Transition Design and Fashion

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As the discipline of fashion design desperately tries to remake itself more sustainable through the introduction of transparency in supply chains, ecological materials, and various modes of recycling and circularity, the question remains if these initiatives have enough impact to make a difference in the markets of fashion keep growing. Across the design field, there have been calls for more fundamental changes to the discipline. One such approach runs under the banner of Transition Design. This paper applies a perspective of Transition Design to fashion design to unpack a series of arenas where change has to happen in fashion design. Using the Transition Design framework, the following text paraphrases levels, systems approaches, and points of concern and translates them to the context of fashion. This endeavor aims to show how possible synergies may arise between these seemingly disconnected parts and how fashion educators can grapple with some of these complex issues, scales, and systems.

Keywords: transition design; sustainable fashion; systems change; transition design and fashion

Introduction

In recent years, Transition Design has emerged as a radical question in the design disciplines, especially in the ongoing discussions on sustainable design. As design's social and environmental issues remain largely unaddressed or wrapped in deception and denial, Transition Design emphasizes the need for more "fundamental change at every level of our society" (Irwin 2015, 229). This fundamental shift in perspective is also what has been lacking in discussions concerning sustainable fashion. Our aim here is to address how fashion could be addressed from a transitions approach to challenge the fashion industry, an extractive and polluting industry, to move beyond merely sustaining the current system with some minor eco-tweaks.

Compared to an approach that mainly strives to make the current system less environmentally costly and more sustainable, a perspective of Transition Design

addresses fashion as a larger social and cultural phenomenon. Therefore, it strives to challenge fashion to change beyond products or the industry level. In alignment with Transition Design, this requires *systemic change* on many levels, not only production but also the introduction of "circularity" in what remains a business built on extraction and accumulation.

With transitions as a vision set already at the point of departure, designers need to tackle fashion beyond sustainable consumption to challenge how extractive capitalism is tied up with individualist and competitive modes of subjectivity to transition towards new individual, social and societal practices and perspectives. Biologist Andreas Weber (2019) argues that "sustainability" is not enough: transitions require a *richer sense of aliveness and thriving*. This implies moving beyond fashion as an industry and system and seeing fashion as a more comprehensive medium for social being/existence in consumer culture. To realize change on such a broad scale, designers need to push for *transitions* at many levels simultaneously; this paper follows the framework provided by Irwin, Kossoff & Tonkinwise (2015).

As envisioned by Irwin, Kossoff & Tonkinwise, Transition Design engages with societal problems within the current system and strives to reveal and create new possibilities for change from within inherited structures but beyond their existing models of linear change. Transition Design can be seen as continuous intervention due to its character of thinking and acting across longer time horizons, and intervening in the wicked problems within socio-economic and contested political systems and societies. Within such a framework of evolving processes, transition designers call for a commitment to work iteratively over long time horizons at multiple levels of change (Irwin 2015, 237). A transition design framework is urgently needed to tackle the unsustainable paradigm dominating fashion design.

The challenge of transitions is, however, not uncontested. Fashion is a realm that does not strive towards new technical solutions of convenience but an arena of ever-lasting cycles of competition and social strife. Thus, following Irwin's (2015; 2018) concern, the transition also must mean *reexamining the organization of knowledge and (design) visions* from a feminist, decolonial, and ecological perspective. This means pushing design towards more inclusive and systematic goals, affecting broader populations, organizing knowledge towards mobilization, and building unity for leverage towards transition. It cannot wait for invention as an elite-driven "disruption" driven by technologies or left to policy and politicians. Design thus plays the role of both visioning and practical implementation. Both must work in tandem for a more profound transition within the design field and society at large.

Following Irwin's earlier discussions (2015; 2018), this paper applies a transition design perspective to fashion design to unpack a series of arenas where a change of perspective has to occur. Using the transition design framework, the following text paraphrases levels and points of concern earlier highlighted by Irwin, Kossoff & Tonkinwise (2015), applying them to the context of fashion. This endeavor aims to show how possible synergies may arise and how fashion practitioners, researchers and educators can grapple with some of these complex issues, scales, and systems.

The levels of transition fashion design

Today's consumer world is dominated by a paradigm where products are produced and consumed in a short time, just in time, and shaped entirely by consumption-centered concerns. It has become apparent that the resources in the world cannot handle the

growing global demands of ever-increasing cycles of production and consumption. As a result of industrialization, problematic issues in factories, workplaces, and workshops have emerged along with the environmental problems, issues that endanger and violate human rights (Sherburne 2009, 6). The disproportionate use of environmental resources, the increase of greenhouse gasses in the atmosphere, rapid population growth, and environmental pollution endanger a sustainable life (Serres 1995; Rockström *et al.* 2009). Clothing production globally doubled between 2000 and 2020 (Niinimäki et al 2020). In the fashion industry, more than 50% of all fibers produced in 2020 were obtained from synthetic fibers and more than 30% from cotton (Niinimäki et al, 2020), while the rate of apparel recycling may be as low as 0.1% (MacArthur 2017).

Current scattered and piecemeal fixes to the unsustainable conditions are in need of a more comprehensive approach. Yet an overarching challenge is to promote change towards ecological integrity while simultaneously tackling social justice: sustainability cannot only serve the wealthy and privileged while blaming the poor for consuming (von Busch 2021). Transition fashion advocates a paradigm shift, changing production-consumption habits, and taking ethical and fair social, environmental and economic cycles into account. Therefore, it is essential to analyze and unpack the levels of fashion to tackle wicked problems. Building on the Transition Design framework (Irwin, Kossoff & Tonkinwise 2015), we will now map out the levels of required transition, starting from a global scale through to the materiality of garments.

Global systems level

On a global level, the current fashion industry is made up of a variety of markets, ranging from labor-intensive haute couture and bespoke tailoring to the dominant models of mass-market brands and online, accessible, and on-trend "one-click" shopping. The characteristics of the garments and the scale of production vary

according to the market level. Still, the design and production processes involve a standard set of stages that occur within all market levels of the industry (Gwilt 2014, 12). From growing fibers, extracting petrochemicals, minerals and water, yarn and fabric production, garment manufacture, to mobilizing workforces, all require a massive infrastructure of resources that circulate from one part of the planet to another (Fletcher and Grose 2012, 54). This global fashion system affects almost everyone on earth while perpetuating cycles of production and consumption under unbalanced, unfair, and exploitative conditions. As an example, the global fashion industry is worth around 1.5 trillion dollars, making it one of the most profitable industries in the world. Yet, garment workers are mainly people of color and from disadvantaged groups and reportedly earn as little as \$94 a month in Bangladesh and China, around \$332 a month (Kuenneke 2020). While the beauty and convenience of fashion as we know it - immediate consumption, cheap and up-to-date clothes - target countries in the global north, countries in the global south experience negative economic, ecological, and social impacts, perpetuated by those with most power who benefit from the model's immense financial success. Understanding that fashion is a global system means confronting the faults of the models and practices within this system on a global scale, seeking systemic change in production and supply chains, regulations and policies. Without having the global level in mind, scaling up a successful model quickly attaches itself to supply chains that endanger sustainable goals. To push for transition on this level, transition designers in fashion need to seek strategic change on the level of production and logistics, political impact on laws, regulations, and tariffs, and worker rights labor through unionization, and minimum wage. Initiatives that can be seen in campaigns over the last decade, from Fashion Revolution to the PayUpFashion campaign create a positive impact on such transitions. With the Covid-19 pandemic, many problems have

emerged and one of them was the second major humanitarian crisis in the textile industry after the Rana Plaza disaster during the pandemic. Many fashion brands producing in countries such as Bangladesh and India stopped their production after the pandemic and did not pay the textile workers for the orders placed in advance. This crisis was announced thanks to the "#PayUp" campaign launched by the Remake organization and Elizabeth Cline on Change.org. Public opinion was formed for more than 40 textile brands to make their payments, and some companies agreed to make payments. The Pay Up campaign has become a platform that puts pressure on brands to create economic and social security for textile workers.

Local level

As posited by Ezio Manzini, institutions and organizations are becoming malleable and fluid, affecting traditional design practices. Projects tend to be flexible and choices vague and reversible. Solid and long-lasting ties evaporate, and light, variable social networks take their place (Manzini 2019: 5). In the solid world, people were led to imagine themselves or others as influential individuals able to leave an indelible mark. By contrast, the fluid world talks about collective action as the only possibility for building favorable environments. It tells us about the importance of attention and listening to things in the long term, about care for their upkeep. In short, it tells us the importance of caring (Manzini, 2019: 8). It can be said that this type of caring first begins at the local level, mainly within our communities and surroundings. This type of localism has an opportunity to shape sustainable futures through connecting with the community and valuing our ecological environment and working on regional levels to revitalize social ties and commitments to production networks within the proximity to one's living environment. Projects like reimagining regenerative agriculture in fiber production in the work of Fibershed, or regional sustainable resource networks such as

the New York State Regional Yarn Sourcebook embody this scale of work. Examples of policy at this level include the recent Garment Worker Protection Act (SB 62) of California 2021, and New York State's Fashion Sustainability and Social Accountability Act (A8352) of 2022.

It may seem paradoxical to pay special attention to the level of local communities in an increasingly fluid and global world, but the everyday social life that remains stable mainly happens on this level; through means of loyalty, solidarity, and the bonds of community. This is the level where individual change can have an impact through means of social bonds, social pressure, and persuasion as much as goodwill and face-to-face interaction. Fletcher and Tham (2019) indicate in their "Earth Logic Fashion Action Research Plan" that there is insufficient time to wait for large-scale research programs to gather and then report robust evidence before we all act. Instead, they suggest taking action by finding more iterative ways where rigor is replaced with robustness, where mistakes can quickly be addressed and mitigated. This can mean being immersed in context and collaborating with peers, continuous dialogue with relevant stakeholders, and drawing on citizen science to create nuanced understandings (Fletcher and Tham 2019, 38). Earth Logic fashion builds processes and decision making which place caring relationships at its center, for the earth, for people, and for fair share (Fletcher and Tham 2019). For example, this could mean addressing fashion on local levels and testing on a small scale while striving for robust ecological resilience. A useful model is the SLOC framework of Manzini (2019); Small, Local, Open, Connected. This means maintaining work at a scale where experiments receive quick feedback and the possible fallout of failures are more easily contained, corrected, or undone. This work builds on qualities that tend to thrive logically, such as loyalties and social commitments to the community or a lifestyle scene. Examples here could be

sustainability-endorsing fashion incubators or the establishment of cooperative business models with shared ownership for fashion brands, such as the brand Friends of Light. We can also see this emerging in local initiatives of connecting emerging brands, as well as consumers, with local farmers and community-supported agriculture, such as in the example of NYC-based NY Textile Lab, using the farmer's market on Union Square as a hub for promotion textile dyeing and the promotion of crafts and repairs. The greatest benefit of such workshops in this direction is to raise the awareness of the society about how citizens can feel agency in a sustainable fashion by using waste materials, visible mending, and using natural dyes. It is equally important for designers to produce together with local participants and for the participants to acquire a new skill, in order to share information on making practices.

Material/garment level

The most immediate level is the level of fashion that touches the wearer's body. Many harmful effects in the fashion industry threaten the environment, starting from the raw material to the final product. The excessive use of pesticides and water in some sectors of cotton production, the violation of animal rights, and petroleum extraction and chemistry are among those. The harmful chemicals used in textile finishing, excessive use of water and energy in textile production processes, and waste of fabric and resources also impact the environment (Gwilt 2014). Fashion is still a material world with all its ephemeral visions and imaginations. Materials are the tangible synthesis of resource flows, energy use, and labor. They visibly connect us to many of the significant issues of our times: climate change, waste creation, and water poverty can all be traced back somehow to the use and processing of and demand for materials (Fletcher and Grose 2012, 12). While craft-intensive production and slowness may not be the only antidote to fast fashion practices, the idea of the slow and careful holds a dialectical

power against the dominant practices promoted through consumerism.

One of the dilemmas faced by the designer who wants to be responsible is designing new products and services to be released to change the understanding that is believed to achieve welfare and comfort by reaching more new products. Solving this dilemma is possible by emphasizing the ecological characteristics of the designs and initiating and maintaining new approaches to welfare (Vezzoli and Manzini 2010, 46). Thus, the issue of sustainable fashion, in which only ecological destruction and waste analyses are calculated and which always serves as a table with one leg missing from this point of view, must expand into the fields of psychology to unpack how fashion constructs the subject positions in and through social groups. We may go a long way by designing conscious, sustainable, and beautiful products with carefully produced fibers based on handicrafts according to ethical rules (Fletcher 2013, 120). But special attention may have to be put on fashion designers on the matters of desire in such living interactions and how all parts of such systems can strive to promote aliveness (Weber 2019). From such a perspective, success is not a matter of "scaling up" towards more growth but increasing the quality or intensity of aliveness. Maybe this means creating a space to learn about and have knowledge on how the cotton is picked, the fabric is woven, and who labored in the making of the garment. The aliveness derives from understanding how it is made. Beyond the production of new items by emphasizing ecological materials, crafts, and slowness, the practices of garment lifecycles can be rethought to support both thriving and sustainability, such as in the examples presented in the "Craft of Use," initiated by Kate Fletcher, or "Golden Joinery" of Saskia van Drimmelen and Margreet Sweerts. The ideas and practices of using garments and the personal craftsmanship and skills of users create an alternative bond with garments and materials that surround us. Examples of garment adaption that are done by users in

"Craft of Use", are gestures that fashion is as much process, practice, and performance as a garment (Fletcher 2016).

Personal/existential level

Fashion has a great dominance over modern culture and provides a strong sense of "now" that few other cultural phenomena provide. Fashion has great importance for identity production, which Lipovetsky defines as 'fluctuating personality and tastes' (1994,148) and can be seen as one of the myriad ways of producing and reproducing individual and collective identity due to its versatile and changeable qualities (Smelik 2017, 8).

While not supported by the fashion system, objects that evolve build up layers of narrative by reflecting traces of the user's invested care and attention (Chapman 2015, 112). However, as noted by Lipovetsky, the desire for constant change supported by faster fashion cycles has brought an acceleration of our perception of time; that is, the speed of time flows along with the increasing cycles or "drops" of fashion. In a psycho-social vortex that Bauman (2010) calls *Perpetuum mobile*, fashion is now consumed to self-sustain a position in the race; you've got to keep swimming just to avoid disqualification, falling out, or becoming a "loser."

The current focus on products - the design, production, distribution, and sale of units of clothing - limits our perspective on what fashion practice *can be*. So one way to get out of this could be to think of fashion as a shared sensibility rather than an industry, system, or product (von Busch 2019). Rather than provoking consumption, fashion practices could support psychological needs, such as participation, creation, renewal, and experimenting with our free will. In the "Craft of Use," Fletcher (2016) has shown that users do not only exist as consumers, but they also can reveal their identities and

revive clothes in their real lives. While Fletcher's project raises awareness on sensitivity for care and preservation of our clothes, the practice of care and repair could also be considered a fuller change in the attention and care in social relations, that practicing with mending on the level of goods may also cultivate awareness to the mending of social relations, society, and our local environment. Working with fashion on a level of individuation and subject-formation allows designers to think of garments as tools not merely for self-expression but for self-transformation, growth, flourishing, and self-transgression (von Busch 2021).

Designing for Systems changes

While we have now examined the different levels of transition needed to change fashion beyond merely sustaining the current system, the transition design framework, as suggested by Irwin et al.(2015), also posits how interventions are needed through reconceptualizing systems and cultures of change. Cutting across the levels are various organizational protocols and systems molded by the current fashion industry that need to be questioned and remade, ranging from modes of exchange and commerce, values and politics, ideas of functionality, societal hierarchies, and extractive and colonial practices. Even if trying to avoid engaging or perpetuating them, design practices intersect and tacitly support exploitative modes of production and thus need to address and reexamine underlying assumptions and ideals to avoid perpetuating these.

As pointed out by Serres (1995, 53-54), the earth speaks to us in terms of power, bond, and interaction; each partner in the situation of symbiosis, therefore, owes their life to the other. In order to push for a transition in systems change, fashion has a lot to learn from the theories of living systems (Capra 1997; Capra and Luisi 2014). Designers have a lot to learn from principles such as emergence, self-organization, resilience, and perhaps most importantly, interdependence to initiate, forward, and catalyze change

within complex systems (Irwin et al. 2015). This section will more specifically examine a transition approach to fashion systems, economies, organizations, and down to subjective and personal change.

Transitioning textiles beyond extractive practices

It has become clear that designers and manufacturers need to address systemic change within our textile and clothing production systems. Fibers are the foundation of our clothing and they link us to socio-economic paradigms. In the case of globalized fashion systems, the cultivation of fiber materials depends on capitalist growth models rather than the growth patterns inherent to natural living systems. As with most industrial production systems, our connection to the land dwindles to a marketing system that provides energy, materials, and food for a price. For most of us, the flow of money seems essential for sustaining life. This can lead us to forage for the highest financial rate of return. The living things we harvest are more than just (monetary) resources; but maintain balances that sustain the living environment of our planet (Krafel 1999, 172). In textiles and clothing, our decisions about material flows can no longer only address a shift in the material type or content to arrive at a "circular" marketing model, based to still primarily favor human wellbeing and agency. Instead, our materials need to be grown and processed in accordance with the shifting balances of nature with universal thriving as its main vision.

Downward spiral flows

The materials integral to global clothing systems flow primarily in a downward spiral of extraction and waste. Conventionally farmed cotton and polyester extruded from oil, two fibers that dominate world fiber production, make up the dominant part of clothing purchases and are cultivated through unsustainable and extractive measures (Fletcher

2014, 5). Due to the disproportionate scale of production of these fibers when compared with other fibers, the detrimental impacts of their production are amplified, contributing to mass extinction and climate change. It is evident that environmental problems arise due to feedback loops triggered through extractive material flows.

The dominant economic system rewards production practices and consumer behaviors that feed downward spiral flows. Scarcity and competition are the results of continual extraction while celebrated through winner-takes-all models of entrepreneurship. Such behavior creates a self-perpetuating spiral of extraction and exploitation. A world that is diminishing in possibilities increasingly appears to justify trying to get enough before it's too late. People who take more than they give are seen as smart; their behavior is imitated. More people try to harvest (or extract) more than they need. As Krafel (1999, 173) mentions, the depletion of Earth seems to justify the very behaviors that are depleting the Earth.

Upward spiral flows

Shifting paradigms within our clothing and textile systems is dependent on making regenerative material flows visible. Upward spiral flows involve putting resources back into the earth, thus enabling regenerative systems to flourish. One example is the cultivation of natural fibers through carbon farm plans. Employing easily adopted composting methods, cover cropping, rotational grazing, and silvopasture management enables the cultivation of textile fibers that can sink carbon back into the ground. Carbon sequestration can help to rebalance the Earth's Carbon and Water Cycles. The problems associated with climate change stem from a series of shifts in the relative balance of many invisible flows. For example, gasses flow into the atmosphere as fast as they flow out of the atmosphere. Our technology, however, has increased the flow of

carbon dioxide into the atmosphere, thereby shifting the relative balance toward accumulation (Krafel 1999, 93). Without a way to measure and exchange upward spiral flows, we are caught in the pattern of only favoring and monetizing the downward spiral, or extractive model. The constant rebalancing of material flows between accumulation and conservation is critical to environmental and social thrivability on this planet. In order to transition our current textile production from solely extractive models, we need to design new currencies that make regenerative systems visible and tradable (Peebles and Luzzatto 2019).

Transitioning economies of fashion

In *Doughnut Economics*, Kate Raworth (2017) presents a vision of economics operating within two limits: a social foundation that meets the needs of every human and the planetary boundaries, which include all life on planet Earth. Economic activity should not transgress either boundary: economic activity, in Raworth's vision, should ensure that all life on Earth can flourish. In light of the IPCC Special Report in 2018 and the IBPES 2019 report, the first outlining a window of about a decade left for action to avert runaway climate change and the second outlining the catastrophic loss of biodiversity, making this vision a reality is all the more urgent. The inner and outer limits of Raworth's economic doughnut corresponds to the boundaries fashion operates within, between the bottom limits of social and personal needs and the planetary limits of overproduction and consumption (von Busch 2021; Rissanen 2017).

The challenge for fashion designers is to build a new vision for fashion that satisfies needs and minimizes poverty while, on the other hand, limiting the incentives and greed of overconsumption. It is essential to understand what represses or stimulates opportunities for meeting needs (Fletcher 2013, 122). We can start building a new

approach to reveal and nourish positive effects; starting from small changes by choosing the materials to a broader transition by establishing decentralized local production while also rethinking material use, design and washing, service systems, and incentives for care, repair, and celebration of patina.

Organizational transition in fashion

While Western-dominated consumer fashion constitutes the current canon of fashion, other societies in the world have different ways and systems of fashioning the body. This affects the organizational models of fashion businesses, through design, production, and consumption, as well as modeling, styling, commerce, and media, as it prioritizes western consumer perspectives while ignoring more sustainable alternatives. The genealogy of western fashion erases, silences, and denigrates other ways of understanding and relating to the world of the dress. In response to this, decolonial fashion discourse suggests a non-normative plurality of alternatives to the western canon of fashion design (Vázquez and Mignolo 2013, Jansen 2020). Decolonizing fashion discourses turns to restoring, revaluing, and acknowledging a diversity of ways of fashioning the body as well as their histories, genealogies, and aesthetics; it is not about erasing difference, but about erasing inequality and denial (Jansen 2020). According to Niessen (2020), another kind of whole world history of dress is needed, in which the obscured side of fashion practices gains an equal voice, and the consequences of the links between fashion and non-fashion are explored, including textile crafts, industrial garment production, and expanding consumption of industrially-produced fashion in Indigenous settings. Following Niessen's work, Fashion Act Now (FAN) campaign group aims to change the current understandings and applications within the fashion system. FAN creates an activist mission for defashion which tackles the exploitative system of fashion. A group derived from Extinction Rebellion, FAN

demonstrates non-violent direct action in fashion weeks, communicative dialogue for the climate crisis, and declares #BoycottFashion for not buying any fashion item for a year.

The organizational transition must also address how brands operate and what consumer behaviors they promote. Human beings are capable to solve problems and therefore are able to design, deliberate, plan and prefigure actions and makings, yet very few of us participate in design processes when it comes to dress; it is more likely that the people who are most adversely affected by design decisions tend to have the least influence on those ideas and applications (Costanza-Chock 2018). Practices such as activism, DIY, repair, and reuse in the sustainable fashion field, and involvement in the design and production process can be seen as a positive step towards feeling like a part of the community (von Busch 2008). Upcycling can be seen as one of the easiest ways towards sustainable fashion businesses and is also something that communities of color have been doing (Odabasi 2020). As an example, Custom Collaborative trains and advocates for and with no/low-income and immigrant women to build the skills necessary to achieve economic success in the sustainable fashion industry and broader society, by using repurposed and upcycled materials. Custom Collaborative creates a positive business plan for their students both in terms of evaluating waste materials and improving community awareness. In the Custom Collaborative, human relations are developed both in order to provide a material benefit and to overcome the problems related to social justice.

Upcycling can be an educative tool for many cases where experimental learning becomes a process while making clothes. Embarking on a slower but satisfying process spanning some time may reveal new areas of discovery. Clark (2008) emphasizes the

different aspects of expressing identity by using reuse, recycling, and upcycling practices where the market-oriented fashion is a crucial concern, but where the hierarchy between designer, producer and consumer dissolves to create a new fashion sense. It is no longer enough to ask, "What will we design?" but the emphasis must be on the question of "What capabilities will we create?"

Personal transitions

The emphasis on the consumer, selling people a notion of self-authorship and control over their lives, emerged in the 20th century and was a vital component of the growth logic of industrial societies. For example, after the financial crisis of 2008-2009, an initiative by US Vogue, Fashion's Night Out, was conceived specifically to encourage people to shop the industry's back into health. A decade later, during the Covid-19 pandemic, similar calls emerged, and politicians across the world encouraged citizens to return to shopping to "restart" the economy. Yet the months of lockdown had demonstrated that much of the retail industry existed not to satisfy human needs but to fulfill an economic imperative, keeping the economy running rather than satisfying immediate needs, desires, or the well-being of the people.

According to Vezzoli and Manzini (2010, 30-31), people's roles should not be defined only as consumers; all actions towards consumption also require active participation. These actions can consist of simple actions (such as calling a taxi or buying takeaway meals at the grocery store suitable for heating in the microwave) or complex ones (such as cycling to work or buying the food itself instead of ready-made food). As fashion systems and services are designed, consumers' different participation activities and usage skills emerge. Sustainability practices in fashion create a space for many people to reconsider their clothing choices and habits; it is evident that consumers

are not passive individuals. Instead, they are participants who have a say in how products should be produced, reflect the differences shown while using the clothes, and show that they are active as users through various ways of making, such as repairing, repairing, and transforming. From this point of view, it is inaccurate to label the person who buys fashion products as just a consumer. It is also misguided for the individuals who purchase the products to see themselves as inactive consumers. The role of all participants is important in shaping the fashion perception of the future. When it comes to sustainability, the variability of emerging approaches and trends can be seen as changes that will mature our approaches and lead to lively and satisfactory results (Walker 2006, 77). The existence of a new and sustainable understanding that positively addresses the lively structure and variability of fashion will progress in harmony with the beauties of fashion itself.

Examples of practices that challenge the current norms could be Jonnet Middleton's documented refusal from 2008 to buy any new clothes, focusing on sustaining and trading clothes, and cultivating care and mending techniques (Middleton 2014). The emphasis here must be clear; we are more than consumers - we are neighbors, family members, stakeholders, stewards, friends, lovers, etc., so we must ask why we are kept so one-dimensional in the eyes of fashion. More meaningful ways to interact with fashion, rather than primarily consuming it, could be explored to expand and celebrate its subjective and social use.

Concluding discussion: Fashion visionings

A perspective on fashion modeled after transition design asks for more utopian modes for fashion, more wholesome ways of being dressed and with others. In line with Weber's (2019) idea of how we must move through a shift of perspective as radical as

through the lens of the "Enlivenment," seeing the whole world as a living system, where all constituent parts and ecological networks endeavor towards "viriditas," or thriving. Satisfying immediate desires with consumption does not do the job. Transitioning in fashion means the need to reexamine what the Greeks called "Eudaimonia," meaning to be in 'good spirit' or 'welfare,' not unlike the "Buen Vivir" of Indigenous communities in South America (Escobar 2018, 148), and let concepts of a life-well-lived be the point of departure in fashion design, beyond the indulgence of self-expression for the designer or covering up the social anxieties of the consumer.

But there are central concerns to tackle to move forward. What kind of change does a transition imply? Change is not neutral but shifts positions of influence, agency, and power; who guides the process, who wins and who loses positions? A theory of change is always present within the design, and it lies at the core of many wicked problems. Transition Design perceives change as a continually evolving body of transdisciplinary knowledge about the dynamics of change within complex systems. It prioritizes the idea of change for transition to a more *sustainable future* at every level (Irwin 2015). This implies rocking the boat while also calling to our attention that we must not shy away from discussing who pays the price.

At a time when everything is changing so rapidly, and new concepts offer suggestions for current discussions, old established habits and repetitions hardly help sustainable fashion. The solution proposals for the wicked problems in the fashion industry are mostly made up of similar deceptions. Withdrawing by making a small intervention in a problem within the system is no longer seen as a positive step by many. But on the other hand, celebrating "disruption" does not do the job. As so much

"disruptive" innovation has shown in silicon valley, it is loyalties, unions, ecologies, communities, and democracy itself that has taken big hits in its footsteps.

Until recently, few designers paid attention to the earth's well-being, and it seldom occurred that forgetting the earth means forgetting time and space. Fashion brands that have a role in this system should take a step towards more egalitarian economies shaped by environment, energy, social phenomena, and events by interacting with living and thriving systems. Fashion industry production has little place for temporal and human complexity linked to use, no place for the multifarious activity that spins off in seemingly every direction after purchase. Therefore, it is crucial to develop techniques for sustainable fashion which allow us to reach forwards through time and embrace the unformed, ambiguous 'life world' of people and clothing (Fletcher 2016, 116). The role of design today is redesigning the "from the above system" based on new values creating criteria for quality that lead to a system of objects that have the variety, complexity, life, and a blend of beauty and utility (Manzini 1995). In attending solely to physical assessment, designers overlook numerous metaphysical renderings of durability. As a creative industry, it is vital that we break away from the physical and begin to understand more about the sustainability of empathy, meaning desire, and other metaphysical factors that influence the duration of product life (Chapman 2015, 55). Also, a new conception of waste must be imagined, which does not handle rubbish as valueless, deprived, or even evil, standing in contrast to the revelry in "virgin" materials. Only by embracing waste and seeing it as part of the living cycle can we acknowledge waste as an active agent in the regimes of value to see it as a valuable component in design processes (Emgin 2012).

To conclude, how is a transition perspective on fashion addressed in fashion

education and creative research? A critical challenge to fashion education is to cultivate a change in the ideals dominant in fashion education, educational posture, and atmosphere. Even if buzzwords such as empathy, service, experience, and co-design have flourished across many design disciplines in the last decades, little of this has reached general fashion education. Few projects are collaborative, as the model is still that of the lone artistic genius. Even if ideas around systemic approaches and sustainability are slowly entering curricula, still most fashion education funnels students' ambitions into haute-couture success or top-down entrepreneurship based on a winner-takes-all final catwalk show.

To answer the call for Transition Design, and applying this perspective to fashion, fashion education must push students to explore, model, and work towards more pluralistic avenues of success, and more thoroughly test how fashion intersects with the social realms other than the catwalk and ready-to-wear market. Otherwise, there is too little room to allow alternatives to flourish. Suggested questions to explore, start at; How does fashion help people thrive in realms such as coaching, therapy, and healthcare? How can fashion designers cultivate collaboration and understanding of users in design tasks instead of focusing primarily on mood boards, personal expression, and celebrating the genius myth? How can fashion education train both fashion designers in the conventional sense, as well as transition designers, and train both to work alongside each other? In writing to fellow fashion educators about the transitions task ahead, Rissanen (2017) calls for fashion design and other design disciplines to redesign "design itself while concurrently designing the world at large. Critical systems analysis, combined with unconstrained, courageous imagination, facilitates reimagining fashion systems." Fashion transitions require collective and individual imagination oriented towards systems-level change; future research will determine implications of

this for fashion education in more detail.

A concurring risk with a transition perspective is that the burden of change seems overwhelming; so much needs to be done. But designers cannot look away from the surmounting urgency and need for change on a systemic level. Fashion transition designers must push the boundaries of where and how fashion exists beyond the current mode of production, consumerism and practice. Transition design helps break down the overall challenge into levels, while keeping the goal on the horizon; that small fixes are not enough, but greater systemic transformations are needed across every part of the fashion industry.

References

Bauman, Zygmunt. 2010. "Perpetuum Mobile." *Critical Studies in Fashion and Beauty* 1 (1): 55–63.

- Capra, Fritjof. 1997. The Web of Life: A New Scientific Understanding of Living Systems. New York (NY): Anchor Books.
- Capra, Fritjof, and Pier Luigi Luisi. 2014. *The Systems View of Life: A Unifying Vision*. Padstow (UK): Cambridge University Press.
- Chapman, Jonathan. 2015. Emotionally Durable Design: Objects, Experiences and Empathy. London: Routledge.

- Costanza-Chock, Sasha. 2018. "Design Justice: Towards an Intersectional Feminist Framework for Design Theory and Practice." Paper presented at the Design Research Society, Limerick, June 25-28.
- Emgin, Bahar. 2012. "Trashion: The Return of the Disposed." *Design Issues* 28(1): 63-71.
- Escobar, Arturo. 2018. Designs for the Pluriverse: radical interdependence, autonomy, and the making of worlds. Durham: Duke University of Press.
- Fletcher, Kate. 2013. Sustainable Fashion and Textiles: Design Journeys. London: Routledge.
- Fletcher, Kate. 2016. Craft of Use: Post-growth Fashion. London: Routledge.
- Fletcher, Kate, and Lynda Grose. 2012. Fashion and Sustainability: Design for Change. London: Laurence King.
- Fletcher, Kate, and Mathilda Tham. 2019. *Earth Logic Fashion Action: Research Plan*. London: The J J Charitable Trust.
- Gwilt, Alison. 2014. *A Practical Guide to Sustainable Fashion*. London: Bloomsbury Publishing.
- Irwin, Terry. 2018. "The Emerging Transition Design Approach." Paper presented at the Design Research Society, Limerick, June 25-28.
- Irwin, Terry. 2015. "Transition Design: A Proposal for a New Area of Design Practice, Study, and Research." *Design and Culture* 7(2): 229-246.
- Irwin, Terry, Cameron Tonkinwise, and Gideon Kossoff. 2020. "Transition Design: An Educational Framework for Advancing the Study and Design of Sustainable."
 Cuadernos del Centro de Estudios en Diseño y Comunicación-Ensayos 105: 31-65.
- Irwin, Terry, Gideon Kossoff, and Cameron Tonkinwise. 2015. "Transition Design Provocation." *Design Philosophy Papers* 13(1): 3-11.

- Jansen, M. Angela. 2020. "Fashion and the Phantasmagoria of Modernity: An Introduction to Decolonial Fashion Discourse." *Fashion Theory* 24 (6): 815-836.
- Krafel, Paul. 1999. Seeing Nature: Deliberate Encounters with the Visible World. USA: Chelsea Green Publishing.
- Kuenneke, Julie, 2020. "How much do garment workers make? Why brands need to do better?" *Remake Stories/News*, November 11. https://remake.world/stories/news/how-much-do-garment-workers-make-why-brands-need-to-do-better/
- Lipovetsky, Gilles. 1994 *The Empire of Fashion: Dressing Modern Democracy*.

 Princeton, NJ: Princeton University Press.
- MacArthur, Fundación Ellen. 2017. "A New Textiles Economy: Redesigning Fashion's Future." *Ellen MacArthur Foundation* Report: 1-150.
- Manzini, Ezio, and John Cullars. 1992 "Prometheus of the Everyday: The Ecology of the Artificial and the Designer's Responsibility." *Design Issues* 9(1): 5-20.
- Manzini, Ezio. 2010. Politics of the Everyday. London: Bloomsbury.
- Middleton, Jonnet. 2014. "Mending" In *Routledge Handbook of Sustainability and Fashion*, edited by Kate Fletcher and Mathilda Tham, 280-292, London: Routledge.
- Niessen, Sandra. 2020. "Fashion, Its Sacrifice Zone, and Sustainability." *Fashion Theory* 24(6): 859-877.
- Niinimäki, Kirsi, Greg Peters, Helena Dahlbo, Patsy Perry, Timo Rissanen and Alison Gwilt. 2020. "The environmental cost of fast fashion." *Nature Reviews Earth & Environment*, *1*(4), 189-200.
- Odabasi, Sanem. 2020. "Upcycling as a Practice for Decolonializing Fashion: An Interview with Ngozi Okaro." *Fashion Theory* 24(6): 975-977.

- Peebles, Gustav and Ben Luzzatto. 2019. "More Precious Than Gold: How a Carbon-based Cryptocurrency Might Save Our Planet." *Public Seminar*, September 19, https://publicseminar.org/essays/more-precious-than-gold/.
- Raworth, Kate. 2017. *Doughnut Economics: Seven Ways to Think Like a 21st-century Economist*. U.S.A.: Chelsea Green Publishing.
- Rissanen, Timo. 2017. "Possibility in Fashion Design Education: A Manifesto." *Utopian Studies* 28: 528-546.
- Rockström, Johan, Will Steffen, Kevin Noone, Asa Persson, F. Stuart Chapin, Eric Lambin, Timothy M. Lenton et. al.(2009). "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." *Ecology and Society*, 14(2):33 pages.
- Russon, Mary-Ann. 2020. "Global Fashion Industry Facing a Nightmare." *BBC News*, February 14. https://www.bbc.com/news/business-51500682.
- Serres, Michel. 1995. *The Natural Contract*. U.S.A University of Michigan Press.
- Sherburne, Annie. 2009. "Sustainable Textile Design." In *Sustainable Textiles: Life Cycle and Environmental Impact: Principles, Advances and Applications*, edited by Richard Blackburn, 3-32. Cambridge: Woodhead Publishing.
- Smelik, Anneke. 2017. Delft Blue to Denim Blue: Contemporary Dutch Fashion.

 London: IB Tauris.
- Vázquez, Rolando, and Walter Mignolo. 2013. "Decolonial AestheSis: Colonial Wounds, Decolonial Healings." *Social Text Journal*, July 15. https://socialtextjournal.org/periscope_topic/decolonial_aesthesis/
- Vezzoli, Carlo and Ezio Manzini. 2010. Design for Environmental Sustainability.

 London: Springer Science & Business Media.
- von Busch, Otto. 2008. Fashion-able: Hacktivism and Engaged Fashion Design.

 Gothenburg: ArtMonitor.

von Busch, Otto. 2019. "A Crisis of Power in Fashion: Is There Agency for Change?" *Fashion Practice* 11(3): 302-308.

von Busch, Otto. 2021. Vistas of Vitality: Metabolisms, Circularity, Fashion-abilities.

New York: SelfPassage.

Walker, Stuart. 2006. Sustainable by Design. UK: Earthscan.

Weber, Andreas. 2019. Enlivenment. Cambridge: MIT Press

REFEREE COMMENTS:

REFEREE 1 COMMENTS:

- 1. This article discusses a relevant topic of enquiry.
- 2. While the communication style of the paper is excellent, and it does demonstrate understanding of the field, my sense is that it offers a more selective representation of current work and literature than is usual, which has the effect of skewing the narrative. It seems that opportunities are missed throughout to link to already existing and complementary work. Earth Logic for instance is a fashion-specific framework that works through many of the Transition Design concepts in an applied way, as does Fashion Act Now's manifesto, among others.
- 3. Certainly the paper is clearly written, and I find its focus to be on the application of transition design to fashion in the abstract. If this is the

intention then I think more conscious recognition of this would be useful to communicate to the reader and a light edit would be required to make this point throughout. If the intention is to bring this to practice, then more work needs to be done to demonstrate what transition design concepts mean for fashion lives.

- 4. The paper is fully referenced. There is a clear aim.
- 5. There are no tables or visuals
- 6. The paper is critical and the author(s) are certainly thinking and reflecting throughout
- 7. The concluding paragraphs are abstract, in that the ideas remain at a distance from application.

My recommendation is that the paper is revised to more fully acknowledge extant and similar work in the field.

REFEREE 2 COMMENTS:

- To what extent is the topic relevant, timely and significant?
 The paper topic is definitely relevant, timely and significant.
- 2. Does the paper demonstrate understanding of current work and literature in the field?

Yes, the paper demonstrates understanding of current work. However an expansion of relevant literature is called for. There are terms that are not well

defined that seem to crop up as though the reader is familiar with them.

After mention, then they are dropped.

- 3. Is the paper focused, appropriately structured and clearly written?

 The paper needs to be more focused as it covers a broad swath of transition design. What is original about the paper and naming its contribution and an addition of some applications could help with the focus.
- 4. Is it fully referenced and showing evidence of original and well designed research or intellectual contribution?

This is basically an intellectual treatise that is interesting in its ideological stance. Yet upon reading, the perspective is sometimes lost in generalities and abstractions. As a reader I found it necessary to return to the title to gain some focus. It could have more impact if there were more focus and less breadth or if the authors' intention were clear and more related to fashion practice with examples of the need to integrate the levels.

- 5. Are the illustrations and/or tables relevant, useful and integrated into the text? There are none!
- 6. Does the paper demonstrate critical qualities and reflection?

 The paper is written as an ideology and yet doesn't stay with the focus of the title. It would be a stronger paper if there could be some further examples of transition design that could become solutions of practice and add to the importance of these levels of interrelationship.

7. Are the conclusions clear and do they successfully synthesise the elements presented?

The conclusions need more focus upon concluding remarks. Conclusions were a bit disappointing in staying abstract and yet offering no solid applications and even some new topics. Introducing education is unfortunate at this point, as this would be a different topic that needs further discussion.

The paper positions the industry at the various levels without consideration of how we got there and what would be needed at that level: the global dependence of the industry for developing countries, for example. Also what about the effects of the user? How important is the age of the user to the products offered? There are more questions than answers in this paper and at the very least, this should be acknowledged.