provide petrochemicals, the animals providing fibre and hides, the growing mountains of waste, and the economic paradigms that require fashion's systems of production and consumption to grow ad infinitum (Gwilt et al., 2019).

The urgent need to systematically engage with environmental, social and economic considerations has been formally recognized for over a decade (Stern, 2007). In 2015, scientists noted that four of nine planetary boundaries had been crossed: climate change, loss of biosphere integrity, land-system change, and altered biogeochemical cycles (phosphorus and nitrogen) (Steffen et al., 2015). While there has been much discussion on whether the Planetary Boundary Framework is wholistic enough to capture the complexities of Earth's systems (Schmidtt, 2013; Pereira & Saramago, 2020; van der Leeuw et al., 2020; Tantram, 2012), there is no doubt that human activity has a burgeoning impact on the health of ecologies, their resources and services. Indeed, such is the significance of human activity on the earth, that a new geological epoch has been constituted to name our human-changed world, the Anthropocene (Steffen, 2021). The extent and impact of human influence on the health of global systems are without precedent, and form the context within which all people and industrial sectors now exist. The finiteness of resources and the disruption of ecosystem services restricts and demarcates all human activity, including the production of fibres, fabrics and fashion products. Thus, the view of fashion as limitless is one that is out of context with the physical and ecological systems that give it material form.

Over the last two decades, the fashion sector has been reinventing itself to secure its relevance and survival in the Anthropocene era (Gwilt et al., 2019). There have been several attempts to reduce the environmental and social impacts of fashion production and consumption. These have resulted in lower impact materials and processes; (Grose, 2015) more transparent production chains; (Gardetti and Torres, 2013) and varied 'end of life' or post-use opportunities to recycle and reuse discarded items (Brooks, 2015). Further initiatives around green chemistry, cleaner production and the communication of these improvements have now become a tacit requirement of being in business in the fashion sector.

While the breadth of change to the technical structures of the fashion sector is essential, welcome and impressive, from a vantage point, true human and ecological flourishing seems to be elusive. Fletcher (2106) believes it evades us not because we lack the technical expertise to produce more efficiently but rather because efforts to improve the industry target parts or independent entities rather than the whole. The cumulative effects of high volume and large-scale production and consumption at bizarre speeds are often not recognized because "no one is in charge of the whole" (Fletcher, 2016, p. 19). Incremental improvements to parts of systems are implemented in isolation, but how those parts work together or their net impact is largely unknown. Yet, the whole may be identified as the key problem system – the values, habits of mind, industrial practices, business models, economic logic and individual practices that shape the scale, volume and speed of production and consumption we are confronted with.

This section is an evidence-based inquiry into the fashion sector's problem system that threatens the impoverishment of human and natural systems. It explores the structural and systemic patterns of meaning, growth and social conditions as drivers of the problem system which impede human and ecological flourishing in the sector. In doing so, it aims to trade in a preference to take the system apart and instead implement a thinking of synthesis (Fletcher, 2016).

HINDSIGHT FOR FORESIGHT

Schoemaker (2020) suggests that in highly complex environments, historical events often exhibit cyclicality and path dependency. He puts forth that the future is causally connected to the fabrics of the past and present. Additionally, the term forecasting describes this very notion, suggesting that the momentum of the past casts itself forward, with action and reaction often producing repetitive cycles. William Faulkner (Shoemaker, 2020, p. 3) emphasizes this temporal continuity when noting that “the past is never dead. It is not even the past,” since history continues to frame how we see the present.

Pivotal changes in the fashion industry over the last century lend perspective to the complexity, pace and magnitude of the scale of the fashion sector and causal connections between the systems within it. This era analysis illustrates developments in industry structure, stakeholder needs, production patterns and consumption patterns. It asks how did we get to where we are today?

While using hindsight for foresight in the fashion sector, it is important to acknowledge that the systems responsible for change are human made. Humans created growth logic, industrialization, globalization and petrol dependency (Fletcher, 2016).

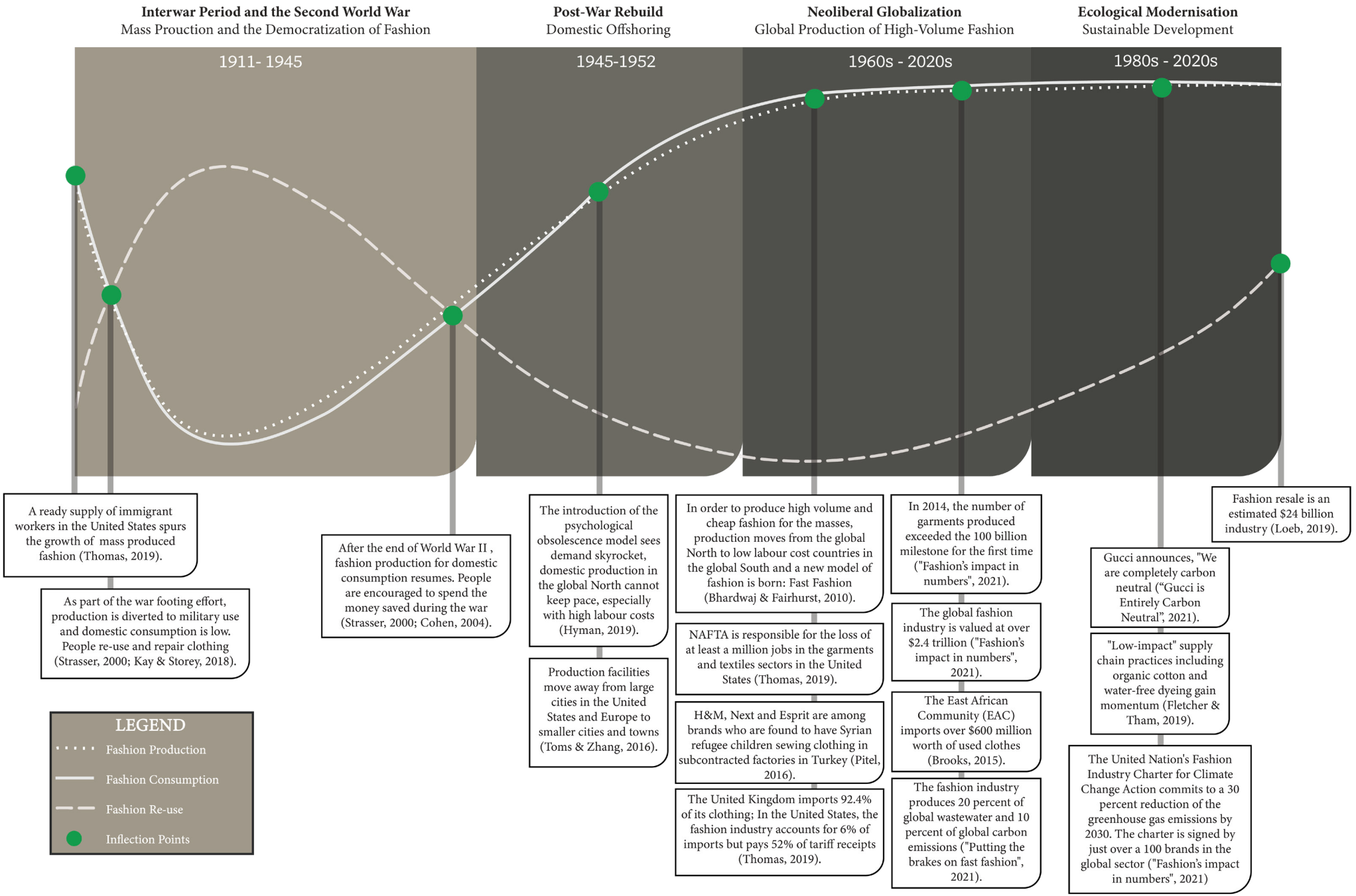

Figure 3 | Era Analysis: 1920's - 2020's. The graph depicts fashion production, consumption and re-use. Inflection points describe significant changes to the structure of the fashion sector, stakeholder needs, production patterns and consumption patterns while also highlighting their macroenvironmental drivers.

Era Analysis:

How did we get to where we are today?

Dana Thomas (Thomas, 2019) when speaking on the present state of the fashion sector asks, "How did we get to that point where we're still paying the same price (for clothes) as we were during the Depression?"

Almost a hundred years ago, German expressionist filmmaker Fritz Lang presented the importance of social and economic balance in his movie Metropolis (Lang, 1927). The sci-fi film forecasts a dystopian future where the poor toil in grim factories for the financial benefit of a few. The era analysis (Figure 3) highlights how technology in the fashion sector has evolved but much of the ethos that governs it, has not.

The infrastructure created by the Industrial Revolution kicked off a transition from handmade to machine made, and towards the system of industrial capitalism– which is still relied on by much of the fashion sector today. This is characterized by production in larger quantities and at faster speeds than ever before, thus helping reinforce capitalism and radically changing the way in which resources are consumed. The power of capitalism to transform the environment is so strong, that authors including Jason Moore (2017), have argued that the term Capitalocene is more accurate than Anthropocene "because the watershed when humanity's modern relation with the rest of the environment began with the dawn of the age of capital" (Brooks et al., 2017, p. 489).

Except for a dip early in the Great Depression, garment manufacturing flourished throughout the 1930's. The New York Garment District had more apparel factories than anywhere else in the world (Thomas, 2019). Specially crafted garments were replaced by the democratization of fashion through mass production.

During World War II, factories turned their attention to uniforms and wartime necessities (much like what is happening with factories producing Personal Protective Equipment because of the COVID-19 pandemic today). Clothing rationing in Europe and "austerity guidelines" in the United States meant that clothing was reused, repaired and production was characterized by sewing your own clothes (Strasser, 2000; Kay &Storey, 2018). By the summer of 1945, the encouragement by the U.S. government's Office of Price Administration (OPA) to save up money, and the wartime austerity measures meant that Americans were saving an average of 21 percent of their personal disposable income, compared to just 3 percent in the 1920's (Cohen, 2004). This resulted in the postwar economic boom, during which, consumers were eager to spend their money, on everything from big-ticket items like homes, cars, and furniture to appliances, clothing, shoes, and everything else in between. During the late 1940's and early 50s, more than one million New Yorkers, or 30 percent of all workers, were engaged in the manufacturing sector, and exactly one third of those were employed in the apparel industry (SUNY Levin Institute, Center for an Urban Future, 2011). They produced 66 percent of all the clothing Americans consumed (Thomas, 2019).

By the 1960's, technological and transportation advances in Britain and the United States started to depress manufacturing and employment in big cities. Survival strategies in the garment and textile manufacturing industries were contingent on restructuring (Toms & Zhang, 2016). A number of big manufacturers moved out of their vertical inner-city plants into much larger, horizontal ones in other parts of the country. Between 1965 and 1975, New York City lost 328,000 manufacturing jobs, including 93,000 in apparel (SUNY Levin Institute, Center for an Urban Future, 2011). Manhattan apparel manufacturing jobs were migrating to Pennsylvania, and to Chicago. It was, in effect, a domestic version of offshoring (Thomas, 2019). Until the 1970's the United States domestically produced more than 70 percent of the apparel its population consumed. And, because of the 'New Deal' (Hyman, 2019), most brands and manufacturers in the United States adhered to national labour laws for much of the twentieth century.

In response to increasing labour costs in the late 1980's in the global North, a new paradigm began to emerge in the fashion sector: fast fashion (Bhardwaj & Fairhurst, 2010). This new model of production and consumption was defined by the production of trendy, inexpensive garments in large quantities at high speeds and in subcontracted factories, to be sold in chain stores in the global North. To encourage consumption by maintaining low prices, fast fashion brands slashed manufacturing costs by using the cheapest labour, often in the world's poorest countries. Offshoring caught on across the fashion sector, in tandem with the spread of globalisation across the globe (Niinimäki, et al., 2020).

Although fast fashion started as a small movement, its astronomical margins were so enviable it soon reset the rhythm for how fashion – from luxury to athleisure was and is conceived, produced, advertised, sold, consumed and disposed. The impact is significant: in the last thirty years, fashion has grown over tenfold, from a 500-billion-dollar trade that was predominantly locally produced, to a global behemoth that rakes in over 2.4 trillion dollars yearly (Thomas, 2019).

The first impact was felt by labour forces in the global North. In 1973, for example, there were more than 2.4 million textile and apparel workers employed in the United States; by 1996, that figure had dropped to 1.5 million (Mittelhauser, 1997). More than three-fourths of the sector's labour force was replaced by labour in Asia and Latin America. This "Deindustrialization" meant the abandonment of manufacturing plants and the devastation of communities in manufacturing towns because of the shift of production to distant lands where people worked for less pay (Gazolla et al., 2020). In the United Kingdom, one million people worked in the textile industry in the 1980s (Thomas, 2019). Now, the number is down to less than a hundred thousand. The same trend is reflected across western Europe, all while apparel and textile jobs doubled elsewhere.

Offshoring resulted in significant and crippling trade deficits in the global North. Apparel exports in the United States totaled 5.7 billion dollars in 2017, while imports amounted to around 83 billion in the same year. The United Kingdom imports almost 93 percent of its clothing, and in Western Europe, only Italy survived, in part due to the 'Made in Italy' label which confers prestige in the luxury fashion market (Thomas, 2019). The second casualty of fast fashion has been human rights in developing nations. The global fashion sector employs more than 300 million people worldwide (Gazolla et al., 2020), making it one of the most labor-intensive industries. Most apparel workers are women; some are boys and girls. The Rana Plaza disaster in 2013 (Butler, 2013), Syrian refugee children working in H&M's subcontracted factories in Turkey (Pitel, 2016), and most recently, a flood in a garment factory in Morocco that killed over 20 workers ("Morocco: At least 24 dead in Tangier factory flood", 2021) are few examples of the many incidents that highlight the recurrent theme of exploitation and prioritisation of profits over people.

The third victim has been the Earth. Fashion's speed and greed has eviscerated the environment in multifarious ways. The impact of fashion production includes 10 percent of global carbon dioxide emissions every year, and the use of around 1.5 trillion litres of water annually (Davis, 2020). And these statistics don't account for the degradation of Mongolia's grasslands due to cashmere fibre production, the death of India's rivers at the hands of industrial effluents from garment dyeing factories or the microfibres found by Greenpeace in Antarctica.

In twenty years, the volume of clothes Americans throw away has doubled from 7 million to 14 million tons; the European union disposes 5.8 million tons of apparel and textiles a year; in the UK, 9,513 garments are dumped every five minutes; textiles are the among the world's fastest growing waste stream ("Fashion's impact in numbers", 2021; The Ellen MacArthur Foundation, 2021; Thomas, 2019). This phenomenon in the global North is a by-product of the pace and volume of consumption and production in the sector today.

Much of the unwanted clothing from the global North is sent to Africa. In 2017, USAID reported that the East African Community (EAC), an association of Kenya, Uganda, Tanzania, Burundi, Rwanda, and South Sudan, imports over $600 million worth of used clothes each year (Brooks, 2015, p. 92). Kenya alone accepts 100,000 tons annually. Most of these are sold by second-hand merchants at a deep discount – a pair of jeans for example, costs $1.50 in Nairobi's Gikomba Market (Thomas, 2019). This is three to five times less expensive than its domestically manufactured counterparts (Katende-Magezi, 2017, p. 16). According to Frazer (2008), these imports explain 40 percent of the decline in African apparel production. Not only has this decimated the continent's indigenous apparel business, but it has also introduced patterns of consuming inexpensive goods in high volumes seen in the global North. In 2016, EAC leaders pledged to phase out the importation of used clothing within three years (EAC, 2016). This move was intended to protect local textile sectors and is an archetypal industrial policy (Warren-Rodriguez, 2010). It aligns with the '2012 EAC Industrialization Strategy' and mirrors historical measures taken by countries in the global North (Amsden, 1989; Wade, 2003; Chang & Grabel, 2014). In response, the Trump administration threatened to launch a trade war, stating that the ban would lead to the loss of 40,000 jobs in the United States. The EAC backed down, with the exception of Rwanda (Fox et al., 2018; John, 2018).

The history of the fashion sector is littered with grim statistics that reflect economic gain from a model of overproduction for overconsumption as the primary driver of almost all decisions and changes in the industry. However, the widespread overconsumption and discard of clothing is a relatively recent phenomenon, traceable to lower per-unit costs made possible by the shift of manufacturing to the global South. While in 2014, the number of garments produced exceeded the 100 billion milestone ("Fashion's impact in numbers", 2021), people have, within living memory, behaved differently. During World War II, for instance, the rationing of fabric and clothing was mandatory in the United Kingdom. The war footing effort during World War II fostered the collective action of consuming less, re-using and repairing for the survival of the country. A key realization of living with less was: in the midst of fewer material possessions, people still dressed.

THE GROWTH LOGIC

Purposive systems (Banathy, 1996) are well-structured social systems that embed deterministic systems for a core purpose. The contemporary fashion sector may be described as a purposive system that embeds the deterministic system of high-volume consumption for the purpose of continuous economic growth.

The logic of growth is well established in the fashion sector as the basis of power and prosperity. The system that grows the fastest, with the highest economic returns is considered the best, and is sustained because consumers believe in it. Belying this apparent simplicity, the implications of the dependence on this growth logic are complex.

Fashion as a commercial system is bound to economic growth and consumerism through the promotion of an ever-increasing pace of individualized consumption. While "fast" has become a proxy for a type of fashion that epitomizes all that is unsustainable, high speed is not in itself a descriptor of unethical or environmentally detrimental practices, but a tool to increase sales and deliver economic growth that has ecological and social impacts (Fletcher, 2013). Questions about a growth logic driven model of production probe deeply into economic systems, business models and value sets that underpin the fashion sector today and govern its potential to enable human and ecological flourishing.

The default assumption is that the size of the global economy will continue expanding indefinitely – in the global South, where a better quality of life may be desired, and in the global North, where there is a growing understanding that material wealth – the goal of growth – often adds little to happiness (Spratt et al., 2009). At the same time, a slew of indicators reveal the implications of this economic structure on environmental and social quality: despite economic advances around the world, in 2018, half the world's population— 3.4 billion people —struggled to meet basic needs (The World Bank, 2018), racial inequality is still persistent in the global North; natural environments are more degraded; and water continues to be a growing source of conflict (Van Der Heijden & Stinson, 2019).

Few people would dispute that if we had more resources and were truly richer, we would be better able to solve a wide range of ecological and social issues. The question is whether further economic growth along the same patterns of consumption and production in the fashion sector would add to this richness, or whether it would continue undermining societal well-being and environmental quality, ultimately making us poorer (Daly 1992). In fashion, like in other sectors, the implications of the growth model are usually felt externally to the corporation enjoying the benefits: by society at large, by supply chain workers, and the environment. Costs are often experienced as degraded environments, resource scarcity, poor working conditions and climate change costs, due to the increasing throughput of resources necessary to maintain the growth logic.
The fashion sector has evolved under this narrative. The structure of the sector, its dominant paradigms, business models and manufacturing approaches have been reshaped by the growth logic, globalisation and the idea of 'more and cheaper' (Fletcher and Tham, 2019). This is represented by a cycle of production and consumption of new products that leads to a sector of ever-increasing size, the rate of growth of which outpaces strategies that target its negative effects.
In tandem with many other sectors, and in order to maintain positive economic growth, fashion has sought to, and succeeded in quantifying, predicting and controlling its product and supply chain. The sector has pursued efficiencies of scale, increased volumes, and produced convenient products that 'disburden' the involvement of consumers, in order to fulfill its ultimate purpose– engineering and facilitating the sale of products (Fletcher, 2016).

In the first decade of the 21st century, clothing prices in Europe fell by 26.2% and in the US by 17.1% (Fletcher, 2016). Cheap garments produced in large volumes and high speeds to maximize profit margins also changed patterns of consumption. Through the merging of free market ideology with changing business practices, economic drivers and technological development, the sector has fabricated and facilitated more opportunities and drivers for consumption.
Prices have reduced as global tariffs on the trade of textiles and clothing have relaxed; production is offshored to nations with low labour costs; success is measured in retail sales figures reported as a percentage growth year on year; and the frequency of stock drops has increased due to the use of AI technologies for stock replenishment. In 2013, Pure Profile (2013), suggested that nearly 70 percent of garments in a wardrobe are inactive, this oversupply and overconsumption still proves to be no barrier to the fashion sector for producing more clothes, and to consumers for buying additional pieces.

The relationship of the sector with novelty-driven consumerism is not part of a 'natural order'; rather the relationship is driven by the dominant mode of production and consumption across sectors and geographies – capitalism. Thus, the fashion sector is implicated in the wider systems of control and power that govern the modern era. Framed like this, the majority experience of fashion is exposed as consumerist materialism that enables the persistence of the growth logic, rather than a reflection of fashion's vast potentials and practices. Often, this is not freely

chosen by consumers but is presented as the only option. According to Fletcher (2016), this growth logic encourages a narrow view of fashion – fashion as a commodity accessed through stores and built on a dependence on the market as the only provider of fashion needs.

While problems associated with high volume consumption and their effects are widely known, there has been and continues to be a reluctance to confront consumerism in the sustainability discourse. This is not unique to the fashion sector. The source of unease with this notion is found at a deeper, more systemic and structural drivers than an industry designing and manufacturing products. It lies within the larger systems of economics, culture and society and the commercial agendas, political priorities and technical mechanisms of our world.

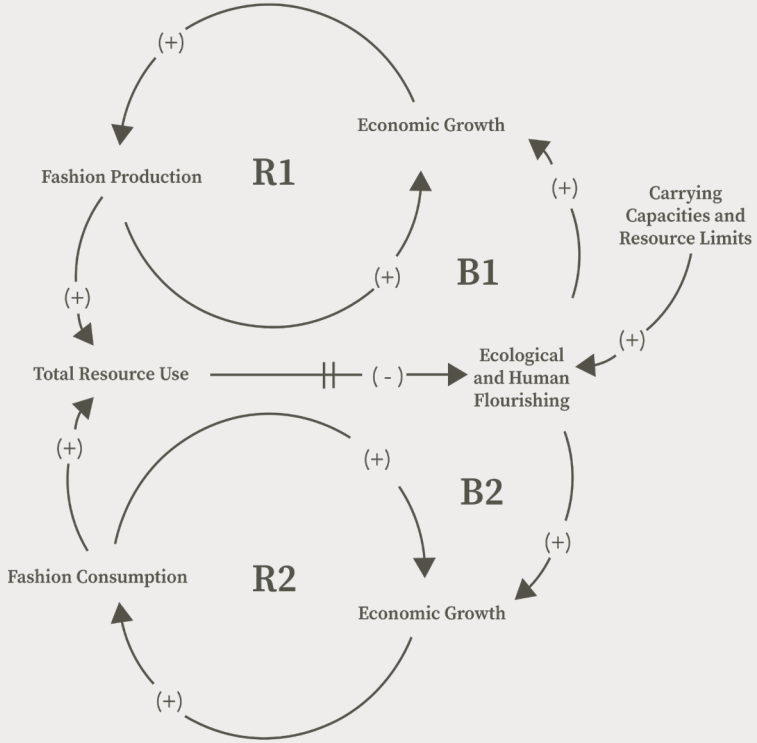

Figure 4 | Tragedy of the Commons: The Consequences of the Growth Imperative
R1 and R2 represent reinforcing actions pursued by producers and consumers in the fashion sector which contribute to economic growth. However, the activity grows increasingly unsustainable in the face of the ecological carrying capacities and resource limits, resulting in diminished ecological and human flourishing, as seen in balancing loops B1 and B2.

Tragedy of the Commons (Figure 4) emerges when there is an escalation in the use of a commonly shared erodible environment (Meadows & Wright, 2009). Here, it represents the consequences of the dominance of the growth logic model that governs production and consumption in the fashion sector.

The growth logic encourages the use of resources such as water and land for fashion production. These are not only limited resources but are also erodible when overused. That is, beyond a threshold, the less resource there is, the less it is able to regenerate itself, or the more likely it is to be destroyed. A critical example of this phenomenon is seen in Mongolia's cashmere production.

Over a decade ago, the globalisation of the fashion industry and an increase in the knitting capacity of China, helped push cashmere from a luxury product to a mass produced and mass market consumer good. This made Mongolia the world's second largest cashmere producer after China. In 2019, goats that produce wool for cashmere, accounted for more than half of all grazing animals on Mongolia's grasslands (McLaughlin, 2019). While they are more lucrative than other livestock, they are also more destructive than the sheep they have replaced because they eat the roots and flowers that seed new grasses (Darbalaeva et al., 2020). More importantly, the crush of grazing goats across Mongolia's increasingly arid landscape is degrading the grasslands at unprecedented rates, affecting subsistence cattle herding of nomadic tribes that reside in the area.

This effect has some locals longing for the pre-1990's Soviet-style days of heavy-handed anti-capitalist governance; "at least it kept the grasslands healthy" says Zandraa Baljinnyam, a former government official in

Dalanzadad, Mongolia (McLaughlin, 2019). Baljinnyam laments that herders of cashmere goats boast of owning more than 1000 goats each. He says "We should not reward people for having large herds" (McLaughlin, 2019).

This is one of many examples of how the growth logic dominated production and consumption practices in the fashion sector rely heavily on shared resources which are typically limited and erodible. The overuse of which, limits the ecological and human flourishing potential of people and systems outside the fashion sector that also depend on them. Within an economic growth perspective, the fashion industry players have no reason, no incentive, no strong feedback, to let the possibility of ecological degradation alter production.

In the fashion sector, the more consumers and producers there are, the more resources are used, and the more economic growth is realised.

However, the more resources that are used, the less there is for beyond-the-sector activity (like subsistence herding). If both producers and consumers in the fashion sector follow the bounded rationality of the commons ("There is no reason for me to be the one to limit production"), there is no reason for either of them to decrease their use (Meadows & Wright, 2009). Eventually, this is likely to result in the rate of resource use exceeding the capacity of Earth's resource production and waste absorption. With no direct feedback to the consumer, overuse will continue. The resource will decline. Finally, the erosion loop will kick in, the resource will be destroyed, and both producers and consumers are likely to be affected by this (Meadows & Wright, 2009).

Figure 5 | Cashmere production in Mongolian Grasslands. Photo by Stuart Anstee (Source:https://robbreport.com/style/menswear/worlds-cashmere-supply-under-threat-1234583232/)

PSYCHOLOGICAL AND PRODUCT OBSOLESCENCE AS A VEHICLE FOR CONSUMPTION

The 1930's and the two decades following the Second World War saw considerable political and economic turmoil in the world. In the United States, the manipulation of product obsolescence was seen as a means to revitalize an ailing economy. The aim was to encourage new product ideas, remove any potential for economic stagnation and enable workers to earn money to buy new products. With reasonably cheap and abundant resources and little concern for pollution, the environmental impacts were not apparent, and the economy responded with sustained growth (Slade, 2006).

The most commonly cited reference of planned obsolescence is credited to Brooke Stevens, an American industrial designer (Adamson, 2003). Planned obsolescence was explained by Brooke Stevens as "Instilling in the buyer the desire to own something a little newer, a little better, a little sooner than is necessary." (Adamson, 2003, p. 4). This spurred the earliest strategies to encourage consumption by appealing to the forces of consumer desire.

In the 1950s, there was some concern regarding the benefits of continuous consumption. However, the public was encouraged to 'consume and throw away', as part of the dream for peace and prosperity in the 'infinite world' many thought they were living in. This marked the birth of the 'throwaway society' that still exists in much of the global North today (Burns, 2010).

Vance Packard's The Waste Makers (Packard & Mckibben, 1960) offers a critical perspective on the term obsolescence. Packard's most profound differentiation is arguably between what he calls 'psychological obsolescence' and 'functional obsolescence'. Packard suggests that through psychological obsolescence, the consumer is falsely manipulated. In the 1960's, Packard's ideas were contested by the marketing world, which responded by citing the need for shorter product cycles in manufacture, particularly in the production of clothing (Burns, 2010). Planning for durability was not a priority. Obsolescence in its earliest form, meaning to wear out, had evolved into the newly discovered use of psychological obsolescence, or 'false obsolescence', as a means to influence consumer spending (Burns, 2010).

Issues around obsolescence have become more complex since Packard's observations, and more economically, socially and environmentally significant. For over 30 years, Burns (1981, 2003) studied a range of products deemed by their owners to be obsolete, in an attempt to determine how that state came about. He identified four modes of obsolescence which best covered all eventualities: aesthetic (changing appearance renders existing products obsolete); social (shifting societal norms leads to retirement); technological (changing technology renders still-functioning products out-dated); and economic (cost structures promote disuse and replacement rather than maintenance).

In order to maintain the high-volume production and consumption in the fashion sector, products have to become obsolete. The legacy of obsolescence in the sector is depicted both in the growing levels of discarded clothing and in the growing number of units produced to satisfy consumer demand. In the fashion sector, aesthetic obsolescence and increasingly, economic obsolescence are leveraged to encourage purchase and discard at alarmingly high rates and speeds. Aesthetic obsolescence in the sector occurs when products begin to appear drab, faded, dirty and worn out. Products used closer to our body such as clothing tend to be more sensitive to psychological obsolescence. The more personal the product the more it reflects the user, and the higher the sensitivity (Burns, 2010). This leads to an increase in replacement purchases. Additionally, fashion usually carries with it an aesthetic or style that by definition will be transient: what is 'in fashion' will inevitably one day be 'out of fashion.' (Burns, 2010) and this transience encourages purchases for the symbolic value of 'keeping up' or 'fitting in'.

Market competition has, in recent years, encouraged cost competitive manufacturing methods of 'cheap' clothing in the fashion sector. This has resulted in rapid rates of replacement due to the economic obsolescence of a vast majority of garments produced. The maintenance or repair work is not economically viable. For example, a wool blend sweater from H&M costs anywhere between $15 to $30. It makes more sense for consumers to wash it rather than dry clean it, and to replace the sweater when it is torn rather than pay the price of getting it darned.

Particularly in the saturated fashion markets of the global North, where most new clothing is bought as additional or replacement purchases, a tendency towards a short 'service life', with little emphasis on a piece's physical durability, is a seemingly inevitable effect of the sector having perfected the obsolescence model (Burns, 2010).

Dr. Mazzarella (F. Mazzarella, personal communication, February 26, 2021) says "I don't believe fast fashion can ever be sustainable. I know that some companies have good intentions, but until they change their business model, and they stop producing things that are just designed for planned obsolescence, then they will never be sustainable."

This model of obsolescence raises a series of deeply challenging questions about the dynamics of consumption promoted by the fashion system and its effects. It also highlights the possibility that fashion's 'perfecting' skills and talents, creativity, social imagination and its abilities to mobilise people fast and en masse, can be redirected to another model (Fletcher, 2016).

The Growth and Underinvestment archetype (Figure 6) builds upon the Limits to Growth system archetype (Meadows, 2009; Braun, 2002). In the case of the fashion sector, aesthetic and economic obsolescence are 'growing actions' that seek to stimulate demand in the face of other models (repair and re-use) that are increasingly weak limits to this growth due to their marginalization in the contemporary fashion sector. Here, there is the added requirement of fashion industry players to keep prices low in order to ensure survival in an increasingly competitive landscape (This is not limited to High Street fashion, luxury fashion brands including Issey Miyake and Prada, have launched 'neo-luxury' or 'affordable' lines to enhance their price competitiveness (Cabigiosu, 2020)).

In the fashion sector, although quality standards are presented as a constant, they are often subject to the Eroding Goals system archetype (Braun, 2002). This is a trend that has developed over a period of time, as organizations in the fashion sector understand the benefits of cheap fashion on their profit margins. Quality of goods, price competitiveness and the lack of accessible re-use and repair options, combine to exert a corrosive influence on the economic obsolescence of fashion products. An increasing sales volume leads to economic growth and consequently, better or higher quality goods, which in turn creates a balancing loop of consumption and lower quality products due to low capacity and/or resource availability.

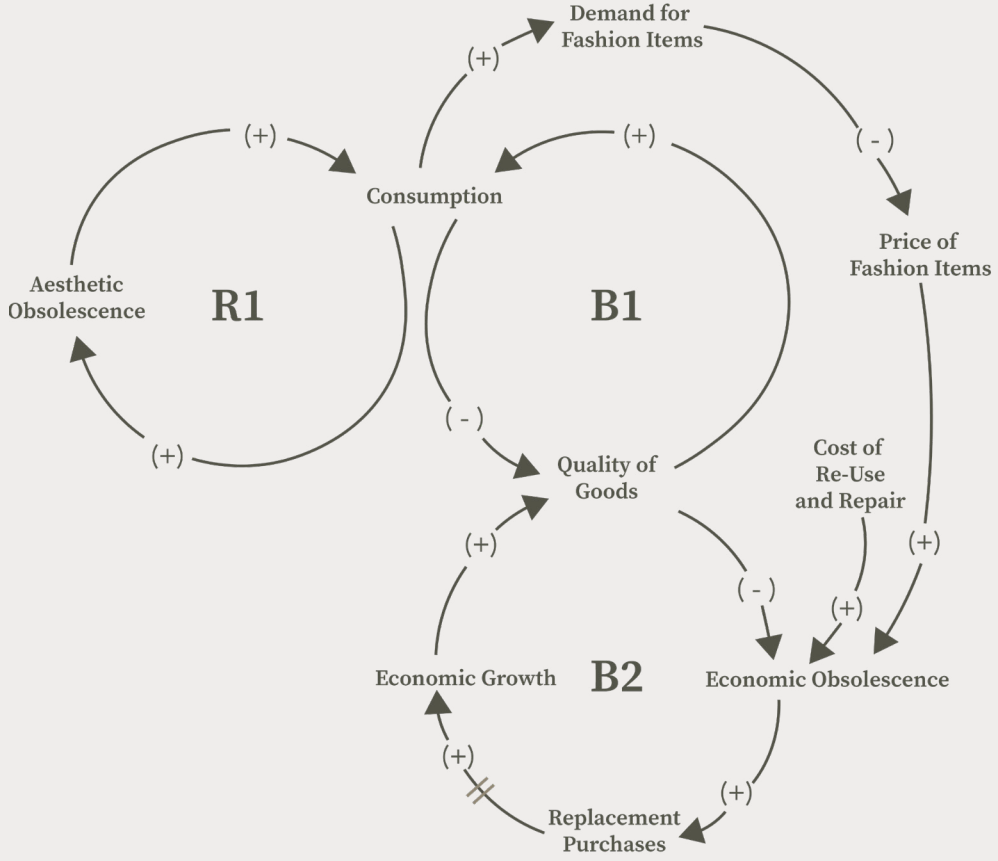

Figure 6 | The Growth and Underinvestment Archetype: Aesthetic and Economic Obsolescence.
R1 represents a reinforcing action where aesthetic obsolescence increases consumption. Here, B1 depicts a balancing action where consumption leads to reduced quality which furthers consumption. B2 is also representative of a balancing action where economic obsolescence regulates quality, which in turn boosts consumption.

THE CULTURE OF CONSUMPTION

A novelty-driven experience of fashion consumption often stems from a desire for pleasure, new experiences, status and identity formation through buying goods. Campbell (2006) suggests that consumption – particularly of new items, continues to grow because of an inexhaustible supply of desires. The purchase of each new item is linked with the provision of a novel experience.

Joanne Finkelstein (1991, p. 145) describes this experience of fashion consumption as a cycle of self-justification that makes it both dominant and credible, "if we are relying upon the properties of procured goods for our sense of identity, then we are compelled to procure again and again." This is reflected in the marked increase of the cycles of new products introduced because retailers compete on novelty and image. Dr Kozlowski (A. Kozlowski, personal communication, March 15 2020) says "we're buying into the symbolism of a particular lifestyle now. We need to stop being so individualistic, we need to move away from this desire and obsession with fame and celebrity because that's really what is behind a lot of these brands. It's this desire for emulation and social status. If our needs were being met intrinsically, we probably wouldn't be buying all these clothes and shoes and sneakers and hype and street wear. I think all of that perfectly encapsulates that mindset of wanting to be like Kanye or wanting to be like the Kardashians ... it is the power of branding and celebrity and fame and that desire for emulation of a particular lifestyle, that is driving all of our shopping behaviours."

Feeding off this need, the fashion sector has perfected the cycle of invention, acceptance and discard of continually changing modes of appearance, with each new cycle different from the old. Additionally, Fletcher (2016) argues that no other sector has delinked the cycle of change from physical need or function like the fashion sector. New cycles rarely offer enhanced protection of our bodies or functionality, and they offer few if any material developments or progressions; instead they offer an opportunity for identity change and 'value' portrayal both at an individual level and to larger social groups within a particular place and time (Fletcher, 2016).

There is also a material component to this cycle of change: an increase in the amount of fashion consumption is further fuelled by the downward pressure on price resulting in lower standards of materials and construction or "quality fade" (Cline, 2012, p. 90) which necessitates speedier replacement. Thus, it seems that in contemporary consumer culture, ideas about fashion are organised around those of commerce and consumerism, creating a dependence on them.

The language and expression of the culture of consumerist materialism that dictates the prevailing experience of fashion, is so dominant that consumers hardly notice it. In the collective cultural consciousness of much of the global North, "fashion is novelty, consumption, materialism, commercialisation and marketing"(Fletcher, 2016, p. 32). Watching, shopping, purchasing and having becomes a normalised pattern of behaviour and thinking – it is normal to engage with fashion primarily by exchanging money for product; it is expected that the purchased products will look dated in six months; it is usual to discard rather than repair. A belief in 'fashion-as-consumption' now dominates ideas of what clothes are.

The model of the growth logic within which prevailing models of fashion production and consumption thrive economically, has resulted in alternative independent and shared expectations and experiences of fashion being forgotten. For instance, hand-me-downs, home sewing and mending, which were relatively common practices in the global North, have dwindled. The cheap price of, and easy access to, new garments has overridden the economic incentive and desire to preserve, maintain, re-use and repair clothing.

Furthermore, Rubina (V. Rubina, personal communication, February 12, 2020) explains that the revival of the 'old' through archival collections or the inclusion of 'vintage' items in brand offerings often fails to truly represent the spirit of repair and re-use, instead it is another 'novel' experience through which companies can drive the dominant mode of engagement with consumers – buying and consuming.

MATERIALISM AND CONSUMPTION

Alain de Botton (De Botton, 2010, p. 35) explains the dynamics of consumption and materialism: "Two centuries ago, our forebears would have known the precise history and origin of nearly every one of the limited number of things they ate and owned, as well as of the people and tools involved in their production … The range of items available for purchase may have grown exponentially since then, but our understanding of their genesis has diminished almost to the point of obscurity. We are now as imaginatively disconnected from the manufacturing and distribution of our goods as we are practically in reach of them."

The rate and pace of contemporary consumption practices in the fashion sector is startling. Yet, according to Raymond Williams (Williams, 1978) even amidst material excess, the problem is that consumers are not materialistic enough. There is little intrinsic value seen in material goods and their qualities. Consumers have little or no knowledge of how garments are made, the difference between fibres or fabric construction practices. There is little thought given to the fine detail in a garment and consumers rarely revere the things they already own.

Contemporary consumption practices in the fashion sector that are dominated by newness and perfection are characterised by a process of alienation from the items or garments purchased. Most modern, commercial fashion products are sourced internationally, based on the most economical production route for each processing step and material component. While direct costs are balanced with service, reliability, and retail times, economic gain remains the logic of production and distribution. This logic makes profit the most powerful factor motivating where and how garments are produced – a factor that takes no account of the knock-on effects of production on environments, communities and cultures; conventional economic models used in the fashion sector account for these effects as costs 'external' to a corporation's activity (Fletcher, 2016). This chain of thought often trickles down to consumers who have little knowledge of or concern for external costs. Dr. Kozlowski says (A. Kozlowski, personal communication, March 15, 2020) "you can start all the way back from the 90s when we really saw the global production takeover. And we saw these complex supply chains develop and this widening of the gap between concepts of where consumers are and the means of production. We're so far removed. So, even when the first round of sweatshop scandals came up, maybe there were some boycotts. But in the end, it didn't really change how we consume because we live in such an individualistic society where we're just not close enough that we're willing to be uncomfortable, especially when it's invisible." The disconnection from supply chains, material and manufacturing processes, from production time frames and geographies and the resulting alienation with the material environment is termed user disburdenment by Albert Borgmann (Borgmann, 1995).

Additionally, contemporary fashion experiences are increasingly dominated by brand and sign making over material making. There exists a marked shift in perception from clothes as durable consumer goods with intrinsic material value to goods that only have novelty and brand value (von Busch, 2008). This, coupled with the phenomenon of user disburdenment in the fashion sector results in the relegation of fashion as an archetypal sign economy where non-material meanings fuel the purchase of material goods; material consumption is driven by a search for social meaning or symbolic value. In this sign economy, the importance of the materiality of garments diminishes, products are not valued for their intrinsic qualities, but are no less in demand due to their symbolism. Since symbols are highly susceptible to the dynamics of rapidly changing events, replacement purchases of material goods in the fashion sector are expected. Additionally, Borgmann (1995) argues that a failure to actively engage with things undermines the development of our sensitivity to ethical responsibility. To counter this, he advocates a design process of creating objects that "still involves some pain to use, some work. By being less than completely polite, somewhat drawing attention to itself, its materiality and its design, such a thing would enable ethical ways of being"
(Tokinwise, 2004, p. 5).

NEEDS

Humans possess specific and identifiable needs, Ekins & Max-Neef (1992, p. 199) identified these as Subsistence, Protection, Affection, Understanding, Participation, Creation, Leisure, Identity and Freedom. While fundamental needs may be the same across cultures and historical periods, the way in which, or the means by which the needs are satisfied, changes. Each economic, social and political system adopts different methods for the satisfaction of the same fundamental human needs, and one of the aspects that may define a culture is its choice of satisfiers. Whether a person belongs to a consumerist or to an ascetic society, their fundamental needs are most likely the same, what changes is they choice of the quantity or quality of satisfiers (Ekins & Max-Neef, 1992).

Fletcher (2013, p. 138) classifies the aforementioned needs into two categories: physical (material) needs and psychological (non-material) needs (Figure 7).

Fundamental human needs are:

Needs	
Material Needs	Subsistence Protection
Non-Material Needs	Affection Understanding Participation Creation Recreation Identity Freedom

Figure 7 | Fundamental Human Needs (Fletcher, 2013, p. 138)

Not all products or even garments in the fashion sector meet the same needs in identical ways. While the apparent material function of all clothing is to maintain our physical need of staying warm, this is often eclipsed when fashion pieces are consumed for their symbolic function rather than their material one.

Fashion consumption is increasingly seen and practiced as a form of identity creation, where consumers signal their place in social structures or individual agency through their clothes. In arguing for the description of all contemporary clothing as fashion, Gibson (2000, p. 353) says: "Whether (people) follow current trends, ignore them and create their own style, are relatively uninterested in 'fashion' as such...they nevertheless, by the simple act of getting dressed in the morning, participate in the process of fashion." This underscores the deeply social nature of fashion where fashion facilitates the fabrication of self-identity within a social context: a collective activity involving the flows of information and influence between businesses, groups and individuals (Blaszczyk, 2011). According to Fletcher (2013, p.137) "The emotional needs met by garments in such individual and social contexts are complex, subtle and inexhaustible."

FASHION PARADOX

Contemporary practices of high-volume fashion consumption generally satisfy psychological needs more than material ones. However, this creates a paradox. Psychological needs are often difficult to satisfy, and in some cases, inhibited by consuming fashion pieces alone. Consumers are familiar with the feeling of a new want or desire arising no sooner than the first one is satisfied. According to Fletcher (2013, p. 139) "Consuming materials gives us a false sense of satisfying our psychological needs."

Offer (2006, p. vii), explains this contradiction: "Resources and cravings do not map precisely onto well-being. What we want and choose can often fail to deliver and even be counterproductive." A fact that according to Fletcher (2016) has been recognized by religious communities for time immemorial and is reflected in their guidelines for living materially simple but spiritually rich lives.

Finkelstein (1991, p. 145), explains that "Fashion, by its capacity to structure the everyday world and order interpersonal commerce in a way that emphasizes the surface life, constitutes an insidious attack on the ability to reflect on the meaning of our desires." In the pursuit of commercial opportunity and economic growth, the fashion sector has drawn psychological needs into the marketplace. Finkelstein (1991, p.145) highlights how this not only enables overconsumption and its negative consequences; it also creates the need to meet our psychological needs with material possessions rather than through internal means: "our pursuit of fashion as a source of personal identity is, paradoxically, the primary ingredient in the degradation of identity. After all, if we are relying upon the properties of procured goods for our sense of identity, then we are compelled to procure again and again."

According to Ekins& Max-Neef (1992), needs that are not adequately satisfied reveal 'poverties'. While fashion consumption often satisfies the needs of identity formation, participation and creation temporarily, it is also the cause of multiple poverties. For example, the desire for and consumption of 'low-cost' fashion in the global North may impair the ability of garment workers to meet needs of subsistence. Additionally, the need to consume fashion is closely linked to damaging the collective need to enjoy a safe environment through the detrimental production practices so widely present in the sector. Yet, According to Fletcher (2013, p. 136) "consumption – a search for satisfaction – is not innately negative." Appadurai, (1986) explains that material culture and 'things' are of significant value to human society as they offer a dynamic and tangible record of cultural meaning.

In the Fixes that Fail system archetype (Figure 8)the primary symptom of the balancing feedback loop structure is that not much changes. Balancing loops stabilize systems; behavior patterns persist (Meadows & Wright, 2009). While this might be a great structure for maintaining equilibriums in ecological systems, in the context of satisfying the psychological needs through the procurement of material possessions, it encourages the persistence of undesirable behaviours over longer periods of time. Here the purchasing of fashion items is a temporary "fix" for the satisfaction of internal needs. Since it is only temporary, the need for identity creation fuels the use of this fix and causes a dependence on it, rather than a long-term "solution" (Fletcher, 2013; Offer, 2006; Finkelstein 1991; Max-Neef 1992).

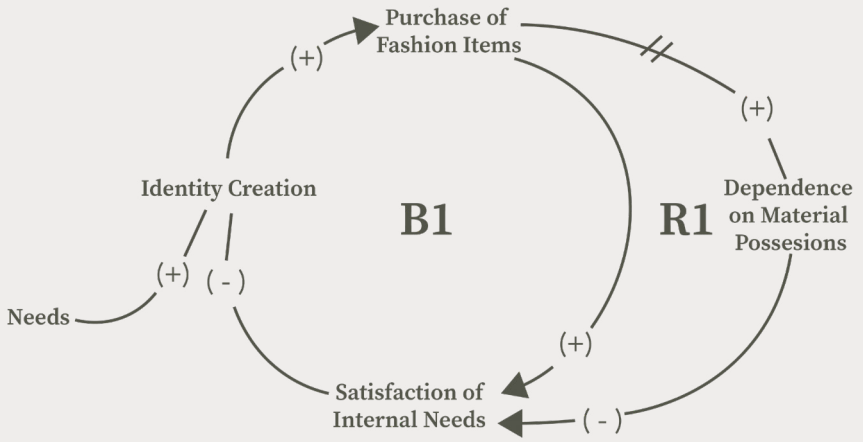

Figure 8 | Fixes that Fail: Satisfying Internal Needs with Material Possessions.
B1 depicts a balancing action where the purchase of fashion items is a temporary fix for the satisfaction of internal needs. R1 represents a reinforcing action where dependence on material possessions is an unintended consequence.

THE SUSTAINABILITY MYTH

The 1980's saw a normalisation of ecological design (Manzini, 1994). During this time, environmental issues penetrated industrial societies and affected various actors. This led to the integration of environmental policy in corporate programmes and eventually, the creation of a new space for the environmental quality in the marketplace. Thus, an ecological re-orientation of the system of production and consumption became a widely discussed and accepted theme which was to be treated in a substantially technical manner, through an appropriate "re-designing of the extant." (Manzini, 1994, p. 37). In the fashion sector, this included the use of organic cotton for t-shirts or recycled Econyl ("Econyl", 2021) for swimwear instead of virgin polyester.

This change was hinged on the publication of the 1987 Brundtland Report which defined sustainable development as that which "meets the needs of the present without compromising the ability for future generations to meet their own needs." (World Commission on Environment and Development, 1987). This definition communicated an eco-political promise to address emerging social and ecological concerns voiced in some sections of advanced consumer societies, while also accommodating the interests of those who were hoping for further economic development or growth. It recognised the seriousness of the concern for environmental integrity and the limitations of bio-physical limits (WCED, 1987). Yet, it also offered reassurance that a significant departure from consumer capitalism, or a radical critique of the western logic of modernisation, or even the "the cessation of economic growth" was not vital. Instead, the Brundtland Commission demanded that the "international economy must speed up world growth" (WCED, 1987, p. 89). It offered the advancement of scientific knowledge, technological innovation, improved monitoring and management, and the internalisation into the market of social and environmental costs as effective tools to "avert economic, social and environmental catastrophes" (WCED, 1987, p. 89). In other words, the Brundtland Report suggested that modern societies might grow beyond and modernise themselves out of the social and ecological problems to which the traditional pattern of modernisation had given rise. A new form of ecological modernisation (Mol 1995, 1996; Spaargaren, 1997; Mol & Sonnenfeld, 2000) was born and would now address these problems and put industrialised societies, and the world at large, onto the trajectory of sustainable development. In terms of sociological theory, Ulrich Beck's concept of a second or reflexive modernity created the foundation for this new eco-modernist approach which aimed to remedy the unforeseen side effects of traditional, first modernity and fulfil those promises of modernity which had so far remained unfulfilled (Beck et al.,1992, 1997).

Three decades later, the terms sustainability, sustainable development and ecological modernisation are ubiquitously present, but they are more abstract than ever. Almost completely missing from the activities of today is a clear notion of what sustainability is. "Sustainable development" is often an extrapolation of the past, with the intention of being more efficient in production practices. It is process-driven with no visionary end in sight (Ehrenfeld, 2004). While measures that followed the Brundtland Report have helped reduce the pace of unsustainability, the magnitude of the ecological and societal impacts of high-volume production and consumption on a global scale have increased. Few companies or institutions have addressed one of the root causes of unsustainability – the addiction to consumption. Rather, virtually all suggestions by the powerful institutions of the modern world for "solving" the challenges of unsustainability are based on quick technological fixes, including eco-efficiency. This seems to be a classic case of the Shifting the Burden system archetype (Figure 9) in other words – focusing on the symptoms rather than attacking a problem at the root. The underlying condition often reasserts and as a result, the capacity to change is undermined by the illusion that issues are being addressed, when in fact rather than mapping an agenda for, and signalling any commitment to, a structural transformation of consumer capitalism, there seems to be a focus on enabling tools for artificially extending its life expectancy. British philosopher John Foster regards the ideas of sustainable development and ecological modernisation as "an irretrievably misconceived framework and a delusive policy goal" (Foster 2015, Preface).

The fact that it has become normal to think that the extant should be re-designed in order to render it less harmful to the environment is a noteworthy achievement. However, the paradigm of sustainability is widely regarded as exhausted – categorically unable to deliver any profound structural transformation of capitalist consumer societies (Blühdorn, 2017) Yet, policy making, from the local to the international level, firmly holds on to the sustainable development promise that consumer capitalism can actually be reconciled with values of social justice, political equality and ecological integrity.

In the fashion sector this means that while the effects of high-volume fashion production and consumption are portrayed as 'unsustainable', solutions tend to be extensions and/or modifications of these practices and

the status quo. Additionally, participants interviewed for this study (2021) explain how the 'solutions' are increasingly commodified through industry specific certifications, such as 'OEKO-TEX' and 'GOTS' which are often unaffordable by most manufacturers i the global South. There is little scrutiny of the industrial structures and economic models that limit radical change and whether 'sustainability' actually leads to social and ecological richness and satisfaction. Sustainability, rather than seeding a radical new approach, gets passed through the sieve of economic priorities in the fashion sector, resulting in a marketing tool, alternative distribution channel in the current model, or a tweaked version of today's practices rather than a high-level system change. Against the backdrop of an unchanged economic model, sustainability makes little sense. The goals and ambitions of sustainability are broader than can be measured by the narrow metric of sales figures (the sector's preferred measure of success). Sustainability has become transmogrified into a trend, and through the elaborate relationship between trends, commerce, fashion, sustainability, is now seen as a tool for increasing material throughput and continual economic growth. The result is the reduction of sustainability to the status of a paradox in the fashion sector.

As the social and ecological crises of today continue to intensify, the promise of sustainable development and sustainability within the confines of economic growth is becoming increasingly less plausible. Accelerating climate change, the continued exploitation of natural resources, the precariousness of the global financial system, the public and private debt crisis, ever higher levels of social inequality, rapidly eroding trust in politicians, the challenges of mass migration, proliferating movements of populism and so forth represent interwoven social, economic, political, and ethical questions.

Almost two decades ago, Manzini (1994) expressed that the scenario of 'the re-design of what exists' is not sufficient for the discovery of true solutions. This is increasingly evident today. While sustainability measures in the fashion sector have led to systems of production and consumption which are less polluting than the previous ones, the extant is inevitably destined to change due to the other crises impacting it. In other words: a Tencel t-shirt is better than a traditional viscose one, but it makes no contribution to resolving the problem of the food crisis, nor the problem of abuses to workers' rights, nor the issue of waste.

Walker (2012) further explains the deficiency and 'mythic' nature of sustainable development. While the concept of sustainable development has contributed to changes including legislation controlling air emissions, water pollution and effluent discharge in most countries, and international standards like OEKO-TEX Standard 100 that guide best practices in fashion manufacturing, there are developments that "run counter to understandings of sustainable development" (p. 36). These include labour exploitation in the global South that is still widespread and often associated with major corporations in the global North, the production of large automobiles with high fuel consumption, the dependence of air transport and the farming of 'cash crops' including cotton for garments instead of food crops in countries where famine is persistent.

Dr. Kozlowski says (A. Kozlowski, personal communication, March 15, 2020) "there's no will to truly change. I think when profit margins begin to be hurt (and that's only going to happen when you have resource constraints – when all of a sudden because of drought and unstable weather patterns due to climate change cotton production becomes very volatile and those prices go up) I think it's only when it starts to hurt the shareholders and the profit margins with things that are out of their control, I think that's when we'll see change. Look at what's happening with plastic industries. People are angry over all sorts of issues, but

we haven't even moved the needle. The only solution we ever seem to come up with is make something just in a better version. If everyone wanting to come up with a sustainable fashion brand is the solution, then we're never going to fix the problem."

Walker says, "In this and in other ways, sustainable development bears all the hallmarks of a mythic story – a story that tries to come to terms with, and provide resolution to, something that is beyond our grasp." (2012, p. 36).

While comparing sustainable development to mythical stories, Walker (2012) suggests questioning the evolving myth of sustainability, much in the same way as myths are questioned. Walker says, "We must not ask 'Is it possible to achieve?' but 'What does the creation of this new narrative mean in contemporary society and for us personally in our work and our lives?'" (2012, p. 38).

In doing so we can develop an alternative to the prevailing narrative of sustainable development, one that transcends an analytical approach to environmental auditing or corporate social responsibility and instead acknowledges our "values and beliefs" while "ascribing meaning to our activities" (Walker, 2012, p. 38). Additionally, he says that "it must also be acknowledged that sustainable development is both ideological and immature. As such, it has neither the breadth nor the profundity of the traditions that, to an extent, it supersedes. It would seem, therefore, that our contemporary 'sustainable' myth might well be insufficient to sustain us." (Walker, 2012, p. 39).

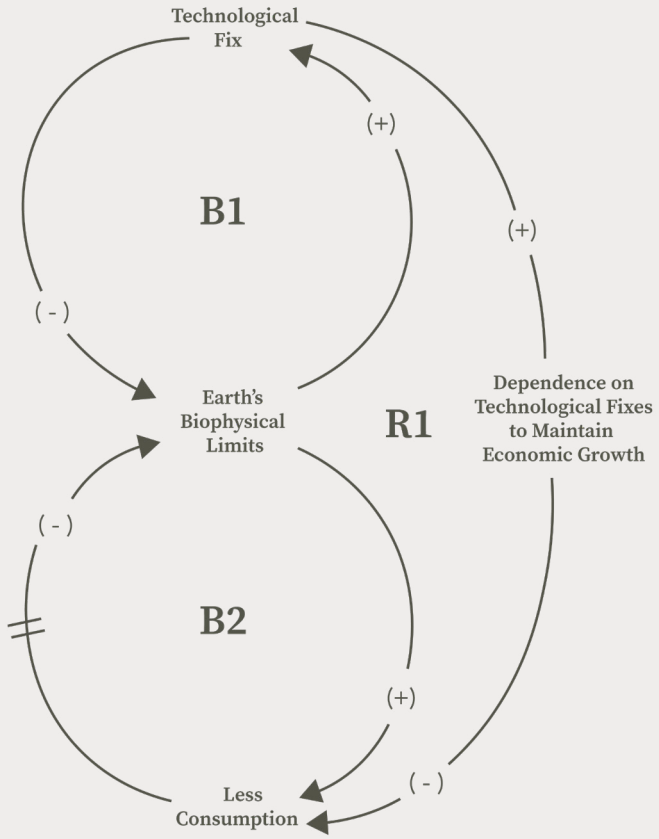

Figure 9 | Shifting the Burden: Technological fixes to Earth's Biophysical limits.
In this archetype diagram, technological fixes represent a symptomatic "solution" to the "issue" of Earth's biophysical limits, creating a balancing feedback loop B1. Here, R1 represents the reinforcing action where there becomes little need to pay attention to the fundamental "solution" of less consumption.

The Shifting the Burden (Meadows & Wright, 2009; Braun, 2002; Ehrenfeld 2004), system archetype (Figure 9), describes the use of technological fixes employed by the fashion industry that help reduce the pace of detrimental ecological and societal effects of resource depletion but not the scale. The fashion industry is dependent, or some might say, addicted to technological fixes to parts of the system such as low impact processes for denim or the use of 'organic' fibres to solve the "issues" of biophysical limits and their impact on ecological systems and people. The technological fixes result in efficiency gains that reduce or disguise the problem symptoms but do nothing to solve the underlying "problem" of overproduction and overconsumption at bizarre speeds. Additionally, this intervention causes a self-maintaining capacity of production and consumption to atrophy, and a destructive reinforcing feedback loop is set in motion. Over production and over consumption have burgeoning societal and ecological impacts and more technological fixes are required. The fashion sector has become increasingly dependent on technological fixes and is less able to produce and consume within the bounds of biophysical limits that ensure societal well-being (such as clean air, clean water and so on). By understanding the deep structural drivers of the problem system, the focus may be shifted from short-term relief to long-term restructuring.

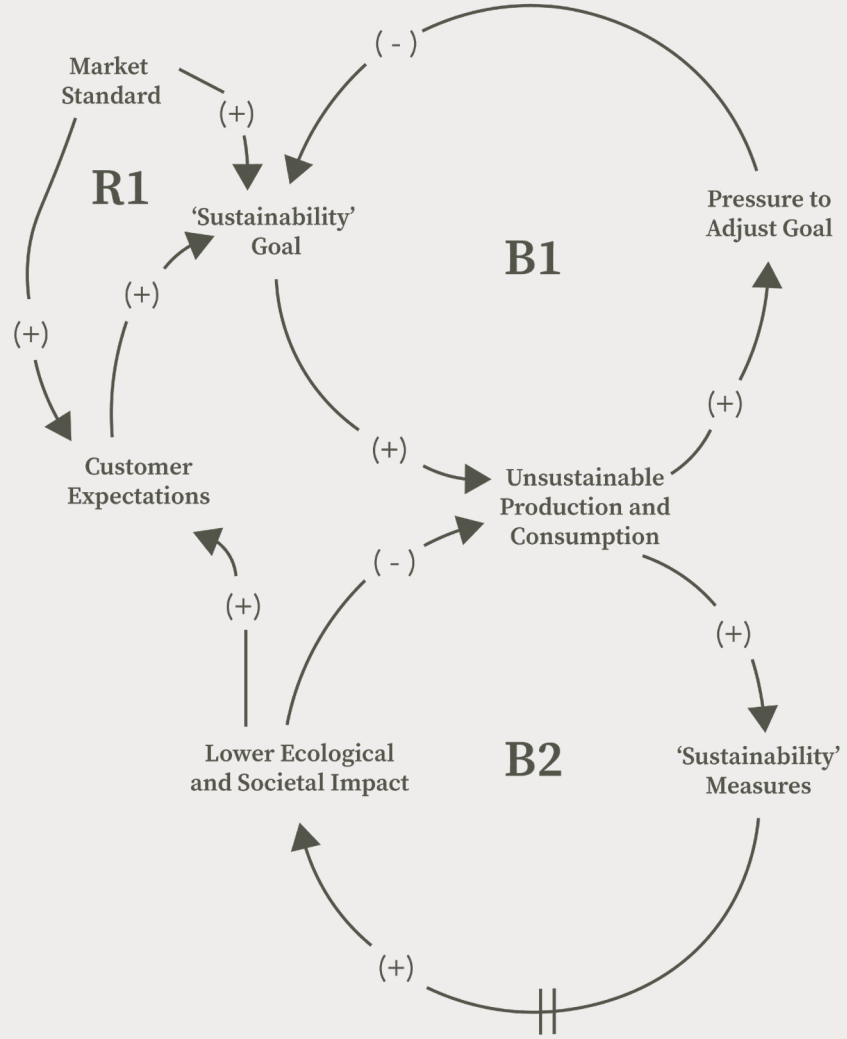

Figure 10 | Eroding Goals: The 'Sustainability' Goal.
B1 represents the gap between the 'sustainability' goal and the current reality of unsustainable production and consumption being resolved by lowering the goal. In contrast B2 represents a balancing feedback loop where the gap is resolved by taking corrective action. R1 represents a reinforcing feedback loop where market standards reinforce customer expectations, which in turn influence the goal.

Often, apart from failing to address systemic causes, technofixes also erode targets for improvement. Players in the fashion sector have a 'sustainability' goal that is in comparison to their existing practices. Typically, if there is a discrepancy, action is taken. This would result in an ordinary balancing loop that should keep their performance at the desired level.

However, in the fashion sector, the desired state is influenced by a market standard, which also influences customer expectations. When the market standard slips (usually due to the prioritization of economic growth above all else), individual goals of industry players slip in a bid to keep up, i.e "Well, look around, everybody else is also as unsustainable". The balancing feedback loop that should encourage better performance is overwhelmed by a reinforcing loop downhill. The lower the market standard, the lower the goals. The lower the goals, the less discrepancy, and the less corrective action taken. The less corrective action, the more unsustainable fashion production and consumption.

Eroding Goals is a gradual process. If the system state plunged quickly, there would be an agitated corrective process. But if it drifts down slowly enough to erase the memory of (or belief in) how much better things can be or used to be, everyone is lulled into lower and lower expectations, lower effort, lower performance (Meadows & Wright, 2009).

TOWARDS FLOURISHING

In the last 50 years, at least two decisive changes in perspective have emerged. The first, which occurred in the 1980's, and was concerned with the transition of environmental issues of production and consumption from a minority critique to a problem that was formally acknowledged. The second shift, which must take place today, should frame environmental and social issues as those that are associated with the growth logic.

In tandem with a paradigm shift away from existing models of sustainable development and economic growth, John Ehrenfeld defines sustainability as: "the possibility that human and other forms of life will flourish on the Earth forever" (2004, p.4). In doing so, he introduces the concepts of possibility and flourishing. According to Ehrenfeld, possibility is about creating a new reality by bringing to the fore something we desire. It enables people to "visualise and strive for a future that is not available to them in the present'" (Ehrenfeld, 2004, p.4) and flourishing is a threshold through which people can create their own vision of what their world would be.

In the Brundtland Report's version of sustainable development, sustainability is an adjective to the noun development. In the definition put forth by Ehrenfeld (2004), sustainability is the focus. This is especially important given that "we have become accustomed to thinking about development as continuous growth." (Ehrenfeld, 2004, p.4).

According to Ehrenfeld (2004), sustainability and unsustainability are not merely antonyms. They are categorically different: unsustainability is measurable; it can be managed and reduced incrementally. On the other hand, sustainability as per Ehrenfeld's definition – the possibility of flourishing in the future – is an aspiration. Quoting Amartya Sen "It is difficult to desire what one cannot imagine as a possibility." (Ehrenfeld, 2004, p.4), Ehrenfeld explains that creating or enabling sustainability is therefore not the same as reducing unsustainability.

Ehrenfeld puts forth an alternative approach to technological and incremental 'solutions' to unsustainability that enable the proliferation of the growth logic model. He conceives a world that brings flourishing into everyday ways of thinking, being, and doing rather than adopting a 'problem and solution' mindset. This approach is in tandem with the work of artists, designers, musicians who make "metaphorical jumps that allow them to transcend the limits of commonplace rationality" and bring visions of the future into being through their work (Ehrenfeld, 2004, p.4). Additionally, Ehrenfeld (2004) explains that flourishing will come only if we pay attention to three critical domains: our sense of our place in the natural world – the natural domain; our sense of ourselves as human beings– the human domain; and our sense of doing the right thing – the ethical domain. These three aspects of flourishing allow us to reframe the 'triple bottom line approach' and can form the basis for the redesign of tools, paradigms, infrastructures and mindsets.

A COMPLEXITY LENS FOR FLOURISHING

Ehrenfeld and Hoffman (2013), explain complexity as a system whose parts are interconnected in such variable ways that it is impossible to predict how the system will respond to perturbations or disruptions. Complexity is also used to describe self-organising systems that can move from chaos to order. This implies that the reverse is also true, where complex systems can move from order to chaos, much like the global financial system during the financial crisis of 2008.

The failure to recognise the complexity of the world is often considered a key cause of unsustainability. According to Ehrenfeld and Hoffman (2013), the dominant culture of having instead of being leads us to a narrow view of what life is about, which in turn limits the search for the fullness of flourishing. Furthermore, scientific thought has led to a reductionist view of the world: how we come to know it, how we act to realise our intentions and how we explain our acts. This system of knowledge, in Ehrenfeld and Hoffman's (2013) view, is partial and limited to parts of the system rather than the whole and, under these beliefs, truth lies in the findings of the scientific method or hypotheses through experiments. In other worlds, the dominant Western belief system that governs the fashion sector and from which scientific truth emerges, regards the world as a machine, governed by analytically describable relationships that are understood through objective science.
The dominance of this objective positivist framework limits the search for flourishing (Ehrenfeld & Hoffman, 2013). While it has resulted in much "progress" it uses quantitative, disparate metrics that do not capture the wholistic qualities of life. Flourishing and other similar qualities emerge from the view of the system as a whole and one which cannot be described by a reductionist set of measures.

This exploration of localism aims to move away from Cartesian metaphors that reduce the world to a kind of computer with built-in logic. Instead, it adopts a complexity lens in which the world and its inhabitants are complex and behave in nonlinear and unpredictable ways (Ehrenfeld & Hoffman, 2013). It follows Ehrenfeld and Hoffman's (2013, p. 94) idea that "In the end, we will know the world and act authentically within it only if we adopt a new and more nuanced way of relating to it: complexity, which blends objective elements of the scientific method with the subjective elements of pragmatic, spiritual, and loving Being. Only then can we find our way to sustainability-as-flourishing."

02 LOCALISM AS FLOURISHING

INTRODUCTION

Nature – with the exception of migrant species – 'shops' locally, using local expertise to produce the resources it needs and process its waste.

– Kate Fletcher, Sustainable Fashion and Textiles: Design Journeys, 2013

The proximity of place of production and consumption, and the act of sourcing and making with the skills and resources found close to home, reflect the overarching practices of localism.

According to Pepper (1996, p. 306), "revising the scale of living will solve at root many of society's theoretical and practical problems". Localism promotes production and consumption on a human scale where, people see and sense the effects of their activity on each other and on the environment directly and are able to enjoy the benefits of change.

Localism may be regarded as a paradigm, for paradigms reflect how ideas relate to one another, to constitute the purpose and meanings of systems. They are the frames of reference, habits of mind, stories and exemplars that enable thinking about a complex subject. "Often paradigms are invisible to us, as they are, so to speak, the water we swim in. Yet, they inform everything we think and do, both as individuals and communities." (Fletcher and Tham, 2019, p. 32).

This section explores localism as a preferred vision for the futures of the fashion sector, one that enables human and ecological flourishing.
Long-term well-being and diversity and some of the economic, social, political and ecological ideas they represent aim to foster an understanding of the change required in the fashion sector to preserve and maintain the ability of ecologies and people.

Additionally, this section includes three trends that evidence the desire for this vision of the futures in the present.

POCKETS OF THE FUTURE IN THE PRESENT

Gathering signals of change in a Global Pandemic

The COVID-19 pandemic has resulted in a global crisis with significant losses in terms of health but also in terms of the global economy. The pandemic serves as a blunt reminder of the fragility of our human-made systems. We may be bearing witness to incipient cascading collapse of entire production, financial and transportation systems, due to a vicious combination of supply and demand shocks. The fashion sector has entered a period of significant change since the start of the pandemic. As the COVID-19 pandemic continues to cause sector wide disruptions, it is prudent to remember that this is not an acute event. Beyond the initial shock to systems, the pandemic is likely to have longer-term consequences on social, technological, economic, environmental and political landscapes (Gariboldi et al., 2021).

Aditionally, shocks to the system – like the COVID-10 pandemic – cause immediate seismic shifts in everyday life. This creates a tsunami of new signals of change (Gariboldi et al., 2021). Signals can show us how life is changing and the direction of change. However, not all dramatic changes in behaviour or attitudes lead to long lasting and significant change over time. For the purpose of this exploration, trends that emerge from signals that accelerate changes that were already emerging prior to the pandemic and those that represent transformative change are explored.

While gathering signals of change during the pandemic the following questions emerged, as seen in Figure 11.

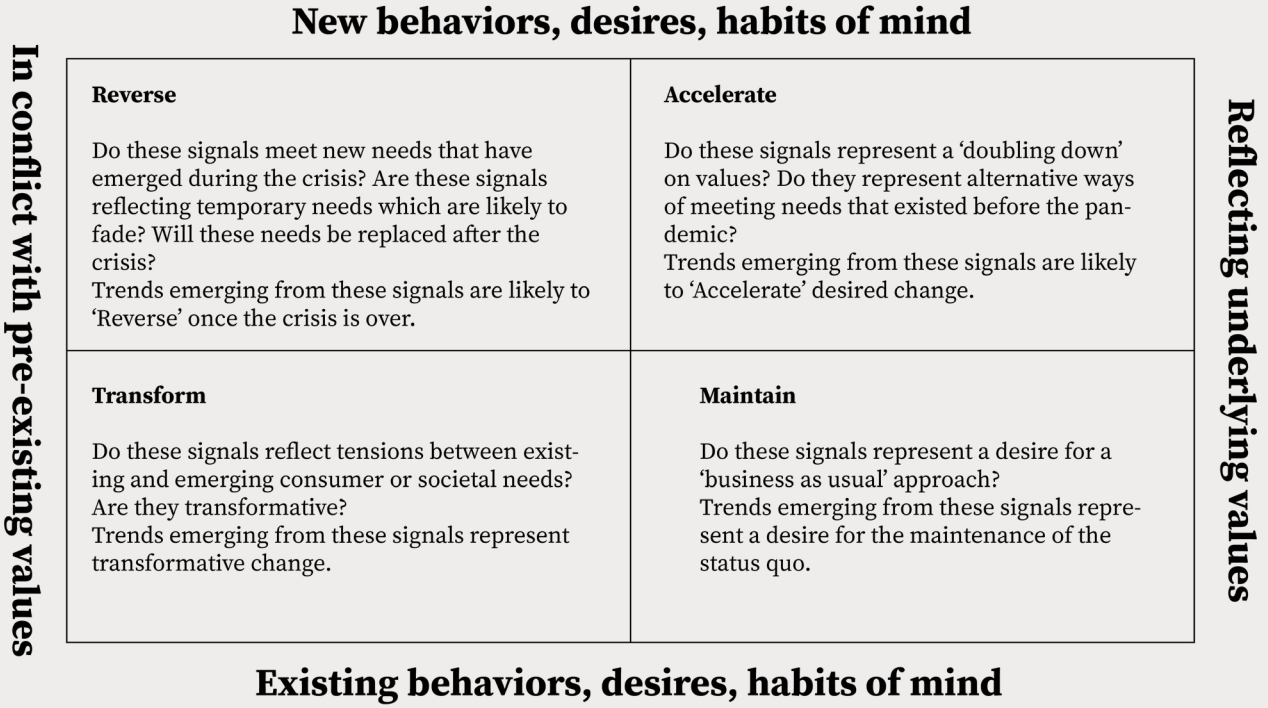

Figure 11 | Adapted from Building a world after COVID-19 (Ipos Futures Advisory Board, 2020).
This represents four possible types of signals of change that arise during a system shock like the COVID-19 pandemic. These signals develop because of four different configurations between new and existing behaviours and underlying and conflicting values.

Signals of Change and Megatrends

Four modes of viewing (Figure 12) are used to scan the environment for signals of change, emerging issues and megatrends. Active viewing (Choo, 1999) is used to develop a peripheral vision of various signals pertaining to the changes in the fashion sector, while conditioned viewing (Choo, 1999) is commissioned to bring emerging issues to the fore. Through a formal search (Choo, 1999) information is gathered systematically to enable the formation of megatrends that reflect evidence of the vision of localism for the futures of the fashion sector in the present.

Signals of change (Appendix B) reflect the social, technological and scientific, environmental, economic, and values (STEEPV) related indications pertaining to the fashion sector between January 2020 and March 2021. The signals represent the acceleration and/or transformation of issues that were already in motion prior to the COVID-19 pandemic. They are gathered through undirected viewing and conditioned viewing and are the foundation for the development of the megatrends.

Scanning Modes	Information Need	Information Use	Amount of Targeted Effort	Number of Sources	Tactics
Undirected Viewing	General areas of interes; specific need to be revealed	Serendipitous discovery 'Sensing'	Minimal	Many	Scan broadly a diversity of resources, taking advantages of what's easily accessible 'Touring'
Conditioned Viewing	Able to recognize topics of interest	Increase understanding 'Sensemaking'	Low	Few	Browse pre-selected sources on pre-specified topics of interest 'Tracking'
Informal Search	Able to formulate queries	Increase knowledge within narrow limits 'Learning'	Medium	Few	Search is focused on an issue or event, but a good-enough search is satisfactory 'Satisfying'
Formal Search	Able to specify targets	Formal use of information for planning, acting, 'deciding'	High	Many	Systemic gathering of information on a target, following some method or procedure 'Retrieving'

Figure 12 | Re-drawn from 'Modes of Scanning' (Choo, 1999, p. 23)

MEGATRENDS

Post-Growth Mentality

Type: Values

Summary: As the obsession with economic growth is increasingly undesirable, consumers are seeking alternative paradigms and new metrics of progress.

Maturity: Developing

Figure 13 | Window sign at a dry cleaning shop in Toronto, Canada, November, 2020

POST-GROWTH MENTALITY

Description:

Consumers and businesses alike are growing increasingly aware of limits to growth posed by the Earth's carrying capacity. While growth has become a yardstick with which the progress of a society is measured, the current measure used, Gross Domestic Product (GDP) no longer accurately reflects changes in consumer mindsets.

As consumers enter a period of late-stage materialism, they still participate in mass consumption, yet they care more about how their purchases reflect their worldview. Ideas that seemed fringe half a decade ago, including the circular economy and zero waste have become more mainstream. However, GDP does not necessarily capture these new modes of consumption.

According to economist Joseph Stiglitz (Chainey, 2016) "What we measure informs what we do. And if we're measuring the wrong thing, we're going to do the wrong thing." And since the GDP does not encourage activities that may have social worth, but which do not add to the economy, people are beginning to reject it as a measure of success.

These sentiments coupled with those which denounce the growing wealth chasm the world over, and the "growth fallacy" form a trend that reflects a post-growth mindset among consumers.

Signals:

Wealth Chasm

Consumers are growing increasingly aware that the focus on relentless wealth growth has done little to halt, reverse or even improve inequalities.

- **Global Protest to Fight Inequality Rejects Davos Elite's 'Great Reset of Capitalism' "We can do so much #BetterThanDavos."** https://inequality.org/research/global-inequality-protest-davos/
- **"The '1%' are the main drivers of climate change, but it hits the poor the hardest"** https://www.cnbc.com/2021/01/26/oxfam-report-the-global-wealthy-are-main-drivers-of-climate-change.html
- **"Even a capitalist system would collapse with this level of inequality, says Amitabh Behar, CEO of OXFAM India"** https://www.nationalheraldindia.com/interview/unsustainable-inequality-why-india-must-tax-its-super-rich

Growth Fallacy

The 'growth is good' mantra, which has been prevalent since the late 1950s and 1960s and which was introduced by policymakers to safeguard against depression after World War II, is now at odds with 21st century mindsets.

- **"An industry growth model predicated on vulnerable countries sticking with business as usual is less empowering than advertised. It's also unlikely to pan out."** https://www.bloomberg.com/opinion/articles/2021-03-22/oil-gives-to-developing-nations-but-climate-change-takes-away
- **"We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth. How dare you!" -** Greta Thunberg at The U.N. Climate Action Summit https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit#:~:text=People%20are%20suffering.,tales%20of%20eternal%20economic%20growth
- **"Capitalism is in crisis. To save it, we need to rethink economic growth. - The failure of capitalism to solve our biggest problems is prompting many to question one of its basic precepts."** https://www.technologyreview.com/2020/10/14/1009437/capitalism-in-crisis-to-save-it-we-need-rethink-economic-growth/

Meaningful Materialism
Economic decisions are now tied in with the meaning they impart, and the Millennial generation is spearheading this movement.

- "Consumers Expect the Brands they Support to be Socially Responsible" https://www.businesswire.com/news/home/20191002005697/en/Consumers-Expect-the-Brands-they-Support-to-be-Socially-Responsible
- "63% of consumers prefer to purchase from purpose-driven brands, study finds" https://www.marketingdive.com/news/63-of-consumers-prefer-to-purchase-from-purpose-driven-brands-study-finds/543712/
- "94% of Consumers Would Switch Brands to Support a Cause" https://www.huffpost.com/entry/94-of-consumers-will-swit_b_1126628

More signals can be found in Appendix B

Implications:

Progressive Metrics: New metrics with which to appraise the progress of the global civilization are likely to develop in tandem with the post-growth mentality. Social prosperity, happiness and mental health are likely to be used by governments as a means to measure the wellbeing of a nation's citizens.

Collective Happiness: Governments and organisations might consider levels of happiness and fulfilment as crucial to their nation's well-being. An emergent example is the appointment of a Minister for Loneliness in the United Kingdom.

Wellness Architecture: Wellness might no longer be a vague ambition but a closely tracked, monitored and statistically driven goal. Since the health and wellness of a society are increasingly linked to success, the ethos is likely to shape innovations in design, technology and urbanism.

Consumption Redesigned: The built environment has been designed to facilitate and support a growth-based system. A post-growth mindset is likely to result in the redesign of public spaces and products.

Natural Capital: A post-growth mindset can result in an increase in protectionist measures and investments into natural resources.

Related Trends:

Humanist Design: Humanist or Human-centric design that places humanity at the heart of innovation rather than commerce.

Decentralised Capital: A change in the way capital is distributed through the use of AI and automating technologies.

Figure 14 | Tags on knitwear, January, 2021

Sourcing Recalibrated

Type: Economic, Political, Environmental

Summary: A combination of trade wars, increased demand volatility, and extreme natural disasters are resulting in an increasing frequency and magnitude of supply chain shocks. Companies are looking closer to home or 'nearshoring' as a resilience strategy.

Maturity: Developing

SOURCING RECALIBRATED

Description:

Recent decades highlight an emphasis in efficiency in the operation, management and outcomes of fashion supply chains as represented by the fast fashion model. The result is the reliance of much of the fashion sector on complex, nested and interconnected supply chains to deliver goods. While this has resulted in considerable economic gain, it has also made the systems the sector relies on vulnerable to sudden and unexpected disruptions. Interconnected supply chains and global flows of data, finance and people offer more "surface area" for risk to penetrate. Ripple effects can travel rapidly across these network structures and across national borders. Business of Fashion and McKinsey & Company (BOF & McKinsey & Company., 2020) analyzed a wide range of industries to assess their exposure to shocks. Out of the 23 value chains analyzed, apparel emerged with the second highest level of exposure. The labor-intensive nature of the apparel value chain, as well as its geographic footprint makes it particularly vulnerable.

Labor shortages in India, disruptions of shipments from China, Brexit in the United Kingdom are among the many shocks witnessed by the fashion sector in 202 alone. They signal the increased frequency of shifting geopolitics and the resulting trade wards, tariffs and uncertainty, resource supply shortages and the demand volatility exacerbated by the COVID-19 pandemic. The result is an urgency for the development of flexible and demand-driven sourcing models. Here, an emergent model is one that is multimodal and uses 'nearshoring' among its levers. The development of this megatrend is further driven by the reduction in the cost gap between proximity sourcing and sourcing from key Asian sourcing countries.

Valeria Rubina says (V. Rubina, personal communication, February 12, 2020) "changes including the inclusion of Scottish brands signal a shift in the UK towards sourcing from countries that are close-by and given the likelihood of increased disruptions in the future, this model is going to gain steam."

Signals:

Supply Chain Socks
Supply-chain shocks are happening more frequently and are taking a serious financial toll on manufacturers and retailers alike.

- **"Geopolitics could choke supply chains: Global supply chains are being squeezed by the rising geopolitical tensions between the United States and China. This poses a challenge for companies heavily reliant on Chinese suppliers."** https://www.afr.com/chanticleer/geopolitics-could-choke-supply-chains-20210312-p57a7t
- **"China's economy dented as American brands cancel Xinjiang's cotton imports"** https://www.aninews.in/news/world/us/chinas-economy-dented-as-american-brands-cancel-xinjiangs-cotton-imports20210224114431/
- **"Companies face up to US$120bn in costs from environmental risks in their supply chains by 2026."** https://www.just-style.com/the-just-style-blog/environmental-supply-chain-risks-to-cost-companies-120bn_id2672.aspxImpacts of Supply

Supply Chains Recalibrated
Anywhere from one-third to half of global apparel exports could shift to different countries in the next five years as companies alter their sourcing strategies in an attempt to increase supply chain resilience (BOF & McKinsey & Company., 2020.

- **"Supply chain overhauls set to be priority in near future."** https://www-just-style-com.arts.idm.oclc.org/news/supply-chain-overhauls-set-to-be-priority-in-near-future_id140927.aspx
- **"UK-US study to overhaul supply chains, drive fair labour."** https://www-just-style-com.arts.idm.oclc.org/news/uk-us-study-to-overhaul-supply-chains-drive-fair-labour_id140943.aspx
- **"'Made in China for China' focus of new five-year plan"** https://www-just-style-com.arts.idm.oclc.org/analysis/made-in-china-for-china-focus-of-new-five-year-plan_id140908.aspx
- **"Nearshoring: Europe's next textile boom? The European Commission is taking action to implement a long-stalled trade plan with**
- **"'Made in USA' Could Really Become More of a Reality"** https://sourcingjournal.com/topics/lifestyle-monitor/made-in-usa-apparel-supply-chain-coronavirus-cfda-forrester-219078/

More signals can be found in Appendix B

Implications:

Sourcing strategies at the core of corporate decisions: Sourcing decisions are likely to become more of a source of competitive advantage and if ignored, can also be a bottleneck for the survival of a business. Sourcing strategies are likely to be key decisions drivers of corporate strategies for fashion players.

Industrial Internet of Things (IIoT) fuelling the ability to pivot locally: Supply chain risks are likely to drive the use of IIoT to develop advanced enterprise resource planning (ERP) and material resource planning (MRP) systems. With advanced IIoT-enabled sensor networks and in-line process automation running on each line, manufacturers will have all the data and information they need to make quick decisions and pivot business without being overwhelmed by logistics.

On-demand manufacturing: An increased frequency and intensity of supply chain shocks and consequent demand and/or supply volatility is likely to drive a shift toward on-demand manufacturing enabled by AI, automation and micro-factories.

Insurance for unexpected events: International governments could agree that any orders for apparel production include an allowance for insurance that would cover the costs arising from natural disasters. The insurance could cover the cost of raw materials, production overheads and transportation of the finished goods to the buyer's specified port and could, entail a premium being added to the individual cost of any garment. This would need to be agreed by all parties but, in light of recent events, is likely to be a cost worth considering in order to safeguard the welfare of apparel manufacturers and their workers in the face of any unforeseen catastrophe.

Related Trends:

Hyper-Automated Supply Chains: Hyperautomation involves a combination of technologies that includes Robotic Process Automation (RPA), Machine Learning (ML), Artificial Intelligence (AI) and many others to automate business processes that traditionally required some form of human judgement or action.

Traceability: Developments of prototype cloud and blockchain tools aimed at tracing materials and products across the supply chains, including information about their environmental and human impact.

Figure 15 | An advertisement in Toronto, Canada, February, 2021

Vocal for Local

Type: Societal, Environmental, Values

Summary: The desire to shop local is becoming more pronounced around the world, as a practice initially enforced by COVID-19 lockdowns becomes a long-term behaviour change among consumers.

Maturity: Developing

VOCAL FOR LOCAL

Description:

"Home is now the new frontier — it's become the workplace, the schoolroom, the place to try new hobbies, the place to socialize and a safe sanctuary — so companies must account for this reality," says Oliver Wright, managing director and head of Accenture's global Consumer Goods practice (Vujanic & Burns, 2020).

The COVID-19 pandemic has accelerated concerns among consumers for their local communities. This has spurred a 'shop local' movement across geographies, on varying scales. According to research firm Kantar, COVID-19 has driven a surge in localism around the world, with 65 percent of consumers now preferring to buy goods and services from their own country ('Localism' is forecast to be a major post-pandemic trend | WARC, 2020).

Additionally, COVID-19 pandemic has created a renewed sense of togetherness and community which has strengthened this sentiment, with the added layer of increased trust and transparency. Various initiatives to support local businesses have developed, from introducing local currencies, to brands working together to promote each other's products.

Signals

- **"Numerous South African clothing retailers are increasing their investment in local manufacturing to reduce reliance on China and secure supply chains in the wake of COVID-19."** https://reports-mintel-com.arts.idm.oclc.org/trends/#/observation/1054289
- **"Visa has collaborated with the Social Development Bank (SDB) on a "Where You Shop Matters" initiative in Saudi Arabia. The aim of the initiative is to encourage consumers to shop with local buisnesses."** https://reports-mintel-com.arts.idm.oclc.org/trends/#/observation/1037425
- **"COVID fuels a shop Canadian movement"** https://torontosun.com/news/local-news/braun-covid-fuels-a-shop-canadian-movement
- **"Has the local movement become a way of life for Americans?"** https://www.retailwire.com/discussion/has-the-local-movement-become-a-way-of-life-for-americans/
- **"Australian Made: The pandemic has reignited the shop local movement"** https://www.adnews.com.au/news/australian-made-the-pandemic-has-reignited-the-shop-local-movement
- **"Indians #ShopSmall to support small local businesses"** https://www.businessinsider.in/business/news/indians-shopsmall-to-support-small-local-businesses/articleshow/79680108.cms
- **"'Buy local' push picks up steam in New Mexico amid COVID-19 shutdown"** https://www.lcsun-news.com/story/money/business/2020/11/26/buy-local-push-gaining-popularity-new-mexico-covid-19-shutdown/6432956002/
- **"Boom in websites supporting local UK shops amid Covid lockdowns"** https://www.theguardian.com/business/2020/dec/06/boom-in-websites-supporting-local-uk-shops-amid-covid-lockdowns

More signals can be found in Appendix B

Implications:

Revival of Co-Ops: A desire to consume locally produced goods is likely to spur a revival of co-operatives in order to create complete supply chains for the local production of goods.

Looking towards domestic markets: Suppliers labelled as 'exporters' in manufacturing hubs including India, China and Bangladesh are likely to look towards domestic markets as consumers in the global North buy local.

Revivalism: A shift towards localism is likely to spur consumer interest in old production practices and materials.

Technology Democratising Crafts: An interest in local cultures, histories and crafts is likely to spur the development of software as a scythe, with designers using technology to democratise crafts.

Related Trends:

Black Lives Matter: A global reckoning with racial inequality has brought attention to Black companies and causes. Consumers and corporate brands alike have signaled their support for the Black Lives Matter movement.

Seeking Justice: Social justice and human rights issues are gaining a higher share of voice in the conversation about the fashion industry's pressing need to improve its sustainability credentials.

LOCALISM AS AN ALTERNATIVE VISION FOR THE FUTURE

Dator's Generic Images of the Future

According to Dator (2009),the many images of the future that exist in the world can be grouped into one of four alternatives. These categories are "generic" in the way that varieties of specific images of them share common features which distinguish them from the other three futures. Additionally, there does not exist a "best case scenario" or a "worst case scenario" or even a "most likely scenario" among them. All the four generic forms have equal probabilities, and all should be considered in equal measure and sincerity (Dator, 2009, p. 8). The Generic Images of the Future are as follows:

Continued Growth

According to Dator (2009), "Continued Growth" is the "official" view of the future of most modern governments, educational systems and organisations. Since the purpose of these entities is to build a vibrant economy, and to develop the people, institutions and technologies to keep the economy growing, this future is also often called "Continued Economic Growth".

Collapse

This future is concerned with the idea of social/ and or environmental collapse. There exist myriad reasons or drivers of the collapse including economic, environmental, moral ideological collapse. Or collapse caused by external factors such as Hurricanes, tsunamis, rapid global warming, and pandemics. This future represents "Collapse" of systems, institutions and models, among other things, from some cause or another and towards extinction or to a "lower" stage of "development" than as they currently exist (Dator, 2009, p. 9).

Discipline

According to Dator (2009, p. 9) "Discipline" or a "Disciplined Society" often arises when people feel that continued economic growth is either undesirable or unsustainable. This is rooted in the idea that the preservation or restoration of places, processes or values is more important than the acquisition of new things and/or the kind of human labour that is required to produce and acquire them (Dator, 2009). Additionally, Discipline is also driven by the notion that while economic growth might be necessary in certain circumstances, continued economic growth is unsustainable due to the finiteness of the resources available, in the face of a burgeoning population. Dator (2009) puts forth that while techno fixes have enabled production and consumption beyond the "natural" ability of resources, this future entails the view that continued growth may be coming to a halt when resources are depleted and/or due to the "choking contamination of our planet by the wastes of our industrial processes." (p. 10)

This future suggests a focus toward survival and fair distribution rather than continued economic growth. It also entertains a view of orienting systems around a set of fundamental values – natural, spiritual, religious, political, or cultural – "to find a deeper purpose in life than the pursuit of endless wealth and consumerism" (Dator, 2009, p. 10).

Transformation

Transformation focuses on "the powerfully transforming power of technology" (Dator, 2009, p. 10) with a focus on robotics and artificial intelligence, genetic engineering, nanotechnology, teleportation, space settlement, and the emergence of a "dream society" that succeeds the present "information society". This future is called "Transformation" or "Transformational Society" because of its anticipation and welcoming of the transformation of life from its present-day form to a new "posthuman" form on an entirely technology driven and artificial Earth.

The following pages describe the emancipatory aims of localism which lay out a possible image of the futures. Placing localism in Dator's (2009) Discipline category enables its exploration as a normative scenario in response to the view that continued economic growth is undesirable for human and ecological flourishing in the fashion sector. The aims of localism describe a preferred, prespecified vision for the future in which human and ecological flourishing may be achievable through a paradigm shift.

LOCALISM

What is localism?

For many commentators, the globalised model of consumption and production that is based on the growth logic is at the core of unsustainability in the fashion sector. The large scale and innate anonymity or user disburdenment (Borgmann, 1995) effect of a globalised fashion system perpetuates our inability to understand social and ecological impacts through a whole or systemic lens (Fletcher & Grose, 2012). Additionally, the technoscientific tools used by the fashion sector often don't work within biophysical actualities, instead they reconfigure and commodify them, coproducing new forms of worldwide relationality and living "(im)possibility" (de la Bellacasa, 2017). The pervasiveness of technoscience in the living world raises a justified sense of urgency to further embed ethical engagement at the level of bios—including tackling the economic pressures to extract "biocapital" (Sunder Rajan 2006; Cooper 2008) from human "biological labor" (Vora, 2010).

In seeking a way to understand localism, one might position ecological and human flourishing as a superset and economics as a subset of a simple hierarchy. This results in an upending of existing priorities of a majority of industrialised sectors, including the fashion sector. When environmental and human priorities dictate industrial ambition and economic growth, limits to consumption and production emerge. Since people and ecosystems vary, the activities within them – knowledge, communities, products, cultures and practices – require adaptation to their specific place. This process of adaptation may be termed localism, which involves the shaping of an activity by a region's natural factors and human dynamics in order to ensure long-term well-being and diversity (Fletcher, 2017).

Localism supports the acknowledgment of place-specific biophysical actualities and human needs by emphasizing practices shaped by tradition and craft, necessity, climate, imagination, and a distribution of authority, leadership and power (Curtis, 2003). In doing so, localism promotes pluralism while also creating a sense of 'rooted identity' and community. Dr Mazzarella (F. Mazzarella, personal communication, February 26, 2021) says, "I think localism can manifest itself into dynamic interconnections between people, places, the ecological context (i.e. nature), but also local economies, and culture (i.e. the way we use fashion to express our local identity). I think fashion localism means really using, leveraging and valuing the resources, and also the constraints of activity within a place. It is grounded on people and communities – so that they are all in line with the natural and social context, and also with the culture where they are based. So, the health of the ecosystem is preserved through the adaptation of local knowledge, products, cultures and practices."

Additionally, localism is not about insularity and protectionism, instead, it is about the sharing of knowledge, skills and resources. Professor Walker explains this idea (S. Walker, personal communication, March 3, 2021) "within localism people can learn from each other globally. So, you see in Canada with First Nations groups, who are often undergoing a lot of deprivation and problems in their communities. They have been connecting with the Aboriginal groups in Australia and indigenous peoples in South America, because many of these groups are suffering the same kind of problems. And so, they can share knowledge, they can share their experiences of overcoming these problems, they can learn from each other, they can support each other". According to Walker and Dogan (2008, p.2), "The long-held meaning of 'the local' has transformed from exclusive spatial boundaries (or geographic delineation) to an appreciation of contextual differences and diversity."

The promise of localism to support human and ecological flourishing arises from a key principle: the recognition that a community's well-being depends on the health of the ecosystems it lives within (and which it is best placed to understand and alter) (Fletcher, 2018). Localism influences what and how much is made and consumed because the associated costs of each extra unit are borne in the same community that people are living in. There is a visible and tangible trade-off between the costs and benefits of producing and consuming too much and too fast. This represents a feedback loop that is location specific, and which binds a community's actions, effects, and responsibility for them.

Professor Walker (S. Walker, personal communication, March 3, 2021) explains this, "If you are dealing with your suppliers, or your customers face to face, you're seeing them as real people, as human beings, with families with issues, and you're seeing them in a more empathetic light because you are interacting one-to-one and face-to-face. Whereas with fast fashion, goods appear on the store shelves and you don't know where they come from, or who made them or what they are made of. It's just about consumer choice in terms of the style or the colour, and we don't think about who produced them, and if they're being exploited or not. And even if they are, they're on the other side of the world, and there is a 'it's not our business kind' of attitude. Whereas if it's on our doorstep, if we are dealing with people face-to-face, we treat them as our neighbours, as other human beings.

And if they're making a mess of the environment, we can see it, we can see if the environment is getting denuded. So, we because we live there, we know this environment, and it affects us. So, we have a vested interest in making sure that the local businesses, the local enterprises, act in responsible ways, because we live here. And if those local businesses and business enterprise owners and producers also live here, then they have a vested interest in investing in the local community and environment". Thus, the aims of localism have a confronting effect on the impacts of globalisation, the indiscriminate sourcing of raw materials, the standardisation of products, intensive commercialisation, economies of scale and long-distance trade and cost externalisation (Fletcher, 2018).

In fashion, localism builds a place-context which is expressed as a dynamic mix of resources, interactions and relationships in an area, or the sum of what a place can offer. Working within what is available, materials and social assets are used to shape processes of adaptation that serve to highlight what is important in an area and what can be done there (Fletcher and Tham, 2019).
David Fleming (2016, p. 389) describes localism as, "a rich earthy mixture of reciprocities and culture [which] will be the resilient successor to the market economy in the tasks of meeting material needs, sustaining social order and keeping the peace."

While localism is place-specific, it contributes to the global imperative of developing an understanding of how diverse economies and social structures may be fostered and maintained. The goal is to pixelate the dominant one economy view of fashion production and consumption into "broader-than-market priorities" (Fletcher, 2018, p. 4) that satisfy human needs. Much of the knowledge on how this may be done already exists, at least in a tacit form.

Natureculture Thinking

Naturecultural thinking is an ecosmology of "affirmative blurred boundaries between the technical and the organic as well as the animal and the human" (de la Bellacasa, 2017, p.140). Naturecultural thinking is present in the humanities, social sciences and in relational ontologies that engage with the material world as knots of relations involving humans, nonhumans, physical matter and meaning (Barad, 2007) instead of from the perspective of "objects" and "subjects". Localism and its emancipatory aims are in part a study of ethicality. Through Naturecultural thinking, attention is given to entanglements of relationality and distributed agency on the ground. Naturecultural thinking may be viewed as a materialist ontology that has the potential to displace ethical research beyond its focus on moral orders and human individual intentionality. Instead, it enriches perceptions of complex articulations of agency that involve associations between humans, nonhumans, and objects working in the realization of new relational formations (de la Bellacasa, 2017). The use of Naturecultural thinking while studying localism contributes to a "postconventional" (Shildrick et al., 2005) vision of the ethical that embeds in it process, rather than discussing it as a set of added concerns that humans reflect on when technoscientific and other material matters are already established.

In Naturecultural thinking, agency is distributed from its humanistic pole. Here, the ethical consequences of human interdependence on the nonhuman world are not only about the preservation of human existence and/or about which decisions will better respond to human needs. Instead, it is about exploring other problems that arise from this interdependence that have been brought to the fore by environmental humanities, eco-feminism, animal rights movements and indigenous struggles, among others. Explaining this approach, de la Bellacasa (2017, p. 144) asks: "How do we actively engage with the lived experiences of forms of nonhuman bios whose existences are today increasingly incorporated in the cultural world of human techne? How do we acknowledge "their" agency, and our involvement with it, without denying the asymmetrical power historically developed by human agencies in bios? How do we engage with accountable forms of ethico-political caring that respond to alterity without nurturing purist separations between humans and nonhumans? How do we engage with the care of Earth and its beings without idealizing nature nor diminishing human responsibility by seeing it as either inevitably destructive or mere paternalistic stewardship?" These questions form the foundation of this exploration of localism's ability to enable human and ecological flourishing in the fashion sector.

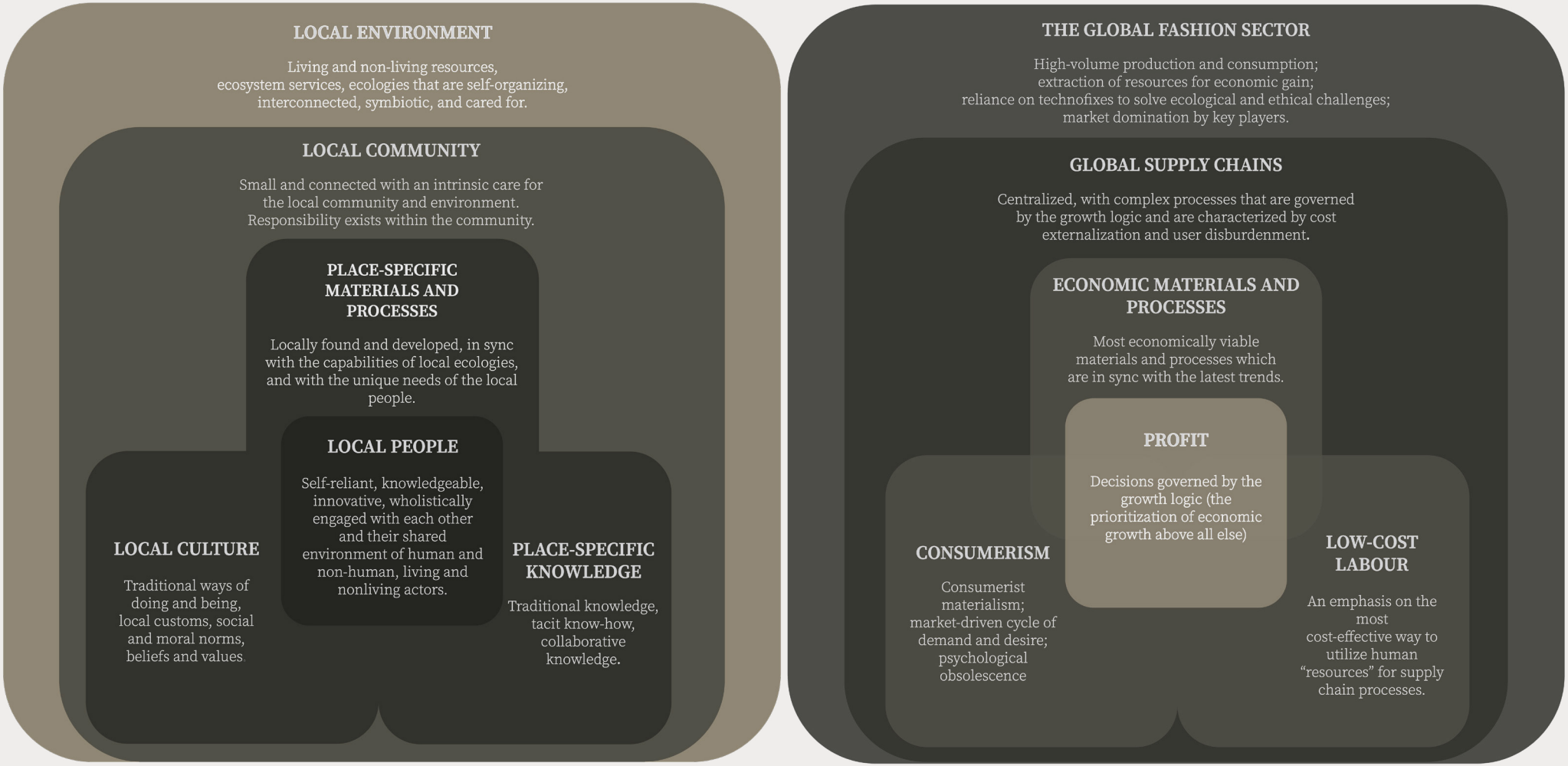

Figure 16 | Adapted from Craft as Leverage for Sustainable Design Transformation: A Theoretical Foundation (Zhan & Walker, p. 491)
A comparison between the priorities of localism and those of the growth logic driven model of high-volume fashion provision and consumption in the fashion sector.

THE EMANCIPATORY AIMS OF LOCALISM

To stray is to roam free from the understanding and epistemologies associated with the 'current condition'. To act differently, to think afresh, to update our ideas about what it is to know about fashion and sustainability in order to re-appreciate the potential of fashion to nourish and foster other actions. As we 'stray' for sustainability's sake from the dominant narrative or 'project of realization' that prevails in fashion today, we uncover new perspectives in which to locate sustainability opportunities that change both what we consume, impacting levels of resource consumption, and how we consume, altering our practices and ideas and ultimately our relationship with clothing over the long term.

– Kate Fletcher, Craft of Use: Post-Growth Fashion, 2016

There exist multifarious aims of localism from those expressed by Aldo Leopold in his Land Ethic (1949), over seventy years ago, to those presented in the 100-mile diet (Smith & MacKinnon, 2009).

Few ideas are more ecologically powerful than those associated with designing and developing products that sustain communities, provide people with meaningful work and a sense of connection with the place and people with whom they live (Fletcher, 2008). According to Fletcher (2016), localism is concerned with enhancing distinctiveness, celebrating cultures and traditions, building communities, creating meaningful employment and promoting human and ecological well-being. Thus, it is a combination of body, mind, object, knowledge, philosophy and action. Dr Mazzarella (F. Mazzarella, personal communication, February 26, 2021) says "I approach sustainability holistically. It's about culture, society, economy and the environment. Everybody needs to find his own place within this huge, wicked problem which is the fast fashion system. I often find that people feel overwhelmed by environmental concerns, they feel disempowered, they feel that the climate emergency is far away – although we are actually witnessing it every day. I often start from the cultural pillar of sustainability, because I think that if we actually can look at our identity and our sense of place, we develop a more spiritual and meaningful approach to sustainability; we then start becoming empowered and we can take agency to change the system. In the end, the outcomes of our actions will also be more authentic because they are true to what we are and our place in the world. So, my approach is to start from culture and then activate communities, make the local economies flourish, and therefore we will make a positive impact on the environment as well. Culture is the entry point, in my case."

This section seeks to explore and synthesise long-term well-being, and diversity, and the ideas that emerge from them, those that are 'emancipatory' in the way that they transgress ideas of the growth logic. In doing so, they contribute to a flourishing vision for the futures of the fashion sector that is outside of the conventional cycle of the provision and fulfilment of a market-driven cycle of consumer desire. Explaining this, Professor Walker (S. Walker, personal communication, March 3, 2021) says "when we talk to local craft makers about why they do what they do, often the first things they say is 'it's not because we want to make lots of money' which is what tends to be the aim of corporations. And governments are also pretty much saying we need to increase GDP. Everybody's on this economic growth bandwagon. But if you talk to local makers, their priority is not growth, they don't want to grow their businesses, because they don't want to take the risk, they don't want to make lots of money, they want to make enough to live on, and maybe a little bit more. But they want to be part of the community and give back to the community and contribute to the community and make a difference. It's beyond self-values, which are driving a lot of this, which is very heartening to see at the local level. And there's an important connection here between that benevolence and those values that transcend self and the natural environment and the community and localization."

Adamson (2010, p.3) proposes the following definition of craft: “the application of skill and material-based knowledge to relatively small-scale production”. This creates a space for the recognition of craft as embodied knowledge, materials, localism, small-scale and so on (Shiner, 2012). Knowledge in craft is developed in specific contexts (Brown, 2014), with locally available materials and resources, and favours serving local human needs: craftspeople root their practices in particular places (Walker and Zhan, 2019). Since localism favours place-specific knowledge, the use of nearby resources, practices shaped by traditions, necessity and imagination, traditional craft is intrinsically a part of localism. Ideas that originate in discourses on traditional craft are used in this section to explore the aims of localism.

The emancipatory aims of localism are concerned with relationality and interconnectedness, with the interactions and relationships between all species, technologies, infrastructures, systems and habits of mind – as well as the impact of these across timeframes. This exploration is a shift away from the search for discrete knowledge, distanced from the real world. It seeks to understand the qualitative ability of well-being and diversity for ecological and human flourishing.

LONG-TERM WELL-BEING: CARE

Humans exist only in a web of living co-vulnerabilities.

– de la Bellacasa, Matters of care: Speculative ethics in more than human worlds, 2017

The fashion sector is highly dependent on flows of resources: fibre, chemicals, energy, water, human labour. The economic growth logic that drives high-volume consumption and production in the fashion sector presents ecologies as subsets of economies, where economic priorities are separate from ecological limits, as evidenced by the growth logic's fantastical approach to resource limits and carrying capacities. The result is an ecological debt or a depletion and disturbance of Earth's vital systems (Fletcher, 2019).

Care is a core component of the aim of long-term well-being within the paradigm of localism. It represents a shift away from the binary construct of production versus consumption present in the growth logic. Since care is intrinsically relational, through its lens, the system of fashion production and consumption is a web of relationships with people and the planet rather than a nexus of business contracts, arrangements and economic priorities. This encourages the notion that there are many different relationships within which there is an obligation of care (Machold et al., 2008). de la Bellacasa (2017, p. 155) sees care as something that is "permeated by ethicality and embedded in a living ethos. It is an obligation that is inseparable from the material continuation of life." Care pertains to practices and ideas of maintenance, repair, and continuation of life through local ecological practices that unsettle modern binaries (de la Bellacasa, 2017). Obligations of care are often asymmetrical. This means that when committing to care, there develops an obligation towards something – such as worms – that might have no power to enforce this obligation. In turn, worms and other beings are part of an symbiotic ecosystem, their actions take care of some of the waste generated by humans, even if they don't intentionally commit to it (de la Bellacasa, 2017). Care promotes the idea that there must exist an obligation of care for nonhuman species and the natural world even if it is asymmetrical – for it is the protection of these ecosystems, their resources and services which enables the well-being of local ecologies and thus the well-being of local communities that depend on them.

While care is a life-sustaining activity, it has become a constraint in the dominant model of production and consumption for economic gain. This may be attributed to the belief that technoscientific fixes will enable the infinite use of nonhuman species for economic growth. The idea of care proposes an alternative naturecultural view: care as something that is done to maintain, continue and repair the world so that all can live in it as well as possible. Here, 'all' is what we seek to 'interweave' in a complex, life-sustaining web (Tronto, 1993). Since care is also contextual and situated, that is rooted in the local environment and community, 'all' is specific to local ecologies and non-human entanglements in a place and 'interweaving' strengthens, expands and invigorates relations between humans, materialities, and the natural world (Fletcher and Tham, 2019).

Acknowledging the necessity of care in more than human needs and relations but as something that "traverses, that is passed on through entities and agencies" focuses our awareness on how human beings depend on care from the natural world (de la Bellacasa, 2017, p. 166). Heightened by the distressed state of the Earth's ecologies and its "resources", this idea replaces the relations of extraction, with those of care – renewing, repairing and returning the surplus. Here, the focus is less on the ethical actions and decision-making processes of caring for local ecologies but in fostering an ethos through relations and doings (de la Bellacasa (2017). This ethos also extends to the future by formalising the development of mechanisms and tools of commitment that provide guidance for choices that promote ecological and human flourishing (Offer, 2006). According to Offer (2006), strategies of commitment help relinquish the immediate demands of isolated individuals in order to benefit long-term, shared societal objectives.

In addition to commitment strategies, true materialism also rekindles the ethos of care because it represents a heightened sense of both, the limits and potential of the material world by fostering a deep appreciation and respect for the intrinsic, material qualities of things. It creates an understanding of their value that goes beyond their usefulness. Charged by this, materialism fosters a shift from a consumer society where materials matter little, to a truly material society where materials, and the ecosystems they rely on are cherished and cared for.

Care includes a commitment to entities who have not managed, or are not likely to succeed, in articulating their concerns. Care is about the pricing of goods (like fashion clothes) to reflect true environmental costs. It is about conditions of workers and about the health of ocean. Prioritising care can enable a shift from interest in the environment as the source of commodified resources for the production and consumption of fashion, to a system that allows humans and non-humans to live as well as possible in a mutual flourishing (Ehrenfeld & Hoffman, 2013).

LONG-TERM WELL-BEING: NATURE AS A GUIDE

Nature typically supports fast and slow speeds; ecosystems achieve balance by adjusting to change at different paces. Nature characteristically combines change that happens on a large scale but slow pace (the time needed to grow a mature, established forest) with fast, small scale changes (the lifecycle of a flowering plant). The varying rates of change within the ecosystem enable sustainability and resilience as, the fast parts react while the slow components maintain system continuity (Thorpe, 2008).

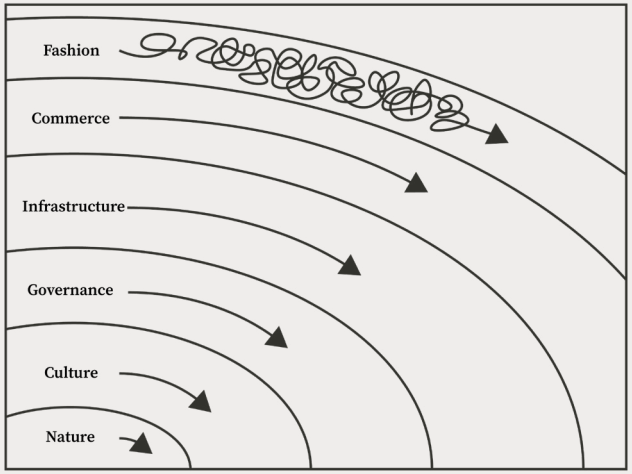

Figure 17 | Pace Layering (Brand, 1999, p. 37)

Stewart Brand (2008) suggests that a resilient human civilization needs layers of fast and slow activity to achieve a balance. He also proposes levels of pace and size, noting that when the whole system is balanced, it combines learning with continuity. As seen Figure 17, from faster to slower and increasing in size, the layers are: Fashion, Commerce, Infrastructure, Governance, Culture and Nature. The fastest layers bring rapid and innovative change, while the slowest layers maintain constancy, stability and provide a long-term supporting structure. The system is balanced when each layer respects the pace of the others (Brand, 2008).

The fashion sector of today focuses on economic growth or 'Commerce' with little respect for the pace of other system layers like nature and culture, other than when they impact directly the commercial activity. While drawing vigorously upon these layers and mining their resources, the sector discounts the value of these layers to broader system goals beyond their industrial usefulness. While the prioritisation of economic activity over nature results in ecological ruin, economic speed also results in an increasing standardization of fashion products across the High Street, thus diluting culture. Aditionally,
high-volume fashion consumption, where discarded fashion products are exported to countries in the global South, decimates their local, culturally embedded fashion sectors.

Localism promotes long-term well-being and Brand's (2008) idea of a balance between different speeds and agendas. This gives a voice to nature and culture in the production of fashion. It proposes the creation of long-term well-being through an engagement with the integrity of natural and cultural systems.

"By reconnecting people materially to local ecosystems and reducing global teleconnections, any impacts to the environment will be recognized more easily, thus decoupling human economic activity from degradation elsewhere" (Ives et al. 2018).

Additionally, Walker and Zhan (2019, p. 15), state that "Craft can be regarded as a way of making the material culture based in a specific place and part of a specific local ecology". The use of natural, locally available materials in craft serves to connect people with nature through both, the making and using stages. Walker and Zhan (2019) explain that this connection fosters a deep perception and awareness of natural resources and the environment. Aditionally, craft production and processes occur in local communities, connecting people to specific cultures and traditions. This cultural connection further strengthens people's bond to the natural world and place.

Biomimicry

As in the ideas of care (p. 58), localism advocates for an understanding that safeguarding natural systems is more than an attractive altruism, for these systems "cradle and nourish" (Benyus, 1997, p. 240) local communities, providing for them both spiritually and materially. Janine Benyus (1997) presents additional reasons for protecting the environment: in a time of ecological crisis and the depletion of resources, nature offers multifarious insights to apply to our own way of living. Biomimicry is a practice of emulating nature's diverse patterns and strategies. Benyus (1997) contrasts the rich and diverse natural world with the systematic taming and simplification of nature through human activity and the subsequent destruction of species. "We understand that the only way to keep learning from nature ... and its wellspring of ideas ... is to safeguard its naturalness" (Benyus, 1997, p. 9).

The aim of well-being in localism advocates for the development of this understanding and its application to practices of living, producing and being. Patterns in nature are in marked contrast to the "narrow and intellectual habitat" of industrialised design and serve as a reminder of "how small a part we play in, and yet what enormous responsibility we have to 'the whole'" (Fletcher and Grose, 2012, p. 115). Through the example of a Koch snowflake (Appendic C) and with reference to fractal geometry, Meadows and Wright (2009), illustrate how simple organising principles present in nature can lead to wildly diverse self-organising structures. Meadows and Wright (2009, p. 81). say that "Out of simple rules of self-organization can grow enormous, diversifying crystals of technology, physical structures, organizations, and cultures." (2008, p. 81).

Meadows's theory highlights how biomimicry through a localism lens is not merely a tool for copying, rather it is a tool for understanding and applying natures principles. This distinction of principles is vital with regard to the contemporary fashion sector which is dominated by high-speed and direct design 'innovation', where it is usual for designers to use biomimicry to maintain the status quo of manufacturing and selling novelty, while degrading natural systems in the process (Fletcher & Grose, 2012).

Benyus (1997) presents a framework of the use of Biomimicry as a tool to inform the 'fitness' of ideas for the context in which they are placed, and to direct the nature of the whole system. Benyus (1997), talks about the three approaches of Biomimicry; the first is the use of nature as a model; the second is employing nature as a judge to measure the appropriateness of practices and innovations; and the third is nature as a mentor, guiding design with values and perspectives in the natural world.

Benyus (1997) presents a checklist for this apporach:

- Will it fit in?
- Will it last?
- Is there a precedent for this in nature?
- Does it run on sunlight?
- Does it use only the energy it needs?
- Does it fit form to function?
- Does it recycle everything?
- Does it reward cooperation?
- Does it bank on diversity?
- Does it utilize local expertise?
- Does it curb excess from within?
- Does it tap the power of limits?
- Is it beautiful?

This powerful checklist reflects the ethos of production in localism, where nature is a guide for long-term well-being and diversity.

LONG-TERM WELL-BEING: AN ALTERED RELATIONSHIP TO GROWTH

Speed

Localism, through its advocacy for long-term ecological and human well-being acknowledges nature's speed and the pace of change of culture. Here, a sensitivity to speed in production and consumption is transformed into a force for quality. Speed is re-framed as a force for flourishing rather than a vehicle for promoting discontinuities (by introducing contrasting styles each collection); Consumption (as old styles are replaced with new); And wealth (almost exclusively for the fashion industry elite). Local production echoes natural systems, that use both fast and slow tempos to foster long-term stability and short-term vitality. Fast actions innovate and bring rapid feedback and speedy take-up of improved products and ways of doing things while slowness provides stability and promotes wholisitic thinking and causal chains of responsibility. The combination of fast and slow "brings newness underpinned by resilience; revolution bolstered by remembrance and fashion supported by nature and culture" (Fletcher, 2016, p. 173).

Durability and Usership

Durability is an essential part of localism and of similar paradigms with an altered relationship to speed than that conferred by the growth logic. Lastingness often slows the consumption and replacement of items: by extending the potential for satisfaction with existing pieces, no additional new pieces are required, and new consumption is forestalled, resources are saved, waste is reduced, and needs are met (Fletcher, 2106). Yet, the relationship between enduring use and durability in the fashion sector is far more complex. The repeated use of fashion pieces is dependent on a set of psychological factors that render a durability approach weak.

The human-dependent nature of factors that affect life spans of products means that aims in localism that pursue durability as a way to live within local ecological carrying capacities are ripe with contingencies and complexity. The incongruity of relying on things to influence behavior that fosters longevity of the things is amplified in the context of the fashion sector due to the deeply social nature of fashion: what one person chooses to wear, is also affected by the decisions and actions of others.

Given the role of human psychology in determining the obsolescence of a fashion item, localism promotes the role of emotional mechanisms to construct meaning in order to encourage durability and use. Chapman (2015) argues that products are most often discarded when they fail to have sustained meaning, and that by cultivating an emotional and experiential connection between people, products, and place, the tendency to continually purchase new goods may be disrupted.

Daly (1992, p. 180), in Steady State Economics, says "The steady-state economy has constant stocks of artefacts and people ... The input and output rates are to be equal at low levels so that life expectancy of people and durability of artefacts will be high" (Daly, 1992, p. 180)

The type of fashion expression promoted by localism is often associated with culture, heritage and heirloom and that which includes fashion use and durability outside the psychological obsolescence model perpetuated by the growth logic. Poignant examples of durability in local production and consumption of fashion are seen in traditional Indian textiles.

Over centuries, different regions in India have developed specialty production practices based on local knowledge, culture, traditions, resources, skills, and needs such as silk weaving in Assam, cotton textiles in Bengal and Pashmina shawls in Kashmir. In Kashmir, shawls are made from different breeds of Himalayan Goats that are reared by local semi-nomadic tribes. These tribes work within the confines of natural patterns and resource capacities: they rear the goats through the same migratory routes, bringing them to the same seasonal pastures once a year during the growing season. The fleece is spun into yarn and then woven into shawls. These are worn and passed down generations because of a deep appreciation of people and place – the craftsmen and herders involved in their making, and the land that only allows for seasonal pastures (Ames, 1996; Hart, 2018). Additionally, the uniqueness and specialty of the craftsmanship often transforms these shawls into artefacts that offer engagement through museums or collections ("Collecting guide: Kashmir shawls Christie's", 2019). This model of production and consumption is echoed in various textile producing regions in India. It reflects audaciously that fashion can be free of the binds of a market-driven cycle of desire and obsolescence and of the economic growth logic. Despite contributing little to the contemporary fashion sector; despite not being seen as a valuable activity by measures like GDP; despite the associated skills and competencies having no currency in contemporary fashion practices; Indian heritage textiles are worn over and over again and reflect engagements beyond the market. Additionally, they emphasize how beyond-the-market activity is an essential part of the fashion sector. They frame design

and use as part of the whole: design is empty without use; use impossible without design (Fletcher, 2016). The one changes the other.

Walter Stahel (2010) describes this expanded view of durability as 'user-ship', a characteristic that emanates from the performance of the product rather than the product itself. Evoking ideas of usership as different from ownership, steers the durability discourse away from a product centric business focus and back to the discourse on the creation of meaning; reflecting the tacit understanding we have of durability – as a function of behaviour and emotions related to material objects (Fletcher, 2016).

This is a challenge within the growth logic of the fashion sector, where consumers are guided towards conventions, habits, social norms and models of consumption that reflect them as consumptive individuals rather than as users. Localism on the other hand, strays outside these conventions and structures by fostering and amplifying the skills, habits of mind and abilities of users to create and engage with fashion from a context of appreciation of craft, tradition and resourcefulness. Walker further explains this (S. Walker, personal communication, March 3, 2021) "the idea that you have to wait a while before you get the product you want has become sort of anathema to us. I think that because it's become such a convenience based instant gratification culture, which itself is, is antithetical to sustainability, that this kind of instant consumption culture is itself highly problematic, because it's a consumption-based culture. And it's a waste-based culture because of which people buy fashion items on a whim and they throw them away, and they don't value them. If you have to save up for things and wait for things and look forward to things, then you value it more."

In tandem with Walker's (2021) thoughts, the example of the Kashmir Shawl, describes how fashion items produced using traditional techniques are valued not only for what they are in the present, but what they might become – representations of tradition, heirloom, culture and place.

The growth logic is also in conflict with priorities of design that extend to include models that promote the repeated use of clothing because they alter power geometries. Control shifts when multiple contingencies on which the growth logic depends such as fuel, are less in demand due to slower production and prolonged use. Additionally, paying attention to use assumes that fashion will be shaped by heritage processes in rural areas, and on bedroom floors with sewing kits, as much as it is from boardrooms and large factories. It also stipulates that fashion will be conceived as a merged enterprise of supply chains and users, between the demands of today and the more distant needs of the future (Fletcher, 2016). Durability and use in localism are a disruptive technology to the dominant system of fashion production and consumption – they interrupt existing market priorities and value networks. They reflect different patterns of power, with citizen politics that span wider than government and with tacit knowledge gleaned from traditional, and often non-western practices.

Scale

Sociologist Ian Taplin, citing Stengg (2001, p. 72), noted that small and medium sized enterprises "typically ... concentrated in particular regions, [they] ... assume a cultural and social cohesiveness function." Historically, in many regions of Europe, manufacturing relied on extended social, familial connections in the local community to create a core workforce with the required tacit knowledge to facilitate the business. These working communities have traditionally enabled the production of high-quality products in small scales, using few resources through increasing specialization achieved over time.

Fletcher (2016) argues that the principles and practices of localism promote an awareness of scale. Scale conveys a focus on the integrity of resource use for every unit produced. Scale also reflects the right number of units produced for an appropriate satisfaction of the needs of the community. Metaphors of weight are often used in the discourses of unsustainability and overproduction – 'living lightly' and 'treading lightly on earth'. Such metaphors acknowledge that weight is a problem and that the greater amount of physical 'stuff' and processes needed to make something, the greater its impact. They also acknowledge that lightness is a challenge to the growth logic that drives the contemporary fashion sector (Beukers & van Hinte, 2005). A key barrier to designing light in the fashion sector is that 'heaviness' is used as a measure of economic (and de facto societal) success: the more resources and energy used, and the more waste and pollution generated, the more gross domestic product increases. Phenomena that are widely regarded as undermining ecological and social flourishing – ranging from oil spills to domestic break ins, grow the economy, for they set in motion a chain of work to clean up the pollution (in the case of oil spills) and replace locks and process insurance claims (in the event of a burglary).

Localism is a proponent of alternative measures of success akin to the Genuine Progress Indicator that measures well-being rather than an increased production of goods. It recognises that an increased use of resources to produce more goods affects ecosystems and their services which are essential for the flourishing of local communities (Fletcher, 2016).

Negademand

A key aspect of the localism agenda with regard to scale involves the development of systems that use and not just create products more efficiently. While these systems contradict the growth logic of the fashion sector, other industries have been developing ideas for reduced consumption and increased use for well over a decade. Utility companies, for example, have realised that helping customers use energy more efficiently, thereby reducing actual demand for their product, can

be good for business. This makes little sense at face value since an electricity company's profits are linked to selling more units of power. However, these companies realise that if they persuade customers to save energy, then profits increase by having to invest in and build more power stations, substations, electricity cables and pylons to meet growing demand. Here, the supplier and customer both profit from working collaboratively to eliminate wasteful consumption. This idea, termed Negademand (negative demand), is central to small scale production and consumption. Negademand works for corporations because it drives diversification. No longer do electricity companies just sell power, they also do businesses that advise on energy efficiency for example (Fletcher, 2016).

Negademand in this frame is a shift away from selling products to selling efficiency. In localism, Negademand works because it is in the interest of local communities to produce less in order to ensure the flourishing of the ecologies within which they live. Here, they produce and sell less fibres while developing businesses for the repair and maintenance of the fibres. Additionally, as seen in the Kashmir Shawl example, the uniqueness of locally produced goods and their rarity due to small scale production spurs alternative interactions with them, through auctions and museums.

Collaborative Consumption

Other ways to use products more efficiently include collaborative consumption; allowing one item to meet many people's needs. In recent years movements around collaborative consumption have developed in response to the philosophical benefits and economic and social opportunities of sharing goods (Botsman & Rogers, 2010). While many consumers share clothes, borrowing clothes from friends, housemates and parents, it is not a widely adopted model within the fashion sector and goes against the grain of what is espoused by the sector, including ideas like "the perfect fit". localism favours the use of traditional practices of design and consumption. Traditional fashion is often designed for community consumption and sharing. The Indian Saree (Kaur & Agarwal, 2019) and the Japanese Kimono (Milhaupt, 2014), for example, have little or no size variation and are often created for collaborative consumption between women in the community, across generations.

Capabilities Approach

Amartya Sen's (1999) capabilities approach to evaluating well-being shifts the focus away from the goods as commodities to what goods enable human beings to achieve. This, Sen explains, is contingent on functioning, or what individuals do with products, skills, thoughts linked with their personal resources. Ownership of a commodity provides little information about true prosperity; possession does not necessarily equate to satisfaction. For Sen, the value of an item like a garment to the well-being of an individual and beyond that, of ecosystems and communities is dependent on the ability to convert it into worthwhile functionings, into valuable outcomes and ways of being (Sen, 1999). This reflects the scale of consumption advocated for by localism. Small scale consumption emerges from the ethos of converting what one possesses, through who they are and what they do, into a life that they value, and not from maximising consumption (Fletcher, 2016). Capabilities present the idea that satisfying fashion production and consumption is only partly dependent on the market. It is, however, dependent on webs of relationships between garments, philosophies and actions. Small scale consumption in localism is often a consequence of the maintenance and development of these relations. Fashion pieces are relational instead of transactional and meaning is created and found in the connections between the elements (tradition, culture, craft) rather than the production of commodities and their exchange (Walker and Zhan, 2019).

Mindfulness and Agency

The attention paid to each garment created through traditional practices, its maintenance, repair and appreciation offers a model of a changed relationship with consumption (Fletcher, 2016). Brown et al., (2009) study on mindfulness suggests that a capacity for mindfulness (attention to and attention and awareness of internal states and external events in the present moment) results in a shift of focus away from materialistic values like image, toward internal aspirations, such as community involvement and personal development, that don't require large material inputs. This shift reduces the potency of consumerist messages, "because the receptive attention to internal states promoted by mindfulness may facilitate attunement to deeper needs and desires" (Brown et al., 2009, p. 728). Furthermore, "mindfulness may conduce to a greater acceptance of self and one's circumstances: a perception that what one has is sufficient" (Brown et al., 2009, p. 728).

Mindfulness is abundant in traditional and cultural practices of fashion and production that emphasize skills, ideas, attentiveness, community, the scant use of natural resources, therefore creating 'plentitude' (Schor, 2012). Plentitude sketches out an economic vision that addresses issues of macroeconomic balance, and other economic requirements for constructing a small-scale, ecologically 'light' economy that has high productivity, efficiency and high levels of welfare for people (Schor, 2012).

LONG-TERM WELL-BEING: POST-GROWTH ECONOMICS

Almost 50 years ago, Gregory Bateson described the need for a shift away from the 'survival of the fittest' ethos, towards a 'survival of organisms plus environment' approach (Bateson, 2000). This theory put forth the argument that an ecological struggle for survival is taking place in the domain of ideas. It is increasingly acknowledged that the fashion sector today is scarcely populated with ecologically 'good' ideas to evolve its practices away from the dominant growth logic. Furthermore, the economic discourse in the fashion sector is dominated by the idea of continuous growth that does not account for an understanding of what enriches people and the 'safe operating space for humanity' that it needs to operate in, within biophysical limits (Rockström et al., 2009).

Offer (2006) argues that beyond the point at which basic needs are met, a growth in levels of consumption adds little to well-being and even undermines it in certain instances. Additionally, Kasser (2002) suggests that a materialistic mindset works against two hallmarks of psychological health and a high quality of life: closer interpersonal relationships and a connection with others.

The aims of localism reflect a different version of economics, where local economies grow less or differently by developing a more integrated vision of social and material aspects that facilitate wholisitic health (Fletcher, 2016). This shift accounts for human and ecological well-being. This is in tandem with Offer's (2006) suggestion that one pathway to wholistic health is found in the active choice of minimising levels of consumption and pacing them back to levels of 'best satisfaction', to keep the flow of rewards under control. Offer says: "Affluence has liberated people; though more moderate affluence would have sufficed" (2006, p. 357). Wapner (2010) echoes this idea that people can thrive with less and can choose to live within ecological constraints and still be happy.

Localism in its respect for ecological limits to ensure long-term well-being follows the aforementioned economic models. Additionally, through its aims, it advocates for what Jackson (2005) calls a 'double dividend': reducing levels of consumption to benefit individual welfare and collective environmental quality. Local practices expose a "foundational delusion of the consumer society, that getting without giving (beyond monetarily) is possible" (Lifkin, 2010, p. 136). This concept reflects the localism ethos of Care- individuals are part of a bigger relational whole which is acknowledged when we give as well as take.

The ideas that underpin posst-growth economics reflect the goal of defining and describing economic activity through ecological limits. This rejects the view of standard economics – that an economy is an isolated system which is free of ecological constraints. In the 'post-growth' or 'steady-state' economics of localism, "the economy is an open subsystem of a finite and nongrowing ecosystem ... that must itself at some point also become nongrowing" (Daly, 1992, p.vii.). Daly (1992, p. 182) also states that this steady-state economy "can develop qualitatively but does not grow in quantitative scale" and "Not only is [its] quality free to evolve, but its development is positively encouraged" (p. 16). Since the models of consumption and production in localism promote knowledge, time, community, creativity and ethical codes, this is not a limitation of progress, rather it is a precondition for future progress through qualitative improvement (Daly, 1992). This economic model taps into neglected assets, through which wealth is obtained by mobilising and transforming social and ecological economies as much as, if not more than, materials. This alternative emphasis leads to the development of less consumerist forms of fashion engagement (Fletcher, 2016).

As is evidenced by the impacts of the growth logic, without a shift of thinking and practice outside the context of the growth logic, the problem of unsustainability will persist. The promise of localism lies in its emphasis on ecological adaptation (acceptance of natural limits), concentration on cultural growth and quantitative improvement, where production practices find a home within the context of resource scarcity (Fletcher, 2016). Anni Albers notes: "Acceptance of limitations, as a framework rather than as a hindrance, is always proof of a productive mind." (Albers, 2010, p.30).

This aim of long-term well-being in localism, practiced through small-scale production, traditional craft techniques, local materials and markets, has been successful in challenging the food sector and offers a set of responses to the social and ecological impacts of conspicuous consumption and production. It questions the fashion sectors model of psychological obsolescence and the "new" over the making and maintaining of material garments rooted in meaning (Clark, 2008), rekindling traditional experiences of fashion linked to active making within ecological boundaries (Thorpe, 2007). It offers a changed power structure between fashion producers and scales. It encourages a heightened sense of awareness of resource flows, communities and ecosystems. It offers a radical alternative to the mental and economic model of the growth logic that promulgates technological fixes to maintain the indiscriminate extraction of resources for high volume fashion consumption and production.

The idea of long-term well-being in localism is part of a bigger culture of change and transformation in the fashion sector, towards flourishing. A culture concerned with remodeling of meaning in the development and success, and the rethinking of values that underpin dominant systems. It contributes to a foundation for flourishing, of a different economic system with different values in the context of protecting ecological and human well-being.

DIVERSITY

The world in which we live in does not exist in some absolute sense but is just one model of reality, the consequence of one particular set of adapted choices that our lineage made albeit successfully many generations ago. And of course, we all share the same adaptive imperative, we are all born, we all bring our children to world, we go through initiation rites, we have to deal with inexplicable separation of death so it shouldn't surprise us that we all sing, we all dance, we all have art. But what is interesting is the unique cadence of the song, the rhythm of the dance in every culture. Together the myriad cultures of the world make up a web of spiritual life and culture life that envelops the planet and that is as important to the well-being of the planet as indeed is the biological web of life that you know as the biosphere. And you may think of this cultural web of live as being an ethnosphere. You may define the ethnosphere as being the sum total of all thoughts and dreams, myths, ideas and inspirations, intuitions brought into being by the human imagination since the dawn of consciousness.

– Wade Davis, Dreams from Endangered Cultures, 2003

Flourishing not only implies diversity, it demands it. Flourishing approaches are linked with the specifics of place, region, climate and culture. Developments in flourishing are the kind that are rooted in, and which grow from these varied particularities (Frankl, 1985). This is in conflict with the 'globalization' of corporations, communications, and manufacturing and the consequent homogenization of culture and products (Walker, 2006).

Eric Hobsbawm (Campbell, 2001) highlights that contemporary manifestations of production and consumption have three overwhelmingly unsustainable features: The first is the combination of globalisation and market capitalism that limits the ability of the state. With regard to sustainable priorities, it limits the government's ability to serve as a moderator of corporate goals and the common good. The second is its conversion of citizens (with rights and responsibilities) into consumers who only have rights. And third, it enables the concentration of wealth and the consequent burgeoning social inequalities (Campbell, 2001).

Walker (2006) argues that the overall effect of growing globalisation appears to be counter-productive to flourishing and the assumption of mass production for global markets as the dominant model of production "can and should be challenged" (p. 115). Additionally, designs can be developed to be adaptable to place, create good work on the local level, use local resources, and express local cultures, norms and their intrinsic diversity (Walker, 2006).

DIVERSITY: DECENTERING AND INTERDEPENDENCY AND RESILIENCE

Decentering

In the fashion sector, the dominant focus is the economic growth logic. This constitutes a single focus of attention and reinforces human-centred priorities of a few over the needs and at the cost of all others. This logic also governs cycles of production and consumption in most sectors and is 'deeply intertwined' with a Western hegemony, including human exceptionalism, individualism, patriarchy and a focus on quantitative science (Fletcher & Tham, 2019). It also represents a homogeneous or 'centered' system of monopolies created by multinational corporations. By contrast, the aims of localism (of shaping a region's activity by what is intriguing and dynamic in a place) explicitly promote plurality and multiple centres of attention and action. These include non-human species, nature, users, communities, non-Western perspectives and the merging of disciplines coming together with citizens, governance, industry (Escobar, 2018).

This pluralism, when applied to the fashion sector enables a shift in perspective of fashion from its commercial purpose to other foci: what it can mean, what it can be, and what it can do (Escobar, 2018). This is a form of decentering that involves new ideas for the production and consumption of fashion, driven by diverse perspectives, including feminist, indigenous and nature-based perspectives (Fletcher and Tham, 2019; Tuhiwai Smith, 1997). Thus, the emancipatory nature of decentering lies in setting fashion free from its dominant association as a vehicle for consumerist ideals while creating a space in fashion that is open to voices marginalized by the dominant narrative of fashion. This creates a platform for envisioning diverse fashion futures, while asking: What might happen if we place fashion outside its contemporary context and outside the market? In doing so, it releases fashion from the bottleneck sustainability goals in an uncompromising sector by exploring opportunities for fashion within a decentered and decolonized context (Fletcher, 2016).

Decentering through the acknowledgement of different perspectives offers new models and practices of interacting with fashion while also allowing for diverse knowledge structures and ways of knowing. Through this creation of a decolonized landscape, new relationships between fashion and nature can be fostered, where human needs are not addressed at the expense of other life forms (Plumwood, 2013). In the fashion context, this involves building emotional and experiential closeness that highlights fashion as a part of nature that is tied to specific places and contexts (Fletcher, 2019).

While fashion industry representatives and policy makers have discoursed environmental and social challenges since the early 1990s, attention to governance structures and decision-making processes, a fundament for achieving change, has been missing (Fletcher and Tham, 2019). Professor Stuart Walker explains this (S. Walker, personal communication, March 2, 2021) "Localism means local decision making and decentralisation of political decision making to the local level, so that people in a particular place or region or city, are involved in their own design and decision making, which suits a place better than one size-fits-everywhere model, because different places have different problems and different socio-economic issues." Here, it is especially important to acknowledge that the fashion sector and the systems that govern it are manmade. In such human-made systems, diversity characterizes thriving while creating conditions for resilience (Walker & Salt, 2012). A decentered landscape proposes pathways to governance that represent the evolving and varied needs of communities within which they exist while placing a greater diversity of stakeholders at decision-making tables (Ostrom, 1999). In the fashion context, this democratises the practices of fashion production and consumption while diffusing the holding of power of 'centralised' multinational corporations in global and local networks. It introduces governance processes that evolve commitment strategies in tandem with the challenges of the times; that lay down webs of connections and moments of understanding based on different types of fashion experience. In doing so, decentered governance promotes resilience in responding to critical challenges, such as climate change.

As opposed to the dominant system which generates a cycle of homogeneity and monopolies, decentering in localism enables a virtuous cycle: the celebration of multiple centers creates more confidence for more voices, leading to more possibilities (Fletcher and Tham, 2019).

Interdependency

The value of decentering or multiple centres is inextricably linked to interdependency. While decentering reflects the valuing of a broad and diverse ecosystem, interdependency is concerned with the quality of the interactions and relationships between the human and non-human actors within this ecosystem (de la Bellacasa, 2017). Human flourishing is

reliant on planetary health, and human beings are an intrinsic part of planet Earth. The interdependency of human systems with ecosystems, their resources and services render production and consumption real and complex. This interdependency underscores the way in which human systems, often designed with little concern for, or understanding of, the whole, combine in cumulative, layered and wholistic impacts that influence larger systems.

Causality in complex systems is not linear, and a small intervention can have a disproportionately large impact; events in one part of the system can create ripple effects across the entire system (Jones, 2014). Fashion consumption and production practices have effects across systems in the world and long into the future, and resource depletion, biodiversity loss and climate change affect each other, as well as all the vital ecosystem services and people on earth (Rockström et al., 2009).

Resilience

Complex systems theory (Jones, 2014; Rihani, 2002; Whiteney et al., 2015; Mitchell & Newman, 2002) suggests that for adaptive systems such as socio-technical systems, the ability to withstand the test of time in the face macroenvironmental disruptions (that is their tolerance of breakdown and their adaptation capacity) results from a particular system architecture and internal dynamics: resilient systems may be characterized by diversity, feedbacks and continuous experimentation; they are made up of very diverse sub-systems and are a platform on which new and alternative solutions may be formed (Manzini & Till , 2015). This facilitates resilience in the way that even when one or more of the sub-systems break down, and one or more solutions (strategies for a desired result) are rendered impracticable, the whole system does not collapse; other solutions (ways to achieve the desired result) are still available, and due to the existing feedbacks, the system can learn from the experience (Manzini & Till, 2015). The large mainstream players the 21st century fashion sector promote large production plants, hierarchical system architectures, process simplification and linearity and standardization. In the context of the growth logic within which they operate, resilience is interpreted as the reinforcement of the socio-economic status quo (Manzini & Till, 2015). The result is the diminution of biological, socio-technical and socio-cultural diversity and "a consequent increase in the overall fragility of the system (Manzini & Till, 2015, p. 9). On the other hand, small and connected actors, in agile, flexible, context-related and highly diverse systems make the viability of

socio-cultural, socio-technical and socio-economic systems visible and tangible. Here exists the paradox: to make societies more resilient, a shift from dominant ways of thinking and doing must occur. Put differently, against the backdrop of dominant models in the fashion sector, resilience is a disruptive concept "one that calls for radical transformations" (Manzini & Till, 2015, p. 10).

DIVERSITY: HUMAN-SCALE DEVELOPMENT AND DIVERSITY ECONOMICS

Human Scale Development

On a political level, the ecological and human impacts of current systems become acute, owing to the inadequacy of existing representative political mechanisms in coping with the actions of growth logic, the increasing centralisation and internationalisation of political decisions; and the lack of control of the citizens over systems that govern production and consumption. Additionally, the increase in technological control over Earth's systems and the lack of deep-rooted democratic values also contributes to the configuration of systems that do not have an ethical foundation that values all its human and non-human actors (Max-Neef et al., 1989). At an economic level, the system of the growth logic involves the internationalization of the economy, the concentration of financial capital and the marginalisation of human scale development.

Human scale development "is focused and based on the satisfaction of fundamental human needs, on the generation of growing levels of self-reliance, and on the construction of organic articulations of people with nature and technology, of global processes with local activity, of the personal with the social, of planning with autonomy, and of civil society with the state" (Max-Neef, et al., 1990, p. 12).

Max-Neef et al., (1980) explain that human needs, self-reliance and articulations are the pillars that support Human Scale Development. This model is sustained by actors through a respect for the diversity and autonomy of the spaces in which they act. Furthermore, they argue that there exists no possibility for the active participation of people in large systems that are hierarchically organised, with decision flows from the top down to the bottom. Human Scale Development assumes a direct and participatory democracy that nurtures conditions for the flow of creative solutions from the bottom upwards. Max-Neef et al., (1989, p. 15) state "Processes which nurture diversity and increase social participation and control over the environment are decisive in the articulation of projects to expand national autonomy and distribute the fruits of economic development more equitably." This model prevents the increasing atomization of social movements, cultural identities and communities and rejects the homogenization of identities, strategies and social demands in global proposals. Additionally, it requires governing mechanisms to reconcile participation with heterogeneity while fostering active forms of representation, and greater transparency (Max-Neef et al., 1989). This model echoes the principles of localism which advocate for the inclusion of diverse human and non-human actors in solving ecological and societal challenges through bottom-up innovations and governance which are specific to local needs, places, cultures, traditions, knowledges and practices.

Diversity Economics

The reaction to the dominance of mass production and the economic growth model emerged in the 1970's with a vision for shaping an ethical model of economics that encouraged cooperation, education and the well-being of all people (Hirscher et al., 2019). In Socialising Value Creation through Practices of Making Clothing Differently: A Case Study of a Makershop with Diverse Locals, Hirscher et al. (2019), describe the emergence of a new craft economy.

Schumacher (1973) ideas of 'small is beautiful' and 'economics as if people mattered' highlighted the importance of maintaining flows of people, resources and capital in a local economy. While various economic ideas emerged after Schumacher, it was the financial crisis of 2008 that drove a revival of alternatives to neo-liberal global economies and concepts on 'de-growth' (Latouche, 2011) and 'no-growth' (Jackson, 2009).

Hirscher et al., (2019), further explain that these 'diverse economies', shifted the focus from corporations to people at the centre of modes of financial exchange along with other types of value, including time and skill (Arvidsson et al., 2008). Additionally, this paved the way for the 'ethical economy' (Arvidsson, 2009), in which, unlike previous economic models, outputs are not free; or beyond value, but follow a value logic where self-expression is a driver and community contribution is the primary measure of value (Arvidsson, 2008).

These ideas coupled with conceptual economic frameworks like the 'circular economy' model (Ellen MacArthur Foundation, 2021), contributed to the proliferation of 'a new craft economy' (Micelli, 2011). Hirscher et al., (2019) go on to explain how this is not perceived as a "nostalgic return to anachronistic craftsmanship" (p. 5), instead it is an opportunity to develop "resilient and redistributed micro-productions". This movement echoes a diverse and decentered economic model advocated for by localism. In the

fashion sector, it represents an increased appreciation for the quality and origin of clothes (Vuletich, 2009; Neuberg, 2010) and is linked to artisanship and the development of a distributed economy (Stewart & Tooze, 2015). When speaking of this model in contrast to that of the fashion sector, Professor Walker says (S. Walker, personal communication, March 3, 2021) "the local product is based on everybody earning a decent living. It's not expensive, because the knitter or the weaver has to make a reasonable living, not an extravagant living. The farmer who breeds the sheep has to make a decent reasonable living, the shearer who shears the sheep, the wool processor, they all have to make a living. Whereas if that's done by some mechanical system on the other side of the world using really polluting chemicals, or using exploitative labour, it means you can produce this stuff really, really cheaply. But there's, there is a cost to it. And it's an environmental cost and a social cost. But those costs are not in the price. At a local level, if everybody's earning a decent living, and if things are done in an environmentally responsible way, that cost of that garment, while it might be much higher, is actually reflecting the true cost of that garment. So that's full cost pricing, whereas the fast fashion is not full cost pricing."

DIVERSITY: PLACE-SPECIFIC KNOWLEDGE AND TRADITIONAL KNOWLEDGE

According to Fletcher (2013), local knowledge can bring a wealth of new perspectives and practical solutions to environmental and social problems. A local understanding of a place rarely contributes to business agendas, yet it has the potential to generate solutions, not only for a specific area but for millions of people. Anil Gupta of the Indian Institute of Management engages local knowledge and innovations by walking between rural communities. These 'journeys of discovery' involve Gupta and his colleagues walking through rural India on a 'Shodh Yatra' – a quest for new knowledge and local creativity at its source (Gupta, 2006). Gupta explains Western misconceptions with regard to local knowledge "For so long, we have assumed that people who are poor economically are also poor intellectually, culturally, institutionally, ethically. Nothing could be farther from the truth." (Walker, 2013). Gupta believes that in the global North and especially in societies that equate economic growth with progress, there exists a view of the rural poor as consumers of aid and knowledge rather than providers of innovations (Walker, 2013). In a presentation Gupta gave at Queens University in Canada, Gupta explained that the basic need to sustain community, culture, economy, environment through adversity gives rise to multifarious innovations. Gupta illustrates this through an example of a man from northern India, who found a way to prevent fungus and bacteria from damaging the 30-year-old walls of his house – through a simple mixture of locally available jute fibre, clay and other straws. Gupta further explains that local innovations such as the aforementioned example reflect frugality, multi-functionality, diversity and resilience (Walker, 2013). The concepts and practices outlined by Gupta reflect local knowledge that typically uses few local materials but an abundance of experience and ingenuity. It also echoes how local practices that emerge from local knowledge often promote ease of making and repair, energy efficiency and production of little waste since the effects of not doing so ultimately limit the long-term well-being of local ecosystems and local communities.

According to Zhan and Walker (2019), traditional crafts offer insights for positive transformations in the context of flourishing, because they represent a manifestation of communal and cultural knowledge, and practices and values grounded in context and place. Additionally, craft can be recognised and valued as a way of thinking and theory building in the way that it converts tacit knowledge into explicit or formal knowledge (Niedderer & Townsend, 2014).

Zhan and Walker (2019) also put forth the concept of the ability of craft thinking and knowledge to trigger new systems of knowledge. They explain that craft may be recognised not just as a way of tacit making but also as a form of complex thinking. Craft is often regarded as an informal and non-intellectual type of knowledge due to its non-verbality, incommunicability and being rooted in labour. However, this is not all that craft is. Many craftspeople, artists and scholars regard craft knowledge as an aggregate of many ways of thinking. Zhan and Walker (2019) propose two key elements of craft that can contribute to the creation of new ways of thinking and knowledge: The first is craft's "creative and subversive" nature and the second is its "ecological, ethical and authentic connotations" that are rooted in local traditional culture (p. 16). Furthermore, they argue that craft involves value judgements about materials and processes; moral norms that guide making and related decisions; cultural and spiritual references to tradition and context. These characteristics echo Abson et al. (2017, p. 26) argument that the "explicit inclusion of values, norms and context characteristics into the research process to produce 'socially robust' knowledge."

Culturally embedded knowledge systems encouraged by localism offer varying ideas for change towards flourishing that are often vastly different from those adopted by the fashion sector to date. As seen in the example presented by Gupta, they privilege sensitivity to people's lived experience rather than industrial, commercial or economic ideas about what sustainability is, or should be. Not only are these systems and the practices that emerge from them variable and slow to enact; falling outside of the growth logic, and hence the fashion sector as we know it (which instead prefers standardized, global products that are quick to produce); they also confront views on the intellectual scope of the "sustainability challenge" and industry and responses to it (where it is often framed as a production-related issue to be solved by industry, technology efficiency techniques) (Fletcher, 2016). When speaking of place specific measures of progress that are vastly different from the growth logic, Professor Walker (S. Walker, personal communication, March 3, 2021) explains, "we need measures beyond the purely economic. One of the most comprehensive examples is Bhutan's happiness index because it includes things like creativity, spirituality, artisan ship and craft. It recognises the importance to your own well-being of making and craft and artisanal things, doing things with your hands. But it also builds

in things like religion and spirituality. So, things have a deeper meaning. It's not just a product to sell, and, and throw away, because that is a kind of profligate attitude which goes against a lot of traditional spiritual and religious teaching. And if people were a bit more conscious of those teachings, whether it's Buddhism, or Christianity, or Hinduism, or whatever, they are not about being wasteful and profligate. It's about not destroying the environment or exploiting other people. So, I mean, those teachings are very important in telling us how we should live in the world, how we can live effectively together in the world. There's a lot to learn from those teachings, I think, which, we haven't been paying much attention to, particularly in the West."

Walker (2020, p. 160) while discoursing traditional knowledge, explains that "over the course of thousands of years, people living in different places with different resources and ecosystems learned to live within the limits of their environment – without substantial want or harm." Their ways of knowing are considerably different from contemporary Western knowledge systems with technical terminologies and limited boundaries (Walker, 2020). Traditional Knowledge (TK), Indigenous Knowledge (IK), Traditional Ecological Knowledge (TEK) and Traditional Ecological Knowledge and Wisdom (TEKW) are types of knowledge that are typically held within communities and passed down generations (Park, 2007; Turner et al., 2000). While the word 'traditional' is used to describe these forms of knowledge, they are dynamic, not static and are connected to "long-term understandings of human activity and environmental change" (Walker, 2020, p. 160). Holders of traditional knowledge adapt their responses, practices and ethical and moral teachings in tandem with prevailing conditions (Pierotti & Wildcat, 2000). Walker (2020) presents an example of these adaptations to change: Youyou Tu, a scientist at The China Academy of Traditional Chinese medicine studied time-honored herbal remedies on malaria, some of which dated back over 2000 years. Based on this traditional knowledge, her work in malaria prevention led to the survival and improved health of millions of people, and she was awarded the Nobel Prize for Physiology (Youyou, 2015).

Traditional knowledge is predominantly heuristic: It is not based on hypotheses, formulae or abstract theories, instead, it is rooted in lived experiences and practical applications and Walker (2020, p. 16) says that "it is deeply anchored in understandings of a particular place or region." Moreover, it is wholistic; it acknowledges the interrelatedness and interdependency of all actors in the environment (Turner et al., 2000). Most often, it is learned by observing and learning from others, and through stories, proverbs, songs and dance which are enacted repeatedly through ceremonial ritual. Ceremony enables traditional knowledge to establish relevance to the present as it "ruptures the division between the historical and the contemporary" (Hopkins, 2019, p. 35). Through these means, traditional knowledge becomes a part of everyday lives, practices and beliefs.

Traditional Ecological Knowledge includes an acute awareness of plant and animal life, ecological relations and environmental changes (Castree et al., 2013) as well as values and worldviews about nature and people (Vivanco, 2018). Everything is considered connected, with little separation between facts, values and spiritual beliefs, Walker (2020) presents another example: In northern Australia, indigenous peoples have long understood the behaviour of kites and falcons, which they call 'firehawks'. During bushfires, these birds spread the flames through burning sticks to flush out insects and small animals (their prey). The knowledge of these behaviours is sustained through its incorporation into belief systems, folk stories and ceremonial practices (Walker, 2020). This emphasizes how spiritual and traditional practices and the beliefs on which they rest, are rooted in, and inextricably linked to practical knowledge about the world and living in it. They are not merely primitive attempts to understand natural phenomena as is frequently asserted by modern scientific thought. Instead, traditional knowledge is "a complex, interrelated, systems-based way of understanding the world. Often tacit in nature, it informs day-to-day life, nourishes artistic expression and enriches spiritual beliefs and practices." (Walker, 2020, p.160). These knowledge systems and the wholistic worldviews they foster are of "fundamental importance in the management of local resources, in the husbanding of the world's biodiversity, and in providing locally valid models for sustainable living." (Turner et al, 2000, p. 1275).

In tandem with Walker's (2021) ideas, Fletcher and Tham (2019), explain that traditionally embedded ways of knowing their practices hold immense potential for the enabling of human and ecological flourishing in the fashion sector. They offer an expanded, diverse view of the practicalities and realities of the limits and challenges of local ecosystems, which exist outside the boundaries within which large multinational fashion players (manufacturers, designers and retailers) currently operate. Additionally, they outline a model for a new type of fashion production and consumption that is based on cultural, traditional and religious values instead of profit and sales growth, and on increasing the quality of fashion experience rather than its quantitative scale.

DIVERSITY: DESIGN

Aesthetics

Stuart Walker (1997, p. 179) describes the link between aesthetics and the production system:

"Designers may be hesitant to acknowledge it, but the aesthetics of a product are, to a very great extent, a result of the system which produced it. The definition of form, detailing of shape and surface are both constrained and largely determined by the overall production system. Therefore, we should not be attempting to find a new style which we may characterize as some form of 'sustainable aesthetic'. Rather we should be developing products and restructuring our manufacturing systems, so they are conceptually and pragmatically aligned with sustainable practices. As we do so, new types of products will emerge whose aesthetics go deeper than shape and surface and which start to embody ethics and to reflect these new sensitivities and understandings."

The pull of globalization and its consequent standardization and homogenization erodes, rather than builds fashions cultural variety: the styling of garments generally reflects the same Western aesthetic irrespective of where they are made or sold. Fletcher (2016) argues that designers are complicit in this and take inspiration from one region and have it copied, and mass produced in the cheapest location. This reduces the cultural elements to mere surface ornaments while diminishing the viability and traditions of locality, thereby accelerating the standardization of markets and producers.

In stark contrast to this, aesthetic diversity seeks to foster flourishing. Instead of a focus on sourcing the 'lowest possible price at all costs' and applying exotic ornament to fashion items (such as print or embellishment), aesthetic diversity in localism involves sensitivity to place and requires a shift away from commerce and towards a cultural lens. This involves knowledge of local traditions, mythologies and symbolisms and an understanding of the meaning of color, silhouette, ornament and pattern from local and cultural perspectives. This approach draws on locally available materials and skills which contribute an innate cultural knowledge to the product (Fletcher & Grose, 2012).

Aesthetic diversity through local design and small-scale local production is a marked difference from the industrial norm. It is in direct conflict with the impersonal and anonymous transactions associated with large-scale commercial trade in the fashion sector, Instead, it favors the 'human touch' where knowledge of the effects of trade on the producer, region and community and their needs is integral to decisions made in the designing and production of products. Thus, by nature, local design is rich and diverse, it emerges through the skills and resources of a particular region, its histories, the attitudes and needs of its people, their traditions, social structures and markets (Fletcher & Grose, 2012).

Local artisans bring all these elements to the fore in an immediate and vital way. Local artefacts display and aesthetic diversity due to the social autonomy of the artisan group, where local ornament, materials, techniques and skills are integral to the design (Dogan & Walker, 2008). This is in contrast to products that have been made because of the cheap labor of a region which look like they might have been made anywhere (Fletcher & Grose, 2012).

Materials

Materials play a vital role in localism's diversity agenda. They reflect a tangible link between a product and a region, its plant species or animal breeds. In doing so, they begin in a small way to counteract the abstract 'flow of goods' that dominates globalized production systems (Fletcher & Grose, 2012).

As in the food sector, local small scale farmers growing fibre struggle to compete on price with large scale players in the sector. In the United States, the number of cotton farms decreased from 43,000 in 1987 to 25,000 in 2002, while the average cotton farm doubled in size during the same period (Freese, 2009). Diversity in localism counters this tendency through the encouragement of crop niches that have heritage, regional, organic and 'predator-friendly' properties that encourage diversification in farming, respect natural ecosystems and often command higher value in local markets (Fletcher & Grose, 2012).

Design and Adaptation

Jeremy Till in his seminal book Architecture Depends (2009), argues for the inclusion of 'slack space' within design in order to accommodate macroenvironmental changes and disruptions while allowing difference and ambiguity to thrive. He champions design that is "conceptually unfinished to allow time to take its course." (p. 108) and for the relinquishing of some control over design outcomes. He suggests that 'slack spaces' are "open to changing use – not literal flexibility ... but in terms of providing a frame for life to unfold within. It is space that something will happen in, but exactly what that something might be is not determinedly programmed. Slack space operates as a

robust background rather than a refined foreground ... quietly setting a social scene, not noisily constructing a visual scenography ... If slack space is to be seen in time, it has to take what time throws at it. Welcoming life into its interstices and not expelling it from shiny surfaces." (Till, 2009, p. 134).

Diversity advocates for designing with unknown futures to invoke new design practices geared towards collaboratively amplifying resilience. Describing a more literal, material version of slack space as 'loose fit', Stewart Brand (1995) encourages design for adaptive use. Brand describes this as a physical change of the building over time, with maintenance playing a key role. He explains how maintenance is learning, through the fostering of informal, causal, astute and applied know-how derived from experience of a particular place (Brand, 1995). Brand argues that this tacit knowledge can be the foundation of design, finding form through diverse, small-scale projects, attuned to contradictions in order to extend a building's life. He notes that, "Buildings do better over time when they are closely held and closely cared for." (Brand, 1995, p. 86), revealing how on-going use is active and a tending directed by diverse elements, including feeling.

In tandem with Brand's (1994) ideas, Christopher Alexander et al., (1977) present the idea that designed things are unlikely to come alive unless they are 'made' by all those involved with them and are communicated through a common language which is also alive. Here a shared framework is offered, but within it exists the flexibility to adapt to needs and local conditions. The 'pattern language' offered contrasts design languages of dominant models in the fashion sector that "are so brutal, and so fragmented ... not based on human, or natural consideration." (Alexander et al., 1977, p. xvi.).

In doing so, pattern language offers a shared means of communication, to discourse in wholistic terms, the diverse needs of the people.

DIVERSITY: MODELS OF EMPLOYMENT

While consumers often pay little attention to the labour practices of subcontracted factories that produce the clothes they wear, the “Made In…” labels represent stories of individuals—often women—who cut, stitch, and glue the shoes, shirts, and pants that are peddled across the globe in high volumes by players in the fashion sector.

Despite the promise of the economic growth model, poverty and inequality are ripe across geographies, especially in the global South. The financial crisis of 2008, and most recently the COVID-19 pandemic, have brought to the fore the inequity of the growth logic dependent model dominant in the fashion sector. Factory building collapses and fires are not the only problems in the apparel manufacturing world. In the $2.4 trillion garment industry, which employs millions of workers worldwide, labour rights abuses are rife. In countries around the world, factory owners and managers often fire pregnant workers or deny maternity leave; retaliate against workers who join or form unions; force workers to do overtime work or risk losing their job; and turn a blind eye when male managers or workers sexually harass female workers (Human Rights Watch, 2020).

Localizing economic activity is thought to provide some of the most wholistic answers to the limitation of human flourishing caused by the growth logic (Henderson & Hursh 2014, 2001; Morris,1996; Shuman, 2000). By localizing production and consumption to a local level, communities are able to make decisions on what practices suit their needs without placing trust in unaccountable corporations. Mazzarella et al., (2017) argue that textile artisan communities can contribute to providing social engagement while making local economies flourish.

In 1971, a small group of migrant women working in the textile sector in Ahmedabad, India sought help to secure decent wages. Like most subcontracted manufacturing facilities today, they were paid per job at exploitative wages. Against the backdrop of the challenges they faced, the Self-Employed Women’s Association (SEWA) – an association of poor, self-employed women workers from the informal economy was conceptualized. By 1981, the textile mills of Ahmedabad were closing down at a steady pace, and the textile industry was changing rapidly, leaving SEWA to cope with thousands of unemployed workers. SEWA decided to charter a new path, away from the control of standardized employment models that lacked resilience. The women of SEWA formed new relationships, and innovative models of work that best suited their needs. Their approach is collaborative and unconventional and largely comprises local cooperative action. The result is a democratic, inclusive, responsive, dynamic and self-sustaining organization with its own bank to meet the needs of local women (SEWA, 2021).

DIVERSITY: MODES OF ENGAGEMENT

Authenticity

For most consumers in the global North, and for an increasingly large number in the global South, everyday relationships with clothes lack engagement. This is in part, the result of formulaic fashion on the high street that is virtually indistinguishable across different brands (Fletcher, 2016).

While formula fashion and formula consumer experiences are easy to manufacture, their effects typically disengage consumers, who stop valuing the products they buy. Traditionally, handmade artisanal objects are associated with uniqueness and small scale or limited production. These elements serve to protect the objects' sense of origin and authenticity. The origin of the object is seen as the expression of cultural production in a particular place and time, for example, the handmade lace of the Venetian lagoons or the silk sarees of Banaras. Additionally, diversity within these expressions may be the result of collective storytelling and multiple narratives, beyond a single artist or craftsperson. The object serves to express the values, traditions, and traditional tacit knowledge of the group or community that produces it (Padovani & Whittaker, 2017).

Amit Basole (2015) discusses the centuries-old embroidered and woven silk saree production in the Indian city of Banaras. These handwoven silk sarees are prized because their designs descend from the sophisticated and complex patterns of the Mughal period. The weaver's craft mixes scrolling patterns with brocade weave that is heavy with gold, silver, and multicolored wefts. This practical knowledge, or textile know-how, reflects authenticity (Basole, 2015).

In contrast to the obsolescence of fashion items found on the high street that lack authenticity and are easily discarded, the aforementioned examples are cherished through multiple uses, over decades, sometimes becoming heirlooms and sometimes appearing in auctions or museum collections. The diversity of the local knowledge systems that contribute to this authenticity and uniqueness make them difficult to replicate or replace.

Active Fashion

Another effect of formulaic fashion is its pacifying effect on consumers. The products are presented as 'ready-made' with an almost untouchable status (Fletcher, 2016). This effect dissuades consumers from actively engaging with them: it makes them wary of cutting a collar or dyeing the garment a different color. These closed products form one-way flows of information from the designer to the consumer. Consequently, users follow the trends prescribed by the industry while becoming increasingly distanced from the creative practices surrounding their clothes. This severing of ties serves the growth logic while marking a conspicuous cultural shift. As recently as a few decades ago, and for centuries before that, fashion pieces were routinely made and maintained by those who used them, yet increasingly few people have those skills today. Furthermore, von Busch (2008) explains that ready-made garments seem to offer a promise of something better than what consumers can make themselves and consumers begin to believe that they can't create fashion themselves. This plays well into the fashion sector's power structures. The industry controls and monopolises the practice of designing and making clothes, resulting in consumers having little idea how, from what and by whom these goods are made. This creates the myth of a genius designer, who synthesizes ideas, concepts and fabrics into inviolable pieces. The system eviscerates active engagement with clothing and, from the disposition of passivity, the only choice available seems to be to consume (Fletcher, 2016).

Diversity of engagement in localism deposes passivity and indifference. It offers a rebalancing of notions about who holds power and influence in the sector while presenting the idea that fashion may be produced by multifarious means. This shift is implicit in a shift from an agenda of quantity to one of quality. These ideas are not new, in the 1970s the cultural critic Ivan Illich (Illich, 1973, p. 57) wrote:

"I believe that a desirable future depends on our deliberately choosing a life of action over a life of consumption, on our engendering of a lifestyle which will enable us to be spontaneous, independent, yet related to each other, rather than maintaining a lifestyle which only allows to make and unmake, produce and consume – a style of life which is merely a way station on the road to the depletion and pollution of the environment. The future depends more upon our choice of institutions which support a life of action than are developing new ideologies and technologies."

Illrich's ideas of 'a life of action' have consequential implications for flourishing and the relationships people have with fashion and textiles today. They recast people as competent individuals who are potential actors in the production of their clothes instead of as mere consumers.

THE CHALLENGES OF LOCALISM

The limitations of the ideas discussed in this sector chiefly rest on the effects of idiosyncratic consumer behaviour and structures of consumer culture which influence the success of the outlined strategies to shape consumption patterns.

Revising the scale of activity in the fashion sector and the development of local ecosystems of production and consumption is not without complex implications. While a move towards sourcing clothing locally has multifarious benefits, it inevitably undermines job opportunities elsewhere. Studies indicate that moving textile production back to the UK from Asia, for example, would put many people out of work in the short-term.

Furthermore, in order to make available a variety of local fibres, a set of practical issues need to be overcome. So as to process fibre into garments, a suitable local industry has to be in place, including processors able to work with small volumes (for local fibre is rarely large-scale), and facilities able to convert fibre to yarn, fabric and final garments. These are substantial challenges, since local textile infrastructure in industrialized nations is limited. These economies have driven production away from high-cost countries; and even specialist processors now struggle to stay in business. Moreover, a supply of local fibre requires consumers who will create demand to support its production and who are willing to tailor their fashion consumption to locally available products. In Northern Europe this would mean garments made from wool, bast fibres and recycled materials processed by an increasingly small network of specialist companies with production facilities flexible enough to deal with small volumes. And in northern California, it would mean a combination of wool, alpaca and some cotton, spun by hand, since there are few, if any industrial cotton spinners in the state. Garment construction in both regions would, by necessity, be simple, since labour costs are high relative to the global average. Designing locally demands creative thinking on many levels for it to work in practice.

TOWARDS NEW MINDSETS

The transition to localism in the fashion sector requires learning on an immense scale. This learning is concerned with both professional and personal life remits and includes new habits of mind and new behavioural patterns. The significant challenge area for producers and consumers of fashion alike, is learning to cope with the loss of past lifestyles and worldviews and unlearning ways of relating, and thinking about the world (Macy and Johnstone, 2012). Many of which are so deep rooted in our thoughts and actions that often we are unaware of them.

According to Fletcher and Tham (2019), the core skills that need to be cultivated to encourage learning and unlearning are: confidence, creativity, community and ecological literacy. Fletcher and Tham (2019) argue that it is not the people most engaged with fashion who have the biggest impact on the environment; they have the confidence and creativity to play with fashion products and to reuse existing fashion resources in new configurations. Instead, it is those who have a mild interest in fashion and perhaps feel pressured to conform to constantly changing trends that have the most deleterious impact. This group is the true victim of psychological obsolescence and is compelled to consume to convey their identity. Youths who have a strong community grounding, often display higher resilience in the face of pressure to consume (Collins, 2015). People who are style, rather than fashion guided in their clothing choices, display higher levels of wellbeing and less materialistic values (Gwozdz et al., 2017).

Unlearning and learning localism is highly political. It claims that each citizen has the ability and responsibility to create flourishing. It counters accepted roles of the learned and learner in favour of co-learning (learning together). In consideration of the necessary speed and scale of learning, this discourse aims to allow for diverse learning moments and trajectories. It recogises that of those with the most to share in localism terms, are often those who are low on a modernist, academic and growth-centric knowledge hierarchy: makers and repairers for instance, along with farmers, indigenous peoples, people developing ingenuity with resources when living on very low incomes, and non-human species. Such knowledge is gleaned through life-long learning or cradle-to- cradle learning (Tham, 2015) and is shared and generated across generations as well as across communities.

03 BRIDGING THE GAP

INTRODUCTION

Clothing links us physically and metaphorically to the world. We can use it to locate ourselves, develop new ways of seeing, comprehending scales of production from seed to product ... clothing is a material pin in our relational map.

– Earley & Harvey, Elastic Learning Tools, 2015

Billions of people across the globe reflect their identity through their visible and undercover fashion practices, which can be playful, political and personal. The importance of fashion is apparent in everyday activities in cities, towns, fields and farms and is profiled in newspapers, through social media, in "fashion capitals", and is raved about as an economic generator by governments the world over (Williams, 2015). Fashion also finds roots at the edges of our vision of it, in informal local practices in rural communities, "generating emergent properties giving place and form to cultures and societies." (Williams, 2015, pg. 93).

Looking at the concepts presented in the previous chapters, the first impression is one of a constellation of ideas that are open to different interpretations, and in turn, capable of generating new ideas and interpretations. At the same time, it seems, they share a common tone and a meta narrative: Fashion is not fixed. It is an interconnected system of individuals, communities, resources and places. The relationships, actions and endeavors that are mediated through the creation, wearing and caring of fashion pieces form narratives of values. Enabling human and ecological flourishing in the fashion sector involves fostering an economy of care: it is not just about the right way to use resources but also the right way to value them. Alison Prendiville (Prendiville, 2015, p. 55) says "human actions of collaboration, generosity, care and empathy, must be understood in terms of their social and material configurations within a location and how they are formed over time."

David Orr says (Williams, 2015, p. 95), "...think of yourselves first as place makers, not merely form makers. The difference is crucial. Form making puts a premium on artistry and sometimes merely fashion. It is mostly indifferent to human and ecological costs incurred elsewhere. The first rule of place making, ... is to honor and preserve other places, however remote in space and culture. When you become accomplished designers, of course, you will have mastered the integration of both making places and making them beautiful."

This reflects the contrast between the dominant experiences of fashion production and consumption (form making) with the ideas of localism (place making). Using a textile metaphor, localism weaves the needs of human and non-human actors together as the warp and weft of a flourishing paradigm. Earley and Harvey (2015, p. 73) say "Resilient-textiles-systems use localised care and repair paradigms with adaptable frameworks, mediating global traversing of textiles, using a bricolage of tools, techniques and agents." Their ideas are in tandem with the practices linked to localism that enable human and ecological flourishing in the fashion sector.

This chapter explores, through ideas of change, leverage, and throughcase studues, how the gap between dominant models of fashion production and consumption and the paradigm of localism may be bridged.

THE IMPERATIVE OF CHANGE

Locating thoughts

Over two decades ago, Henderson in 'From the Fossil Fuel Era to the Age of Light' (2000), presented the Layer Cake with Icing (Appendix D). Through this model, Henderson explains how Gross National Product (GNP), rests on the 'Love Economy' which rests on 'Natures Layer'. This idea reflects how "Knowledge, human capital, trust, cohesive values and sound management of the planet's biodiversity and natural resources are now the key factors of production" (p. 397).

Today, planet Earth is home to roughly 7.9 billion, unequal human beings, consuming over 50 percent more than can be replenished, destabilising ecosystems and habitats in the course of overproducing and overconsuming in their quest for economic growth, and where more than half the population are struggling to get by, let alone fulfil their potential because of deprivation and social injustice (Penty, 2015). Against this snapshot, emerges, perhaps more urgent than ever before, the imperative of a new vision for the future.

Since fashion may be considered a social system, it reflects an external manifestation of cultural thinking patterns and of human needs, emotions, strengths and weaknesses as described in Chapter I. According to Meadows and Wright (2009, p. 167), changing these habits of mind "is not as simple as saying "now all change," or of trusting that he who knows the good shall do the good."

Systems thinking (Meadows & Wright, 2009)suggests that ideas beyond technoscientific "solutions" are required to foster change. Self-organising, nonlinear, feedback systems like our planet are inherently unpredictable. They are not controllable and are only understandable in the most general way. The goal of predicting the future and preparing for it is largely unrealizable. The dominant ideas of sustainability seek to make this complex system and its resource limits and carrying capacities adjust to human goals of economic growth through technocentric "solutions". This control, can be achieved temporarily, at best. Meadows and Wright (2009, p.168) say "We can never fully understand our world, not in the way our reductionist science has led us to expect. Our science itself, from quantum theory to the mathematics of chaos, leads us into irreducible uncertainty. For any objective other than the most trivial, we can't optimize; we don't even know what to optimize. We can't keep track of everything. We can't find a proper, sustainable relationship to nature, each other, or the institutions we create, if we try to do it from the role of omniscient conqueror." Here lies the imperative of a new vision, away from the mindset of an 'omniscient conqueror' and towards that of care.

While the future cannot be predicted, it can be envisioned and brought lovingly into being. This exploration envisions a future for the fashion sector that is guided by the principles of localism to enable human and ecological flourishing.

Understanding change

The complexity, speed and magnitude of the scale of change enquired to enable human and ecological flourishing in the fashion sector commands attention to how we understand change. Braidotti's notion of transposition (2006), inspired by genetics and music offers a metaphor: "an intertextual, cross-boundary or transversal transfer, in the sense of a leap from one code, field or axis into another... It is created as an in-between space of zigzagging and of crossing: not linear, but not chaotic; nomadic, yet accountable and committed; creative but also cognitively valid; discursive and also materially embedded – it is coherent without falling into instrumental rationality." (p.5)

STAYING WITH THE TROUBLE

Trouble is derived from a thirteenth century French verb meaning “to stir up”, “to make cloudy”, “to disturb”. According to Haraway (2006), the task in these turbulent times in which we live, is to make trouble, to ‘stir up’ potent responses to devastating events while also settling troubled waters and rebuilding quiet places. In urgent times, there exists the temptation to address trouble in terms of making an imagined future safe, of clearing away the present and the past, in order to make futures for coming generations. Staying with the trouble does not necessitate such a relationship to the future. Staying with the trouble “requires learning to be truly present, not as a vanishing pivot between awful or Edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings” (Haraway, 2006, p. 18).

The idea of ‘staying with the trouble’ is particularly impatient with two responses to the horrors of the Anthropocene and the Capitalocene (Haraway, 2006). The first, is a comic faith in technofixes, whether secular or religious: “technology will somehow come to the rescue of its naughty but very clever children, or what amounts to the same thing, God will come to the rescue of his disobedient but ever hopeful children.” (Haraway, 2016, p. 20). The second response is a position that the ‘game is over’, that it is too late and there is no sense trying to do better, or at least “no sense having any active trust in each other in working and playing for resurgent world” (Haraway, 2016, p. 20).

According to Haraway, the odd coupling of working and playing for multispecies flourishing while expressing an explicit “game over” attitude is discouraging, especially for students, and is facilitated by certain kinds of futurisms. These include the idea that “only if things work, do they matter” or, “only if what I and my fellow experts do, works to fix things, does anything matter.” (Haraway, 2016, p. 21).

While this attitude makes sense in the midst of the earth’s sixth great extinction event, in the midst of engulfing wars, extractions, and immiserations of billions of people and non-human species for profit or power, there exists a fine line between acknowledging the extent and seriousness of the troubles and ‘succumbing to abstract futurism’ and its consequences of despair and politics of indifference (Haraway, 2016).

This study avoids abstract futurism and instead adopts a ‘staying with the trouble view’, which involves multispecies players, enmeshed in partial and flawed translations across difference; redoing ways of living and dying in tandem with a still possible flourishing, still possible recuperation. It also includes understanding patterns, dropping threads and failing but sometimes finding something that works, something consequential, of relaying connections that matter, of telling stories to craft visions for flourishing futures (Haraway, 2016).

TOWARDS A PARADIGM SHIFT

The ideas of localism enable a vision of new patterns, new possibilities and pathways. This represents a change at the level of a paradigm, where the goal and purpose of the system arises.

The internet has facilitated the creation of new and "disruptive" economic and social models. Perhaps one of the most widely known is its peer-to-peer model and the distributive networks this creates. However, as with many disruptive models, this was quickly adopted by the mainstream, as we see with online sellers including eBay and Amazon who use P2P reviews to create trust and fuel consumption. While finding better ways of doing things that break the stranglehold of existing systems and barriers, is ingrained in us, recent disruptions in the fashion sector have proven to be temporary solutions to the issues of the growth logic. Taking a critical look at innovation and disruption in the industry, even if it is bottom up, shows that few of the many new ideas re-centralise power back into the hands of the few, and majority merely extend the status quo through new practices or mediums. Here lies the imperative of a new vision at the level of a paradigm.

While looking at paradigms as leverage points for change, it is necessary to first understand leverage points. Leverage points are places in the system, where a small change could trigger a large shift in behaviour (Meadows & Wright, 2009). While leverage points may be considered points of power, Forrester (Meadows & Wight, 2009, p. 145) says "although people deeply involved in a system often know intuitively where to find leverage points, more often than not they push the change in the wrong direction." Meadows and Wright (2009) present an example of this backward intuition through the 'World' model:
When the Club of Rome asked Forrester to depict how major global problems of poverty and hunger, environmental destruction, resource depletion, urban deterioration, and unemployment are related and how they might be solved, Forrester made a computer model which highlighted a clear leverage point: growth. Not only was this limited to population growth but also to economic growth. While growth typically has costs and benefits, often the costs are not counted (poverty, hunger, environmental destruction and other similar costs), and these are the problems that growth is attempting to solve. Instead, what might be needed is slower growth or different types of growth and in some cases, even negative or no growth. While the world's leaders are correctly fixated on economic growth as the answer to the problems, "they're pushing in the wrong direction" (Meadows & Wright, 2009, p. 146).

Counterintuitive is the word used by Forrester to describe complex systems in this context. Leverage points are often not intuitive, or if they are, are too often used backwards, systemically worsening the problem under inquiry (Meadows &Wright, 2006).

Paradigm as a Leverage Point for Change

Jay Forrester (Meadows & Wright, 2009, p. 162) says: "It doesn't matter how the tax law of a country is written. There is a shared idea in the minds of the society about what a "fair" distribution of the tax load is. Whatever the laws say, by fair means or foul, by complications, cheating, exemptions or deductions, by constant sniping at the rules, actual tax payments will push right up against the accepted idea of "fairness.""
Shared ideas in a society, the unstated assumptions, form a society's paradigm or "the deepest set of beliefs about how the world works" (Meadows & Wright, 2009, p. 163). Often there exists no necessity to state these beliefs because all members of the society in which they originate already know them.

According to Meadows and Wright (2009, p. 163), "Money measures something real and has real meaning; therefore, people who are paid less are literally worth less. Growth is good. Nature is a stock of resources to be converted to human purposes. Evolution stopped with the emergence of Homo sapiens. One can "own" land." Are few of the many paradigmatic assumptions of dominant Western culture, "all of which have utterly dumbfounded other cultures, who thought them not the least bit obvious." Paradigms may be considered the sources of systems from which shared social agreements about the nature of reality, system goals, information flows, feedbacks, stocks, flows, among other system features emerge. According to Meadows and Wright (2009), those who intervene in a system at the level of the paradigm, have stroked a leverage point that is completely transformational for the system.

While paradigms are a systems hardest feature to change, they are not lowest on Meadows and

Wright's(2009) list on leverage points, instead they are second-to-highest in terms of impact. There is nothing physical or 'expensive' or even slow in the process of paradigm change, according to Meadows and Wright (2009). Instead, in a single individual, this change only takes "a click in the mind, a falling of scales from the eyes, a new way of seeing." (Meadows & Wright, 2019, p. 164). However, in entire societies this is not the case – changes, or challenges to paradigms are fiercely resisted.

Kuhn (1962) asserts that change at the level of the paradigm can happen by working with active change agents and with the vast middle ground of people who are open minded, rather than wasting time with reactionaries. It is for this group of people that this section attempts to present ideas of change with localism as the desired paradigm.

BARRIERS TO CHANGE

Meadows and Wright (2009, p. 87) say "You can't navigate well in an interconnected, feedback-dominated world unless you take your eyes off short-term events and look for long-term behavior and structure; unless you are aware of false boundaries and bounded rationality; unless you take into account limiting factors, nonlinearities and delays."

The overriding of long-term goals for short-term benefits, a dependence on econometric models, false boundaries, and bounded rationality that Meadows and Wright (2009) speak of, contribute to barriers for a paradigm change in the fashion sector.

Dependence on econometric models

Econometric models in the fashion sector work to find the statistical link between past trends of profit, revenue, sales and so on, often in complicated equations. While these behaviour-based models are more useful than event-based ones, they have fundamental problems. Key among them is an overemphasis on system flows and underemphasis on system stocks. The fashion sector follows the behaviour of flows, because that is where the variations and most rapid changes in the system occur. Reports often contain data on production (flow) of garments, rather than the total physical capital used to produce the garments. Following this model of neglecting a view of how stocks affect their flows through feedback processes, players in the sector neglect the development of an understanding of the dynamics of economic systems. Additionally, finding statistical links that relate flows to each other is a search for something that does not exist. According to Meadows and Wright (2009), there exists no reason to expect that any flow will hold a stable relationship to any other flow. Flows fluctuate in various configurations, in response to stocks instead of other flows.

Econometric models hold, only until something changes in the system structure. In the case of the fashion sector, it is the impoverishment of ecologies and their consequent impacts on human flourishing. The dependence on econometric models results in predicting near term performance and generating near term fixes. It is "quite bad" at predicting the longer-term performance and "terrible" at informing improvement strategies (Meadows & Wright, 2009, p. 90) This fascination with short-term gains results in the sector being insufficiently skilled at recognizing historical clues to the structures from which behaviours and events flow, thus limiting the adoption of long-term, paradigm changes.

Linear thinking in a Nonlinear World

In the fashion sector, as in most other sectors there often exists a lack of understanding of the nature of relationships. There exists a focus on capitalising on linear relationships between two elements in a system such as input and output and a neglect of nonlinear relationships in which the cause does not produce the proportional effect (Meadows & Wright, 2009).

While the fashion sector is full of nonlinearities, it depends on the view that a small efficiency gain produces a small change in output, and a big efficiency gain will produce a big change in output. However, this is not the case, a big efficiency gain can still limit the output. This is seen when the technofixes to improve the efficiency of resources and further the ability to generate more output, are outpaced by over-consumption, natural disasters, rapid rates of ecological destruction and so on.

Nonlinearities foil the reasonable expectation that if a little destructive action caused only a tolerable amount of harm on the environment, then more of that same destructive action will cause only a little more harm. Nonlinearities confound expectations and they also "change the relative strengths of feedback loops" (Meadows & Wright, 2009, p. 92). When the sector relies on technofixes to solve resource shortages, it shifts the whole system to balance uneasily on different points within its nonlinear relationships. Not only does it continue to destroy ecologies, but it also affects their natural feedback mechanisms that keep the ecologies in check. These practices are akin to using artificial pesticides and thus, set up what Holling (Meadows & Wright, 2009, p. 94) calls "persistent semi outbreak conditions" over larger and larger areas. Thus, the fashion industry finds itself locked into a way of thinking and making in which there is a catastrophe bubbling – if the technofixes fail, production will fail. This dependence acts as a barrier to the adoption of alternative ways of thinking and doing for the fear of immediate collapse if the technofixes are taken out of the equation.

Non-existent Boundaries

"There is no clearly determinable boundary between the sea and the land, between sociology and anthropology, between an automobile's exhaust and your nose. There are only boundaries of word, thought, perception, and social agreement—artificial, mental-model boundaries." (Meadows & Wright, 2009, p. 95).

The fashion sector relies heavily on the boundary of the growth logic. In so far that doing something beyond the

bounds of economic growth seems almost implausible. For example, the industry thinks of "solutions" to ecological and human impacts within the bounds of continuous economic growth. It deals with these "issues" without thinking of the ecological constraints and instead uses technofixes to increase resource efficiency. Those fixes, in turn, generate an increased interest in the product (as is planned), which then results in the same issues of resource scarcity.

Ideally, in order to adopt a new paradigm, the industry would have the flexibility to find the appropriate boundary for thinking about each new issue. However, it is rarely that flexible. Instead, it is attached to the boundaries drawn by the growth logic and it is accustomed to the financial gain and power they enable.

Meadows and Wright (2009, p. 99) say "It's a great art to remember that boundaries are of our own making, and that they can and should be reconsidered for each new discussion, problem, or purpose." The boundary rigidity in the fashion sector limits the adoption of new paradigms that contain a different set of boundaries.

Layers of Limits

The fashion sector employs technological fixes to resource scarcity and wonders why the problem has not gone away, neglecting to consider how technology may not be the biggest limiting factor. As the growth of the industry outpaces the replenishment of ecological systems and human capacities and the issues shift beyond resource scarcity to dead rivers, sick children in polluted environments and agricultural land shortage for food production, technological fixes become increasingly unhelpful.

There exist layers of limits around every ecology, community, product, technological advance, economy and population. The ability to shift from current models of production and consumption to new paradigms comes from recognising which factors are limiting while also from "seeing that growth itself depletes or enhances limits and therefore changes what is limiting." (Meadows & Wright, 2009, p. 102). The interplay between a growing fashion sector and its resource base, is dynamic. When one factor ceases to be limiting, growth occurs, and the growth itself changes the relative scarcity until another becomes limiting. A lack of focus from the abundant factors to the next potential limiting factor, diminishes the ability of the sector to recognise a need for deep structural and paradigm change.

Bounded Rationality

The fashion sector is littered with examples of producers and consumers acting rationally in their short-term best interest and consequently producing undesirable aggregate results. For example, companies over-produce and deplete the natural stocks on which their products rely, consumers over-consume and destroy ecological systems on which their survival depends. This is called bounded rationality (Meadows & Wright, 2009).

Bounded rationality means that people make relatively reasonable decisions based on the information they have. However, they don't have perfect information, especially with regard to more distant parts of a system. This is especially prevalent in a globalised industry where retailers know little about ecosystems in which fibre is grown and the people involved in the process, and consumers know little about who makes their products, or where and how they are made.
Simon (1957) says that humans attempt to meet (satisfy) our needs well enough (sufficiently) before moving on to the next decision. We attempt to further our own nearby interests in a rational way, but we can only account for what we know. Thus, often we don't see the full range of possibilities available and, we often don't foresee (or choose to ignore) the impacts of our actions on the whole system (Meadows & Wright, 2009). Instead of chasing a long-term optimum, fashion producers leverage technofixes and consumers continue consuming greenwashed products, because that is what they know.

Additionally, Meadows and Wright (2009, p. 107) say, "we don't even interpret perfectly the imperfect information that we do have ... We misperceive risk, assuming that some things are much more dangerous than they really are and others much less. We live in an exaggerated present—we pay too much attention to recent experience and too little attention to the past, focusing on current events rather than long-term behavior. We discount the future at rates that make no economic or ecological sense. We don't give all incoming signals their appropriate weights. We don't let in at all news we don't like, or information that doesn't fit our mental models"

User disburdenment of consumers, and cost externalisation and greenwashing by producers are great contributors to the phenomenon of bounded rationality that prevents deep rooted change in the fashion sector.

Success to the Successful (Figure 18) is a recognised concept in ecology, where it is called "the competitive

exclusion principle" (Meadows & Wright, 2009, p. 127). This principle states that two different species cannot live in the same ecological niche, while competing for the same resources. Since the species are different, one will reproduce at a faster rate, or be able to use the resources more efficiently than the other. Thus, it will win a larger share of the resources, which will give it the ability to be the dominant species. Not only will it dominate the niche, but it will also drive its competitor to extinction (Meadows & Wright, 2009).

This phenomenon may be viewed as the consequence of a culmination of various barriers of adoption of alternative paradigms in the fashion industry. Here, the barriers contribute to the conviction that resources must be allocated to the paradigm of production and consumption governed by the growth logic. With that advantage, this paradigm has more resources to invest in productive facilities, newer technologies, and thus contribute significantly to the Gross National Product of a country. It represents a reinforcing loop of capital accumulation which is able to turn faster than that of alternative paradigms, enabling it to produce more, earn more and have greater power.

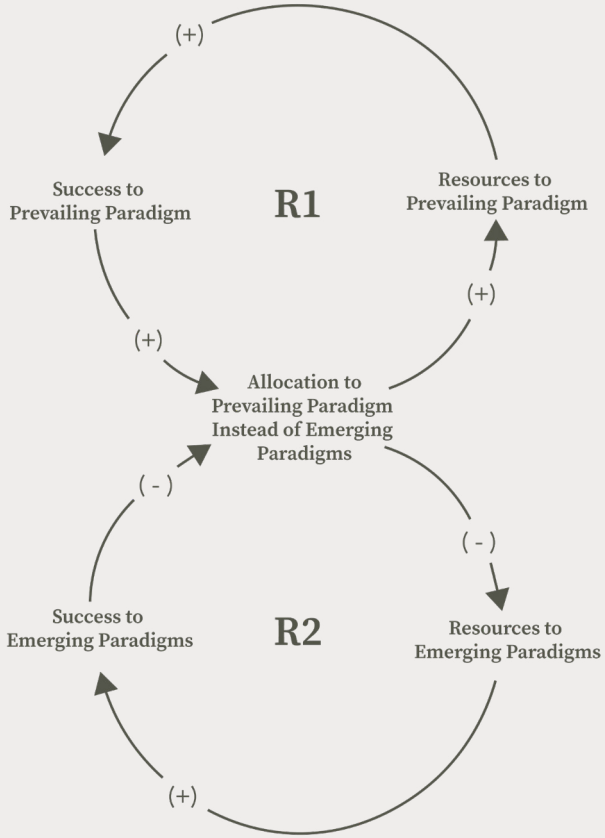

Figure 18 | Success to the Successful: Success of the Growth Logic Paradaigm
Here, R1 represents a reinforcing feedback loop where the prevailing paradigm is given more resources, making it more likely to succeed than emerging paradigms. R2 represents another reinforcing feedback loop where the success of the prevailing paradigm justifies the allocation of less resources to emerging paradigms.

In a consumer society that has no limits to growth, the dominant paradigm prevails over all other paradigms. On an organizational level, this creates a trend where there are fewer players controlling more market share within the fashion sector. On a societal level, it inhibits the potential of other paradigms because of its ability to contribute to wealth in economic terms. Dr. Kozlowski explains (A. Kozlowski, personal communication, March 15, 2021). "I don't think we'll see the change that's needed because there's just too many powerful companies and everyone goes into fashion because it's exploitative and they can make a lot of money. Even within the sphere of sustainable brands, people who come from other spaces move into fashion because they think they're going to become a millionaire if they come up with the right sustainable product. This just reinforces the capitalist mindset over and over again".

Dhruv Kapur (D. Kapur, personal communication, February 25, 2021), further explains this from a manufacturing perspective. He says that "larger factories that produce high volume, low-cost fashion garments attract fashion players. The capital they receive from jobs completed furthers their ability to produce garments with low margins in high volumes, thus capitalising on economies of scale. Fashion players, impressed by their ability, choose to manufacture with them instead of a smaller player. Eventually, they attract investors like Walmart which eviscerates any competition and even results in the formation of a monopoly at times."

PATHWAYS TO CHANGE

Despite the multifarious barriers to change from the growth logic paradigm to the adoption of a localism paradigm, there exist examples of players in the fashion sector who are bridging the gap. A review of their practices offers insights on pathways to change.

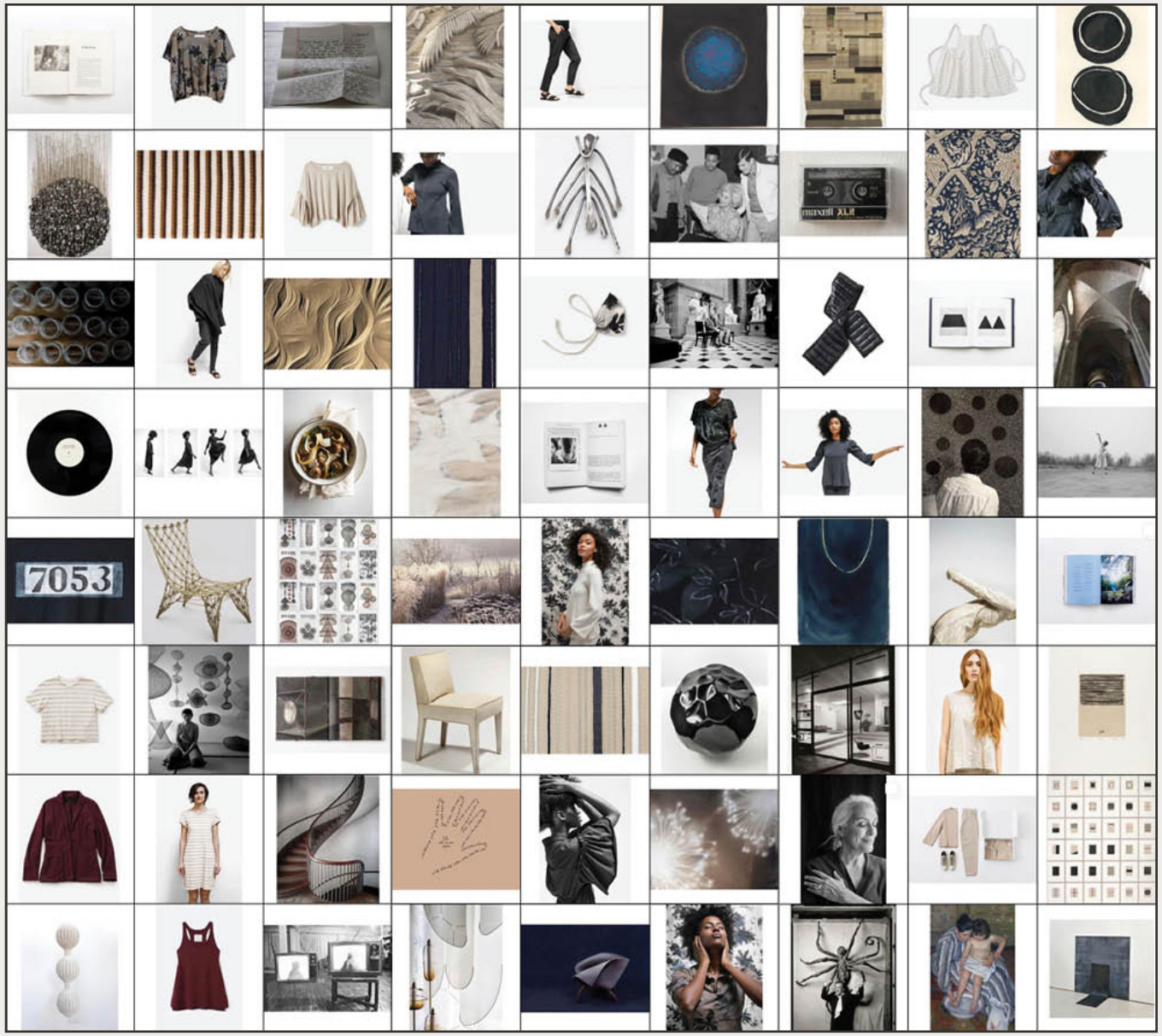

Figure 19 | Alabama Chanin
(Source: https://journal.alabamachanin.com/)

CASE 1: ALABAMA CHANIN

In the northwest corner of Alabama across the Tennessee River, is Florence, a town of 39,000 people. Before NAFTA, Florence was the cotton T-shirt capital of the world. Natalie Chanin of Alabama Chanin remembers a time when her hometown was a robust apparel manufacturing centre (Thomas, 2019). After the passage of NAFTA, United States T-shirt production moved offshore. Local manufacturers like Tee Jays ceased operations. Florence, like much of the textile-driven South, plunged into financial and social crisis.

Now, over twenty-five years later, Natalie Chanin and Billy Reid are helping Florence rebuild. At 'The Factory', Chanin and her team of thirty run Alabama Chanin, a women's wear brand specialising in organic cotton dresses and smart tailoring, all produced in the region. In the same region, Reid has his headquarters and shop. To staff their companies, Chanin and Reid have recruited a section of the local community that had, in part, been left unemployed by the closure of textile mills and garment-manufacturing companies following the 1992 North American Free Trade Agreement (Padovani & Whittaker, 2017). In addition to Chanin's thirty, Reid has seventy employees. That influx of people has spawned a slew of other businesses – gastropubs, boutique hotels, a microbrewery. Each

August, Reid throws a three-day celebration of southern food, music, fashion and culture, open to the public, drawing visitors from across the region (Thomas, 2019).

Chanin and Reid, in response to high volume fashion globalised fashion, have significantly dialed back the pace and financial ambition of their companies, freeing themselves to focus more on creating items with inherent value, curating the customer experience, and reducing their environmental impact. This quiet resolution is also driven by their desire to improve the quality of life for the people around them. Their approach champions localism and regionalism rather than a growth logic driven mass-production model. It honors craftsmanship and tradition (Thomas, 2019). It is about reducing the effects of user disburdenment and cost externalisation, by "buying from the person down the street whose face you know and love" says Chanin (Thomas, 2019, p. 132).

Chanin buys her fabrics from a mill in South Carolina which makes fabrics from organic Texas cotton and she works with a local artisan dyer for certain pieces. When a customer places an order, Chanin's freelance seamstresses – about two dozen in total – bid for the job. They are all independent contractors, free to decide, when, where, and for whom to work, and they account for extra costs such as utilities, healthcare and other benefits into their bid. The contracted seamstress picks up the materials, stitches the garment in a day or two and brings it back to the Alabama Chanin headquarters to be packaged and delivered to the customer. Chanin has a rule that all of her sewers have to live within an hour and a half of her facility and have to come and pick up and drop off the work themselves, to ensure the work isn't being outsourced (Thomas, 2019).

While Chanin added machine-made into the mix in 2013, her production capacity is purposefully limited by finding sewers who can run the machines to a quality standard. At the same time, Chanin opened a café and a shop. The shop carries southern artisanal homewares and a selection of Alabama Chanin clothes.

Chanin opens the doors of The Factory every day for public tours, she says "We try to be as transparent as possible" (Thomas, 2019, p. 133). In this spirit, she also believes education is key, At The Factory, she has opened the School of Making, an outreach program to teach sewing, and she publishes books on needlework. Chanin says (Thomans, 2009, p. 133) "Students who come to us from design school, all they know is drawing pictures, sending them off, and getting finished garments back ... There's a real lack of understanding of how clothes are made – a lot of critical knowledge that's been lost"

In 2001, Chanin produced a short documentary called Stitch, about the art of southern quilting, to show her first collection. Since 2016, she has been working with the Center for the Study of Southern Culture at the University of Mississippi to record an oral history of sewing in the South. And in 2019, she introduced some of her findings during her inaugural Project Threadway's Symposium, an annual celebration of "manufacturing, music, and community" with a focus on material culture, textile history, cotton and women in the workforce (Thomas, 2009, p. 133). Chanin sees her education initiatives as a way to "preserve" needlecraft – a skill believes is dying out in the United States.

Chanin says that while this model has not been the most lucrative way to run her company, "But we've stuck to our standards, even when it wasn't the easiest thing to do" she said, "And we've made it" (Thomas, 2019, p. 143).

Chanin goes on to explain that "when the difficult times come around ... our overhead and expenses are so low, it's not as frightening" She also says "I'm 100 percent self-owned—no partners. We don't owe the bank. We don't borrow money to produce the collection. We invest in young people and train them well. We have a deep commitment to our community. I have been able to raise my children and live a creative life that makes me happy and do good and important works. I like where I've landed and what we have created. And I'm proud of having been active in bringing something back to my hometown and contributing to its future."

CASE 2: ANITA DONGRE

Figure 20 | Gauriben
Anita Dongre works with Gauriben, who is a highly skilled artisan in traditional Indian embroidery. Instrumental in training over 15,000 rural women. (Source: https://www.anitadongre.com/int/about-anita)

Nestled against the backdrop of large manufacturing houses that produce cheap fashion for high volume exports in India, exists Indian designer and brand Anita Dongre. According to Dongre, "Sustainable fashion is the creation of beautiful garments that also empower their makers with respect, livelihood and a platform for her craft and voice" (Dongre, 2021).

In response to a growing need for fashion that supports people and ecologies, Dongre adopts a two-pronged approach: the creation of low impact garments and the empowerment of rural women through training and craft revival. Dongre (2018) says "It has always been my dream to create beautiful clothes—and a beautiful tomorrow for our people, planet and crafts."

In India, a number of socio-cultural barriers including the lack of education and the limited access to training programs and resources, limit the flourishing potential of rural women. Who, according to Dongre (2018) "aren't able to completely unshackle themselves from the dogmas and social hierarchical boundaries. Gender biases in a patriarchal society add to their challenges." Dongre believes that the empowerment of these women stems from self-sufficiency through education and training.

Dongre says (2018) "When you empower women, you empower a family and build a stronger community, and this will lead to a more progressive, inclusive nation. In addition to becoming economically independent, they win the respect of family members, communities, and are part of key decision-making processes. In my experience, I have found rural communities to be immensely talented; they just need the opportunity and exposure to harness their potential. India has a long and unique history of craftsmanship, with several indigenous crafts and practices passed down generations of artisan communities. I feel privileged to rediscover and revive these beautiful heritage crafts through my designs and work."

Dongre's journey with Grassroot (a collection that revolves around artisans, instead of seasons. With their skills and the demand for their craft driving production) began through an introduction to the rural women associated with SEWA. It became increasingly important for Dongre to conceptualise a way to give rural women the ability to make a living without having to migrate to cities and work in large, unsustainable and largely unethical garment factories. Dongre (2018) says "Our long-term vision is to provide regular work to artisans and bring back respect and dignity to these master craftspeople." In order to empower rural female craftspeople, Dongre (2018) created a five-step process: i) enable her to think she can earn; ii) equip her with relevant professional skills through structured theory and practical (on-the-job training) modules; iii) provide the forward linkages post-training for her to earn a decent livelihood through employment/self-employment; iv) help her deliver value-added products/services while she balances her family responsibilities, and v) communicate her achievements to her peers, family and community to motivate and inspire other women.

To this end, The Anita Dongre Foundation "adopted" the village of Charoti in Maharahstra, India to train tribal women in garment-making. Encouraged by the success of this initiative, the foundation took another step in that direction, with another rural community, Jawahar, in the same district. As of 2018, over 100 tribal women are trained in garment-making at two tailoring units and are now earning a decent and regular monthly income. The foundation has partnered with local village leaders and NGOs to provide steady employment opportunities for skilled rural artisans and train unemployed and unskilled women in villages like Charoti and Jawahar.

The Anita Dongre Foundation's vision (Dongre, 2018) is "to scale up its women empowerment initiative to other locations/states as well as enable structured capacity building and leadership development of the women at these tailoring units so they can be independently, professionally managed and self-sustained in the medium to long term."

On the environmental front, Dongre says she feels a drive "to do more and more" (Anita Dongre on fighting for feminism and sustainability in fashion, 2020). At her headquarters, cafeteria food waste is composted or used to make biogas while the water utilised in clothing production is recycled and pumped back into the bathrooms. Her 'affordable' brands 'AND' and 'Globaldesi' use low impact fabrics including Tencel – a biodegradable fibre made of wood pulp – while her slow fashion luxury label 'Grassroot' showcases hand-woven, hand-embroidered designs created by Indian artisans.

Additionally, while Dongre's designs have been worn by celebrities including Hillary Clinton, Kate Middleton, Ivanka Trump, Priyanka Chopra Jonas, and Beyonce (Anita Dongre on fighting for feminism and sustainability in fashion, 2020), majority are designed for local consumption through traditional silhouettes and fabric suitable to local climates.

While The Anita Dongre Foundation has now given countless rural women "an equal voice" (About Anita, 2021) through craft revival and training, and has been a strong advocate for "compassionate living" (About Anita, 2021), Dongre's commitment to people and the planet has not been easy. Dongre says (Anita Dongre on fighting for feminism and sustainability in fashion, 2020) "The biggest challenge is educating the consumer to support our efforts."

While it is hard to imagine how a company that employs over 2,00 people and works with thousands of artisans can enable human and ecological flourishing without compromising on profits, it is a price Dongre is willing to pay. Dongre (Anita Dongre on fighting for feminism and sustainability in fashion, 2020) says "Companies cannot be driven only by profits... this idea of making money in whatever way possible and then giving large sums to charity, it's not sustainable. Why not make a contribution to your community a focus of your business to begin with?"

PATHWAYS TO CHANGE IN SYSTEMS AND PHILOSOPHIES

Dongre and Chanin have bridged the gap between prevailing practices in the fashion sector that are based on the growth logic and the paradigm of localism through the following:

Distributing Information

We often hear the saying 'information is power'. Information that is regulated by the fashion sector, gives it the power to influence consumer decisions. Dongre and Chanin both distribute information in varied, unfiltered forms. The accessible channels of distributions they use including tours, documentaries, rural outreach and skills training programs, have the ability to pave the way for a paradigm shift.

Going beyond what is quantifiable

Developing a discourse on that which is appropriate, proportionate, flourishing, caring involves moving beyond a common attitude of "if you can't define it and measure it, I don't have to pay attention to it" (Meadows & Wright, 2009, p. 174). Too often change is limited because the value of the new model or discourse is not quantifiable. If ideas that are not measurable are not spoken about or pointed towards, they will most often cease to exist (Meadows & Wright, 2009).

Speaking of ideas, values, models that are not quantifiable, instead of shying away from them because of the limiting belief that "what we can measure is more important than what we can't measure" is an important pathway to change used by Chanin and Dongre through their business models that value people and the planet above profit. (Meadows & Wright, 2009).

Fostering Responsibility in the System

Often blaming or trying to control macroenvironmental factors blinds one to increasing responsibility within the system.

"Intrinsic responsibility" means that the system is designed to send feed-back about the consequences of decision making directly and quickly and compellingly to the decision makers (Meadows & Wright, 2009). Fostering this idea paves the way for a shift from a system in which consequences of actions are rarely experienced to one where they are directly felt.

Global value chains and their consequent effects of user disburdenment and cost externalisation reflect how poorly fashion systems are designed to experience the consequences of production and consumption. Closely connected consumers to producers or even different nodes of the supply chain, increases responsibility that emerges from within a system. Dongre and Chanin's use of local labour, resources and knowledge fosters responsibility in the system.

Celebrating Complexity

Social systems are nonlinear, turbulent, and dynamic and often self-organising and evolving. Fashion industry production and consumption involves social and ecological systems. Often the sector tries to control these systems to form mathematically neat equilibria that generates profit.

Conversely, the models used for production by Dongre and Chanin celebrate and encourage self-organization, disorder, variety, and diversity. They mirror what Aldo Leopold (1949, p. 224) said in his land ethic: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

Expanding Time Horizons

According to Meadows and Wright (2009, p. 182) "One of the worst ideas humanity ever had was the interest rate, which led to the further ideas of payback periods and discount rates, all of which provide a rational, quantitative excuse for ignoring the long term."

The official time horizon of the prevailing model of the fashion sector does not extend beyond the payback period of investments made into stock and retail. Chanin and Dongre, through their investments into communities and places, consider in their decisions the effects on longer time horizons and through longer operant time horizons, ensure long-term well-being (Meadows & Wright, 2009).

Championing the Idea of 'Less'

Less is the biggest provocation to the fashion sector which veers towards technofixes to "solve" the issue of "less": less resources, less available land, less financial gain and so on. Yet, only by pursuing less can the scale of change deemed necessary to ensure ecological and human flourishing be achieved (Fletcher, 2016).

Instead of procrastinating with incremental fixes, Dongre and Chanin face the reality of less and address the socio-economic problems that growing out of the

growth logic creates. Their lessening of the scale of operations results in less output and a smaller economy (Kallis, 2017). Their practices re-establish the focus of fashion production on the 'economy' in the original sense of the world, of household and community management, which trade in the economies of time, creativity, community and skill. Dongre and Chanin realize that a quantitatively smaller sector is a prerequisite for a system that is limited by a finite resource base. Their strategies of less are accompanied by an increase in the quality of fashion experiences.

Leveraging Escalators of Consumption

Shove and Warde (2002), argue that one of the easiest places to start the process of slowing production and consumption is to piggyback on already existing trends and steer them in the direction of flourishing. Trends such as those of informalization or eclecticism, for example, have the ability to influence the pace of consumption. Dongre and Chanin, leverage the interest in culture, crafts and novelty and use them towards championing local ways of producing. The uniqueness of each garment created, resists easy replacement, and aids in the reduction of the quantity of what is bought.

Using Inclusive Design Practices

Co-design or the potential of designing together fosters a more connective and active engagement with fashion and textiles. This kind of design practice involves a different distribution of power and inclusion than is seen in mass produced consumer fashion today. Co-design is concerned with an active and skilled role for users and a system of production that is more decentralised. Chanin and Dongre's methods of production are an unabashed challenge to the hegemony of High Street consumerist fashion and the identical products and production models they peddle. Chanin and Dongre's use of co-design with artisans, local sewers, craftspeople, dye houses and so on, further the values of localism which include appropriateness, connectedness and engagement that change everyday relationships with fashion production and consumption.

Dongre and Chanin also leverage open-source design practices which offer the prospect of a more inclusive and participatory model for fashion and textiles. The network of people that create the fashion pieces in their models of production are deemed to be more active, and they all progress towards a collective goal. They share the work and the benefits while engaging in a sense of network, in which they are autonomous individuals who are part of a bigger project.

As presented in Chapter II, localism is concerned with "Discipline" or a "Disciplined" society where continued economic growth is undesirable and unsustainable. The aims of localism are rooted in the idea that the preservation and/or restoration of places, processes and values is more important than the attainment of new things and the kind of liming effects that has on ecological and human flourishing. Dongre and Chanin, through their models of production and consumption showcase poignant examples of value placed on people, places, processes, traditions and cultures. Additionally, they produce fashion within the idea that while economic growth might be necessary in certain circumstances, ecological and human flourishing takes is more valuable than the financial bottom line.

04 CONCLUSION

CONCLUSION

Through an exploration of localism, this project sketches out an involved and flourishing vision of relationships and resource flows that reflect the ecological, social, creative and economic potential of the fashion sector. The themes explored are multi-part, multi-scale and involve multiple webs of stakeholders. They confront the idea of fashion as a poster child of consumer capitalism by offering its potential for human and ecological flourishing through a post-growth and 'beyond-the-market' lens. They go against popular notions of "solutions" to societal and cultural conditions, which rely on increasingly simplistic economic and social theories. In contrast, the vision of localism for the futures of the sector is about ideas, stories, and practices about, and for, a complex and unpredictable futures of the fashion sector. The ideas developed in this study are tentative steps in developing a wholistic vision of human and ecological flourishing in the fashion sector. These ideas are directed to not just develop what we know, but also engage how we respond to the burgeoning societal, economic and ecological challenges we face.

A fundamental and explicit theme of this project is exploring the cultural conditions and industry models that reinforce the growth logic in the fashion sector, despite significant evidence over the years, that this model is unsustainable in the long-term. This critique is essential to the project's arguments for localism and for the pursuit of the possibility of ecological and human flourishing in the fashion sector. It realises that the timidity in confronting consumerist materialism that dominates contemporary experiences of fashion may be attributed to the way in which fashion and textiles have become so tightly bound with consuming in our minds, that we struggle to think past current ways of doing and having, in order to imagine different experiences of fashion.

This project has sought to set out an alternative approach, rooting the provision and experience of fashion in the ideas, aspirations and principles of localism. The first chapter describes the current, growth logic determined practices that govern the flourishing potential of the fashion sector. The second chapter offers points of departure for engaging with fashion within the context of localism, as opposed to seeking flourishing within the growth logic; and the last chapter has set out to explore what a pathway to change between the present reality and a flourishing vision for the futures of the sector might look like. The resulting picture is one that shows how the prioritisation of people and the planet over profits is a possibility in the fashion sector.

In drawing this project to a close (for the time being), I would like to briefly explore four themes that lay out areas for further study in the face of future challenges to the fashion sector.

THEMES FOR FURTHER STUDY

Explore Deep System Structures

There exists an ongoing interest in the cultivation, processing and selection of fibres and fabrics as a response to the challenges of ecological and human flourishing in the fashion sector. These material dimensions are evidenced in the contemporary discourse of fashion makers and takers who talk about fair wages, climate change, the use of chemicals, pollution and so on. In the near future, these themes are likely to be eclipsed by global crises related to water shortage, climate refugees, an evisceration of finite resources among others, which may form defining challenges for the fashion sector. Yet, while these issues are of critical importance, the sector seems reluctant to address the deep system structures that contribute to their urgency. While this project has attempted to initiate a discourse on some of these structures, there exists a need to further study deep economic, political and psychological structures that drive decisions in the sector and which exist within deeper systems of values and meaning, in order to better understand flourishing in the fashion sector.

Delve into the Granularity

Breaking down generic ideas of fashion practices into numerous interactions, experiences, design opportunities, commercial exchanges and ideas on what is valuable, is important to encourage new possibilities for the flourishing in the fashion sector.

Understanding the various possibilities of production and consumption of fibre, fabric and garment are diverse ecologies and an area for further study. For, an attention to, and awareness of these potentialities can help change habits of mind and thoughts about what is possible and who can act. Thus, graduality is a necessary theme for further study as the knowledge it generates may facilitate consumers to challenge monological ideas about who holds power while invoking a sense of potential and responsibility.

Investigate a broad spectrum of activity

The ideas in this project argue that localism is an invitation to create wealth in ways outside of the growth logic, through long-term well-being and diversity. What is missing is an exploration of a broader spectrum of activity, outside the paradigm of localism that also fosters ecological and human flourishing. Concepts and ideas that are not yet discoursed by academics, those that exist exclusively in the villages of India or the mountains of Italy, for example. Through a sustained search of different forms of fashion activity, wholistic and forward-looking opportunities for flourishing might emerge.

Partake in doing

As is said in this project, fashion is not just the preserve of professionally trained designers, but rather open to all who seek to experiment with fibres, fabrics and garments. While this project talks about a few practices it does not offer ideas on practical experiments of these concepts. By describing methods and practices, a deeper understanding and a larger variety of ideas of provision and experience of fashion as flourishing might emerge.

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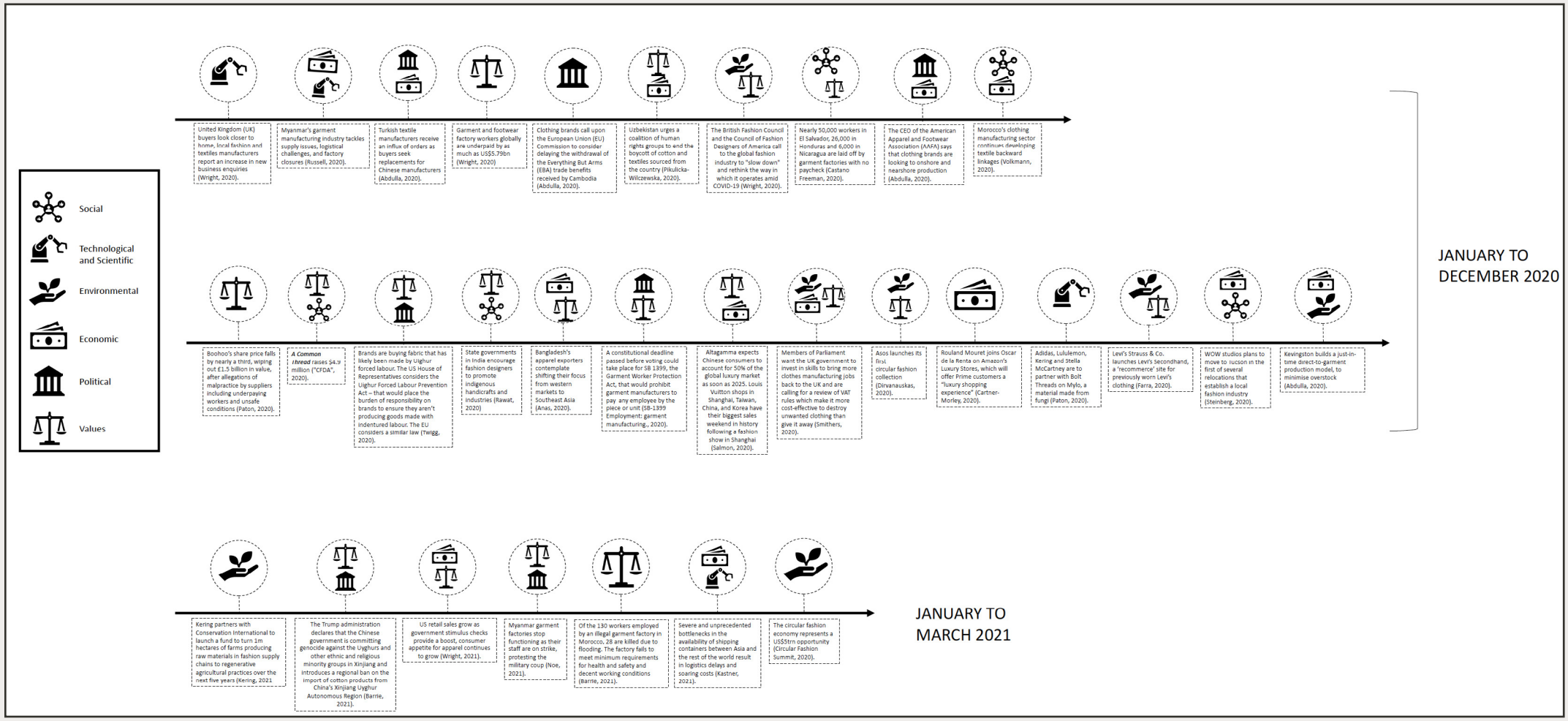
APPENDICES

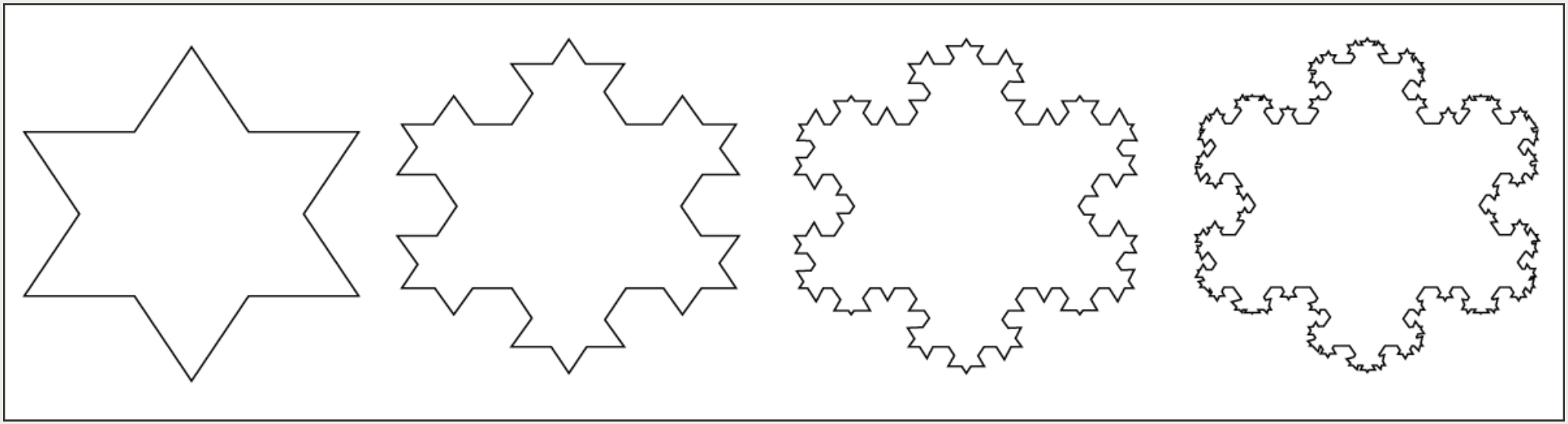
APPENDIX A: ERA ANALYSIS

Era	Interwar Era	Postwar Rebuild	Neo Liberal Globalization	
Period	Mass Production and the Democratization of Fashion	Domestic Offshoring	Global Production of high-volume fashion	Ecological modernization
	1920's to 1940's	Late 1940's to Early 1950's	1960's to 2020's	
What macro-environmental events influence the fashion sector?	The Great Depression, The Second New Deal, World War II	The Marshall Plan, India, Israel, Myanmar, Pakistan are among the countries that gain independence, Postwar economic boom or the 'Golden Age of Capitalism', The Cold War	The Concorde changes air travel, Rise of the PC, Collapse of the Soviet Union, NAFTA is responsible for the loss of at least a million jobs in the garment and textile sector in the United States[1] Commercial uses of the World Wide Web[2] China joins the World Trade Organization[3] Growth of the middle-class in Asia, The Financial Crisis of 2008, Instagram is launched, Paris Climate Accord, #Metoo Movement, Black Lives Matter Movement, Brexit	Our Common Future (The Brundtland Report), An Inconvenient Truth, Paris Climate Accord, Greta Thunberg ushers in a new generation of activism.
Which developments define structural changes in the fashion sector?	A ready supply of immigrant workers in the United States spurrs the growth of mass productuion of fashion[4] The development of the Progressive Bundle System, Rationing of clothing and textiles due to war footing efforts and military demands.	Psychological Obsolescence is adopted by the fashion sector, Fashion magazines like *Esquire* for men and *Vogue* for women promote fashion, and giant national retailers like Sears and J.C. Penney sell fashion, New York and Chicago become influential centers for design and manufacturing after World War II	A new business model of fashion production and consumption is born: fast fashion, Hong Kong becomes the world's largest exporter of fast fashion, [5] "Quick Response" manufacturing is developed by the US Apparel Manufacturing Association to compete with imports from low-cost labour markets,[6] The East African Comunity (EAC) imports as much as $274 million worth of used clothes,[7] Globalization hits its stride - Zara has over 2200 stores in ninety-six counties,[8] The United Kingdom imports 92.4 percent of its clothing,[9] The fashion industry accounts for 6 percent of imports but pays 52 percent of tariff receipts in the United States, [10] Burberry admits to shredding and incinerating unsold stock,[11] The global fashion industry is valued at over $2.4 trillion, India becomes a focal point for the fashion sector for both, production and consumption.	Micro-factories, Just-in-time manufacturing, Nearshoring.
Which developments characterize evolving stakeholder needs?	Trade unions are formed in the United States and across Europe, Rationing of fabric and clothing for the general public.	European countries become the biggest consumers, or users, of U.S. goods, Fashion manufacturers market well-made and stylish clothes to "common people" as the appetite for fashion grows.	Few employment opportunities for immigrant workers in the fashion and textiles industries in the U.S. and parts of Europe, Fewer than 15 percent of garment workers in the United States are unionized[12] Cheap imports lead to closures of garment production facilities in Europe and the United States, Textile and garment manufacturers campaign for restrictive policy against imports from Taiwan, South Korea and Hong Kong[13], Imports by the EAC decimate local garment manufacturing in East Africa, H&M, Next and Esprit are among brands who are found to have Syrian refugee children sewing clothing in subcontracted factories in Turkey[14], With 1,134 dead and 2,500 injured, Rana Plaza is the deadliest garment factory incident in modern history[15], An average of 18¢ of a €29 shirt (0.6%) goes to the supply chain worker[16]	'Sustainable' fashion creates new demands for manufacturers, Manufacturers suffer under the pressure to obtain increasingly expensive sustainability 'certifications', Supply chain transparency gains momentum.
What milestones mark shifts in production patterns?	Ready-made clothing is produced in factories, primarily for domestic sales, Production is steered away from public consumption and towards the war effort	Cheap garments made with synthetic fibres are mass produced, Standardised products and production processes, Production facilities move away from large cities in the U.S. and Europe to smaller cities and towns.	Fashion behemoths including Nike, Inc. begin using contract factories worldwide, The International Labour Organization reports that much of the production capacity and garment manuacturing jobs of the sector have moved to the global South[17], The number of garments produced globally reaches over 100 billion annually[19], Amazon secures a patent for an on-demand, automated apparel factory[20], The fashion industry produces 20 percent of global wastewater and 10 percent of global carbon emissions[21]	Gucci announces "We are completely carbon neutral"[22], "Low-imapct" supply chain practices including organic cotton and water-free dyeing gain momentum, The United Nation's Fashion Industry Charter for Climate Change Action commits to a 30% reduction of the greenhouse gas emissions by 2030. The charter is signed by just over a 100 brands in the global sector[23]
What landmarks indicate shifts in consumption patterns?	Consumption hits a low peak during the Great Depression, Clothing purchases are limited by the government in the UK due to fabric shortages, people repair and re-use clothing as part of the war footing effort.	Home sewing gains popularity due to the avilability of patterns and cheap fabrics. The popularity of fabrics made with synthetic fibres begins to exceed those made with natural fibres.	Fashion consumption is characterized by the purchase of cheap, low-quality garments in high volumes, Straight-off-the-runway novelty purchases gain poularity, Peer-to-peer marketplaces gain popularity, 80% of all clothing is landfilled or incinerated.	Fashion resale is an estimated $24billion industry

APPENDIX B: SIGNALS OF CHANGE



APPENDIX C: KOCH SNOWFLAKE



Koch Snowflake.
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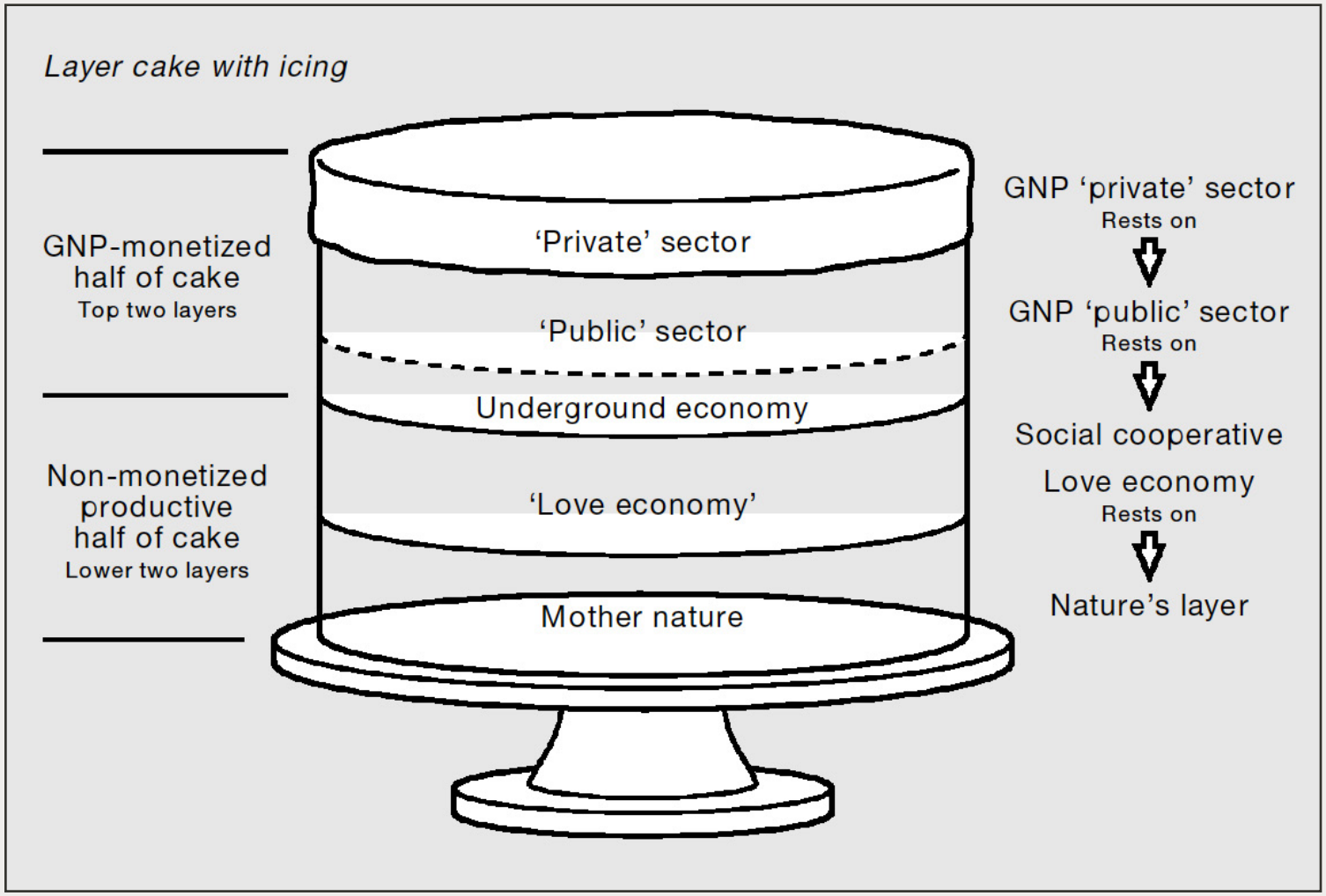
APPENDIX D: LAYER CAKE WITH ICING



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