REVALUING COMMODITY FETISHISM TO FACILITATE FASHION SUSTAINABILITY

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DECLARATION

I, LISA NEL, identity number and student number do hereby declare that this research project submitted to the Central University of Technology, Free State for the Degree MAGISTER TECHNOLOGIAE: DESIGN, is my independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the Central University of Technology, Free State; and has not been submitted before to any institution by myself of any other person in fulfilment (or partial fulfilment) of the requirements for the attainment of any qualification.

SIGNATURE

25 October 2018

DATE

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“We abuse the land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect” (Leopold 1949).

KEYWORDS

flourishing, feminist ethics of care, commodity fetishism, fashion sustainability, critical analysis, circular fashion economy, emotionally durable design

ABSTRACT

Despite the environmental and humanitarian costs of the clothing system in this industrial age, sustainability plays a minor role in design education, commercial practice and the industry. This situation has resulted in the fashion industry becoming the least sustainable industry, second only to oil. Part of the problem lies in the contemporary system of advertising and related cultural practices, which promise customer satisfaction by encouraging the consumption of “fast” seemingly disposable fashion. However, the products of the fashion industry are not designed to promote true customer satisfaction, but rather to meet company’s sales goals in the capitalist society, therefore the customer has to procure again and again in an attempt to construct their cultural identities through fashion. The central concern is the loss of positive agency resulting from consumerism and the lack of values in a fashion system. Consequently, profit based fetishes are used as a substitute for the lack of more synergistic need satisfiers, such as belonging, nurturing and connection.

How can a model for strategic intervention be conceptualised in order to address the deficit between the production-value and the perceived added-value of commodities in the fashion industry, by using the notion of the fetish to engage with the quintuple helix innovation model and Kaiser’s circuit of style-fashion-dress model? Positive agency is precluded from the conventional model of sustainability, so an alternative ‘agent model’ is presented in which agency is central. This aspect opens up potentialities to insert positive agency agendas within the theoretical argument. Additionally, the generalised universal ethics within the helix innovation model are not in-depth enough to effectively consider aspects oriented to feminist ethics of care. Therefore, ethics of care, Chapman’s concept of ‘emotionally durable design’ as well as Maslow and Max-Neef’s theories on

needs, are used as a moral foundation to determine consumption versus ethical approaches. A grounded theory study is undertaken with critical analysis and synthesis of theoretical data as the methods of investigation.

By contrasting the processes in Kaiser's circuit of style-fashion-dress within the concerns of ethics of care, a strategic framework is developed. Sustainable intervention routes towards positive agency are identified by exploiting the gap between wants and needs through the lens of Marxist, Freudian and Baudrillardian notions of the fetish. Conceptualising a strategy to address these dilemmas provides recommendations for more sustainable and ethical practices in the fashion industry, and thereby aims to promote agency towards human flourishing.

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“Second to oil, fashion and textiles is the most polluting industry in the world. Every stage in a garment’s life threatens our planet and its resources. It can take more than 20,000 litres of water to produce 1kg of cotton, equivalent to a single t-shirt and pair of jeans. Up to 8,000 different chemicals are used to turn raw materials into clothes, including a range of dyeing and finishing processes. And what becomes of the clothing that doesn’t sell falls apart or goes out of style? More often than not, it is discarded in giant landfills” (Business of Fashion 2015).

1.1. INTRODUCTION TO THE PROBLEM

The motivation for this study grew from the researcher's aspiration as a fashion designer to help initiate positive change towards environmental sustainability. The central concern of this study is consumerism in the contemporary fashion system. Unsustainable consumption has severe impacts on virtually all domains of the environment, the economy and society. Environmental scientists like Ehrlich and Ehrlich (1996:154) claim that up to 33% of cancers are caused by industrial pollutants. Minorities, children and the poor are exposed to greater pollution and harm due to the proximity of poor neighbourhoods to environmental risks such as landfills and industry (APHA 2000). In all three domains (environment, economy and society) a committed agency towards sustainability has disappeared because of consumerism. Unsustainable consumption, as a driver for the global fashion industry, has led to dire environmental consequences. The fashion and textile industry is the most polluting, resource-intense industry globally, second only to the oil industry (Business of fashion 2015). Walker (2017:53) argues that the lack of values, and the focus on technological growth and profit in the consumer society, restrict human's views on meaning and reality, and strips the planet of resources and biodiversity.

To counter unsustainable practices, Ashby, Smit and Shand (2013:63) encourage the integration of the three pillars of sustainability, the economy, the environment and society – the very systemic pillars on which unbridled consumerism rest. However, the model of sustainability seems to present these systems as disembodied entities independent of people and therefore excludes the agency of people in the system. Spangenberg, Fuad-Luke and Blincoe (2010:1486) state that in capitalist societies the wish to satisfy human needs is not the driver, but rather the profit motive is. The possibility of a model with agents at its nexus could reactivate agency, as it could place the focus on needs (or value) not just wants (or surplus-value for profit).

However, it is challenging to distinguish between real needs and fabricated wants, as commerce currently sets out to manipulate consumer desire with growth-based cultural messages (Fletcher & Grose 2012:132). Therefore, the taxonomies of Maslow and Max-Neef are utilised and exploited to determine the drivers for unsustainable consumption desires – an argument extensively explored in chapter 2 of this study. Fletcher and Grose (2012:133) note that clothing can satisfy utilitarian needs such as protection from cold, but when linked to fashion, it could satisfy social and personal desires for belonging and expression. However, the agents in the commercial fashion system exploit these desires for profit, which in turn could potentially drive self-doubt, insecurity, loss of agency by the consumer, and unsustainable practices.

In order to ethically bridge the gap between needs and wants in the fashion system, the areas in which the loss of agency occurs need to be determined. The five points of the quintuple helix model, identified as 'systems,' namely, the "education system, economic system, natural environment, media and culture-based public and the political system" provide areas in which to identify deficits (Carayannis, Barth & Cambell 2012:6). The helix model illustrates how knowledge circulates through social subsystems, and how it transforms into innovation and expertise in society (Carayannis, *et al*. 2012:6). Knowledge itself does not bring about change, but it could change attitudes, and therefore potentially affect behaviour towards positive action (agency). Analysing the domains of the quintuple helix, in the context of the three sectors of sustainability provides potential areas of lack for intervention.

1.1.1 Areas of unsustainability

The main concern of the study is fashion sustainability. For each domain of the quintuple helix, areas of lack are identified in the environment, society and the economy. For example, in the *education system*, environmental sustainability is given a low priority in certain course content, as primarily course content caters for industry demands[1], not for sustainable societal futures, and for technology/skills demands, not ethical needs. Similarly, within the *economic system,* cost-effective synthetic fibres are prioritised instead of sustainable alternatives. There is an emphasis on meeting 'fast fashion' desires, instead of meeting slow fashion[2]Potential synergistic satisfiers (Max-Neef 1991: 34), and growth and profit motives are central, not sustainability. Within the *political system,* environmental sustainability is not prioritised and implemented; instead censorship and authoritarianism are enforced, that are meant for protection but inhibit freedom, participation and creation. Moreover, there is inadequate legislation and funding allocated for sustainability. Within the *media and culture based public*, marketing utilises 'green' slogans for profit goals, instead of addressing real environmental initiatives. Additionally, in societal aspects such as pseudo satisfying status symbols are prevalent, instead of identity markers, and fashion fads are popular instead of authentic identity. In this way, the media generate instant fashion gratifications by exploiting the seeming need for identity markers, only for these to be replaced once they are no longer profitable. In this way, 'added-value' goods are mainly for profit motives. Within the natural environments of society, pollution and limited resources compound the cry for a move toward sustainability. Harmful pollution near neighbourhoods is widespread; instead of community environments developing a social connection, communities are exploited as investments in the industry without adequate environmental (and social) impact considerations.

[1] This process is the classic determination, for example, that universities and colleges should "prepare students for the industry." However, if the industry is embedded in the pursuit of profit, the sustainability problem is downplayed.

[2] As will be explained further, 'fast fashion' references the takeaway food industry which fosters speed, instant gratification and portability, over deliberation, long term satisfaction and sustainability.

For more extensive coverage of these matters regarding the lack of agency towards sustainability, chapter 2 points to the environmental sustainability and consumption concerns and chapter 3 demonstrate how these tensions play out in the fashion system. Chapter 4 outlines how the notions of the fetish could be reworked to address needs, and chapter 5 develops a strategic framework towards reactivating ethical agency for fashion sustainability.

1.1.2 Potential strategies towards sustainability

Potential strategies to counter this problematic situation could be the design for 'emotional durability', in which relationships with product users are sustained by increasing the emotional resilience of the link between consumer and product (Chapman 2009:34). Another strategy might be Max-Neef's design for 'synergistic satisfaction', in which needs are satisfied while simultaneously satisfying other needs (Fletcher and Grose 2012:132). However, one could argue that there might not be a sustained approach to changing this lack of agency towards sustainability. This study proposes that a potential approach to counter this lack of agency could be through the positive and ethical use of the fetish as presented through the work of Marx, Freud and Baudrillard (as argued in chapter 4).

However, ethical approaches are essential in order to avoid further exploitation and in order to activate positive agency. In this regard, traditional ethics can be a powerful tool to defend the environment, as people bear an ethical responsibility to help stop life-threatening harm caused by pollution, and a democratic responsibility, because people have fundamental human rights to equal consideration.

In this regard the Greek philosopher Aristotle (1948) believed that man's highest good is *Eudaimonia,* generally translated as 'happiness' but closer in meaning to' flourishing' – this more objective state comprises of success, fulfilment, self-realization and an adequate level of material comfort (Cheng & HO 2013:385). Associations of a commodity *Eudaimonia* perception include three characteristics: psychological, physiological and spiritual, and this is in alignment with Maslow's (1943) Hierarchy of Needs.

In short, needs are pursued because there is a real or perceived ‘lack of fulfilment' of those needs. However, this approach seems to suggest ‘individual' or egocentric human flourishing, perhaps at the expense of another flourishing. When dealing with human rights issues, utilitarian rules, principles and guidelines do not always provide all the solutions to ethical conduct. Therefore, alternative and more inclusive approaches are required in order to address issues of holistic human flourishing. Feminist ethics of care is one such approach, as it focuses on female ways of moral reasoning with emphasis on aspects such as community, relationships and connection (Jaggar 1992:363). Feminist ethics aims to address the oppression of any groups in systems, such as the fashion system (Jaggar 1992:363-364). From this philosophical perspective, the “good life” or flourishing is determined reciprocally; in other words, individual flourishing cannot occur at the expense of the greater “good life” or flourishing, and vice versa. Therefore, the emphasis is not about “the good life” for individuals, but rather about “the optimal good life” for all.

According to Peter Senge, in his foreword for Ehrenfeld’s (2008: xiv) book *Sustainability by Design*, the way forward is to confront the more profound relation between both inner and outer unsustainability of our present ways of living. He maintains that through reflection and awareness we can enact new structures for sustainable habits. Senge goes on to argue that humans have fallen out of alignment with their deepest natures and with the environment. The Taoist transcendental ideals of "the good", "the true" and "the beautiful" have been replaced with a mindless quest for more economic growth; this instead of a system which encourages "a sustainable ecosystem that generates a level of health, vitality and resilience and allows all members to flourish” (Enrenfeld 2008:xix). Senge reasons that, through meaningful conversations about a world of care and flourishing, changes in behaviour (from unsustainability to flourishing) can emerge for modern humans (Enrenfeld 2008: xix). He goes on to motivate that one can flourish by *being*, not by *doing* or *having* something.

1.1.3 Fashion for flourishing

"Fashion is seen to connect people to cultural systems, not natural ones" (Fletcher & Grose 2008:1). Fletcher and Grose (2008:1), on the other hand, call for "fashion that helps us flourish". They explain how

> . . . the rich culture of fashion helps us to meet our human needs for identity and participation, and argue that celebrating this role of fashion could improve individual well-being and allow new opportunities for sustainability to emerge (Fletcher & Grose (2008:1).

According to Belk (1988) individuals in society can construct their identities through their physical possessions (as noted in Fletcher & Grose 2008:1). Bredward and Evans (2005:2), and Briggs (2005:81) explain fashion as two inseparable processes: “A market driven cycle of consumer desire and demand”, as well as a “modern mechanism” for expressing personal identity. The two processes of fashion as explained above are a central challenge for sustainable fashion.

Crane (2000:11) adds that in contemporary society, work, religion and class are no longer as important as lifestyle and relaxation in constructing the social identity of consumers. Therefore, the “consumption of cultural goods, such as fashionable clothing, performs an increasingly important role” (Crane 2000:11). Retailers supply customers with new clothes that the customers can use to construct their identities. However, Finkelstein (1991:145) contends, that if “we are relying upon the properties of procured goods for our sense of identity, then we are compelled to procure again and again”. Ehrenfeld (2008:3) argues that this “compulsive need” for more commodities is “producing [an] individual and societal sickness” in the social fabric of life. Human relationships are fading, while there are a record number of people seeking cures for apathy, depression, obesity and other aspects of physical and emotional distress. Ehrenfeld (2008:3) adds that there is increasing "divisions between the rich and the poor, with the rich appropriating ever more of the world's natural and economic resources" despite the "affluent world that should provide the basic needs of everyone".

Additionally, only a small percentage of commodities are still used within six months of their acquisition. Labourers that are barely above the poverty line are toiling to produce

cheap fast fashion that quickly ends up in the garbage of the rich (Ehrenfeld 2008:3). Ehrenfeld (2008:4) asks the following question: “What is it about modern life that requires ever-increasing quantities of goods to produce satisfaction?”

Regarding the construction of identity, Kaiser offers a potential solution (elaborated upon in chapter 3 of this study). Kaiser (2012:20) replaces the notion of ‘identity' with ‘subject formation' in the circuit of style-fashion-dress model. Kaiser describes subject formation as ‘subjection' (being subjected to something structured by others) and ‘subjectivity' (having the agency to express one's way of being). Kaiser goes on to state that, "individuals generally have some degree of *agency*: the freedom or ability to exert one's voice and to resist power relations in some way". For example, fashion could enable the agency for self-expression, differentiation and similarity through the expression of technologies, mass media and popular culture through which fashion is advertised and represented (Craik 2009:245). Kaiser (2012:20) adds that ‘subject formation' prioritises the process of "becoming" over merely "being". This aspect provides a potential gap, or "potentialities" to insert a positive agency agenda within the argument. Therefore, the term "agency" could also refer to the notion of role-players in the fashion system, demonstrating agency through active engagement in the success of the enterprise. Thus agents with the potential to "do good" can be seen as ‘role-players', as opposed to the notion of ‘stakeholders' in the fashion system with less altruistic determinations (such as motives of consumption or profit), despite the potentially harmful impact of these choices.

The original “circuit of culture” model contains the elements of, “representation, identity, production, consumption and regulation” (Kaiser 2012:13). Kaiser (2012:21) adds ‘subject formation' instead of identity and ‘distribution' in the place of representation. Rather than the linear value chain, Kaiser's (2012:14) circuit of style-fashion-dress represents a circuit rather than a line, in order to connote the idea of multiple interconnected sites and movements that flow in multiple directions in the fashion system. Each concept in the circuit is a process of the fashion supply chain, and diverse cultural paradigms and practices are interconnected into the chain through the concept of subject formation. By analysing the processes in the circuit of style-fashion-dress, value gaps in the system (caused by unsatisfied holistic needs) which lead to unsustainability can be identified.

Chapter 4, outlines how the notions of the fetish through the Marxist, Freudian and Baudrillardian lenses could be reworked to address these identified unsatisfied needs. The central contribution to new knowledge from the dissertation can be found in chapter 5, where the fetish is integrated into the complex 'style-fashion-dress' circuit model of Kaiser's, in the pursuit of positive agency and sustainability in fashion.

In addition to Kaiser's circuit, analysing the domains of the quintuple helix model (Carayannis, *et al.* 2012:6) in the context of the three sectors of sustainability could provide potential areas of lack for intervention towards positive agency. However, the helix model is based on generalised universal ethics, arguably characteristic of male centred ethical perspectives and positions. As argued in chapter 5, these utilitarian rules, principles and guidelines do not always provide all the solutions to ethical conduct in which aspects such as community, connection and relationships are considered (Jaggar 1992:363-364). Therefore, despite the effectiveness of the helix in illustrating how knowledge circulates through the social subsystems, and how it transforms to innovation and expertise in society – it could be argued that the model is not in-depth enough to effectively consider aspects orientated within and from feminist ethics of care. Therefore, this study aimed to develop a strategic framework that could consider ethics of care within Kaiser's circuit of style-fashion-dress.

In this study, the researcher explores how the perceived production or manufactured value of goods, creates the consumer desire for fashion commodities, and how the deficit in the added-value or retail value, of these goods, is partly responsible for overconsumption and thereby exacerbates the challenges facing sustainable fashion. By engaging in the added-value concerns through identifying 'lack', an ethical strategy for addressing the issues raised will be developed in order potentially to reactivate positive agency. The following subsection provides the key terms for the study.

1.2. KEY TERMS

1.2.1 Agency – This concept describes the state of having the potential to act (generally of one's own free will). In this study, it refers to the potential notion of role players in the fashion system to demonstrate agency through active engagement in the success of the enterprise, and the potential to "do good". This concept needs to be articulated against the notion of "stakeholders" in the fashion system with less altruistic determinations like motives of consumption or profit, despite the potential harm caused.

1.2.2 Clothing – Clothing could be defined as apparel or garments that meet humans' basic need for covering and protection against the elements (Craik 2009:3).

1.2.3 Design for sustainability (DfS) – Design for efficient, sustainable production and consumption. It aims to provide satisfaction while focusing on minimising the negative and maximising the positive effects on the environment and society (Spangenberg *et al*. 2010:1486,1487,1490).

1.2.4 Fashion – Fashion is to embellish, aestheticise and add symbolic (not utilitarian) value to clothing (Craik 2009:2). Craik (2009:3) describes fashion as, "a prevailing custom or style of dress, etiquette, procedure; a shared and internalised sense of modish style of the time". It is a cultural practice which relates to the identity and status of individuals and as members of groups. Cultural status is acquired through consumerism or, "the purchase of goods to acquire social value" (Craik 2009:2).

1.2.5 Fast fashion – "A term that plays on the cultural connotations of 'fast food' and its accompanying inexpensive, low-quality consumables. As a business model, fast fashion is designed to provide imitation runway designs as quickly as possible at meagre prices, a taste of luxury for the masses" (Hertz 2011:28). The associated characteristics of high turnover and disposability, initiated by retailers like H&M and Zara have been criticised for this issue (Hertz 2011:28). Critically, fast fashion relies on rapid turnover and throwaway culture, as fashion expectations change (or are changed by the industry), and

therefore this implies the potential for masses of garments that have 'fallen out of fashion' and are headed for landfills and the like.

1.2.6 Value – A pivotal issue in ethics regarding the moral significance or worth that people attach to things. To say that something has value, in this sense, is to acknowledge that it weights the choices and decisions people make and that it should guide their behaviour (Dupré 2013:12).

1.3 SUMMARY OF THE THEORETICAL ARGUMENT

This research has been undertaken in order to try to address issues of consumption in contemporary society. A literature review is undertaken to set a theoretical context for the study. A broad overview of environmental sustainability in the fashion industry provides the context. The literature points to the need for the conceptualisation of a strategic model of intervention. The key aspects of the Quintuple Helix Model are introduced and explained to build a clear strategic understanding of the model in the context of the fashion industry. To this is added the central circuit model of Kaiser that is known as the circuit of style-fashion-dress to develop the complexity of the Helix, and to open up the understanding of the domain to create a potential strategic framework for intervention in the fashion industry. A strategic understanding of the fetish is explained, and the critical dynamics of Marxist, Freudian and Baudrillardian notions of the fetish are determined. These dynamics are used to identify deficit areas and therefore strategise interventions in the fashion industry. Finally, the three paradigms of fashion, the fetish and the quintuple helix model are utilised to develop a strategic model or framework, which can target, through the feminist ethics of care, the five systems of the helix and, more specifically, draw on the Kaiser model. The research is aimed at illustrating how the three paradigms can be used to conceptualise a strategic model of intervention to address sustainability issues in the fashion industry. The objectives are achieved by discussing the deficits identified in the literature review, within the framework of the model in order

to strategise possible interventions. Based on this summary of the work, the research question is presented in the next section.

1.4 RESEARCH QUESTION

How can a model for strategic intervention be conceptualised in order to address the deficit between the production-value and the perceived added-value of commodities in the fashion industry, by using the notion of the fetish to engage with the quintuple helix innovation model and Kaiser's circuit of style-fashion-dress model? Drawing from this research question the following sub-questions guide the research and the literature review:

1.4.1 Sub-questions

- What are the central aspects that can provide a contextual understanding of sustainability issues in the fashion industry?
- What are the critical dynamics at work in the notion of the fetish?
- What are the key aspects of the quintuple helix model and Kaiser's circuit of style-fashion-dress model in the context of the fashion industry?
- How can the quintuple helix model and the Kaiser model be used to conceptualise an ethical, strategic model of intervention regarding sustainability issues in the fashion industry?

Exploring the quintuple helix model and the Kaiser model through the notion of the fetish can provide access to, and address the dilemmas raised within the model as it pertains to the construction of intervention strategies. Therefore, a model for strategic intervention is conceptualised to address the deficit between the production-value and the perceived added-value of commodities in the fashion industry, by using the notion of the fetish to

engage with the models, towards ethical agency. The research methodology is explained in the following subsection.

1.5 METHODOLOGY

The research methodology identifies the body of methods and the particular practices undertaken in the research project. It is a logical, systematic strategy in which the researcher states the intention or purpose of the project in relation to the anticipated outcomes (Nobel & Bestley 2005:19,24). In light of established epistemological models of scientific enquiry, the researcher will present the methodological paradigm that defines the study, as well as the research design, the data collection methods and the data analysis. In conclusion, the validity, reliability and the delimitations and ethics of the study will be discussed.

1.5.1 Research Design

A grounded theory study is undertaken, and the methods of investigation are those of critical analysis and synthesis of theoretical data (Strauss & Corbin 1998; Leedy & Ormrod 2005: 136,140). Deductive thinking is used to interpret the hypothesis and interpret the epistemological (shared) meaning. The literature review includes contextual material and ideas of theorists in relevant fields (De Vos, Strydom, Fouche' & Delport 2011: 279). The process of deconstruction is used to expose the logic of opposition within the texts (Nobel & Bestley 2005:26).

The use of the term ‘critical’ in critical analysis**,** could link to the method of critical linguistics. This approach holds that the “use of language can lead to the mystification of social events which systematic analysis could elucidate” (Wodak & Meyer 2009:7). Similar to language, dress is a social practice determined by both social structure and that which adds to stabilising change and structure at once. On the other hand, according

to Krings *et al*. (1973), the concept of critique "is the practical linking of 'social and political engagement' with a socially informed construction of society" (as noted in Wodak & Meyer 2009:7). Hence, "critique is essentially making visible the interconnectedness of things" (Wodak & Meyer 2009:7; Leedy & Ormrod 2005:141). Critical theories "want to produce and convey critical knowledge that enables human beings to emancipate themselves from forms of domination through self-reflection. So it is aimed at producing enlightenment and emancipation" (Wodak & Meyer 2009:7). The "theories seek not only to describe and explain but also root out a particular kind of delusion… and create awareness in agents of their own needs and interests" (Wodak & Meyer 2009:7; Blanche, Durrheim & Kelly 2006:394).

Socio-cognitive research strategies make use of theories of social cognition and focus on social phenomena such as ideology or power, such as the way that individuals perceive, or social structures determine discourse and agency (Wodak & Meyer 2009:21,22; Levett, Kottler, Burman & Parker 1997:11; Eagle, Hayes & Sibanda 2006:500). The notion of context **(**including factors such as society, culture and ideology) is considered and thereby informs an interdisciplinary method in developing the theoretical framework (Wodak & Meyer 2009:22)**.** Data collection methods for the study are explained in the following subsection.

1.5.2 Data Collection

The literature review was conducted to build a contextual background for the study. The potential objective was to develop a model for strategic intervention to address the problems of sustainability in the fashion system. The research questions were used to guide the systematic collection of data, with emphasis on the following three areas. Firstly, the central aspects that provide a contextual understanding of sustainability issues in the fashion industry are documented. The specific focus was on how the deficit between the production- (manufactured) value and the perceived added-value of fashion commodities increase the challenges of sustainable fashion. The second area was the critical dynamics at work in the notion of the fetish. The focus was to determine the critical

dynamics of Marxist (economic), Baudrillardian (symbolic) and Freudian (emotional/psychological) notions of the fetish so that these dynamics could be used to identify deficit areas and therefore strategise interventions in the fashion industry. The third area contained the key systems of the quintuple helix model and the Kaiser circuit of style-fashion-dress model. The focus was to introduce and explain the five embedded domains of the helix Model (the "education system, economic system, natural environment, media-based and culture–based public, and the political system", Carayannis, *et. al*. 2012:6) in the context of the fashion industry, as well as the five domains of: "distribution, subject formation, production, consumption and regulation" (Kaiser 2012:13,21) contained in the Kaiser model. The following subsection explains the data analysis and interpretation.

1.5.3 Data Analysis and Interpretation

The analysis aims to examine how theories are interrelated, by engaging in detailed readings of various relevant texts in order to show the patterns of variation and consistency (Blanche *et al*. 2006:336). The "constant comparative method of coding" and pattern seeking is used to interpret the data. It involved the careful reading and rereading of data until the systematic patterning emerged (Potter & Wetherwell 1987:168). The theory that evolved has conceptual density by including numerous concepts and interrelationships among those concepts (Leedy & Ormrod 2005:141). The interpretation of data collected from the literature review enabled the researcher to gain new perceptions of the phenomenon and to determine the issues that occur within the phenomenon (Leedy & Ormrod 2005:134). Through critical reflection, the researcher analysed the contextual theories in the relevant fields, in order to evaluate how the outcomes of the study related to the set of specific objectives (Nobel & Bestley 2005:68). The data collection was not completed before the analysis began; rather it was a continuous process of theoretical sampling, which involves collecting, analysing, and "finding indicators for particular concepts, expanding concepts into categories and, on the basis of these results, collecting further data" (Strauss & Corbin 1998). The reading of the text must be a layered and multifaceted one, examining text repeatedly and using various

tactical approaches for interpretation (Blanche *et al.* 2006:336). The critical analysis of texts must be understood and situated within its cultural context. Successful analysis outlines and presents the steps followed to understand the text and presents this outline in an interesting manner (Blanche *et al.* 2006:336). The validity and reliability of the study are explained in the following subsection.

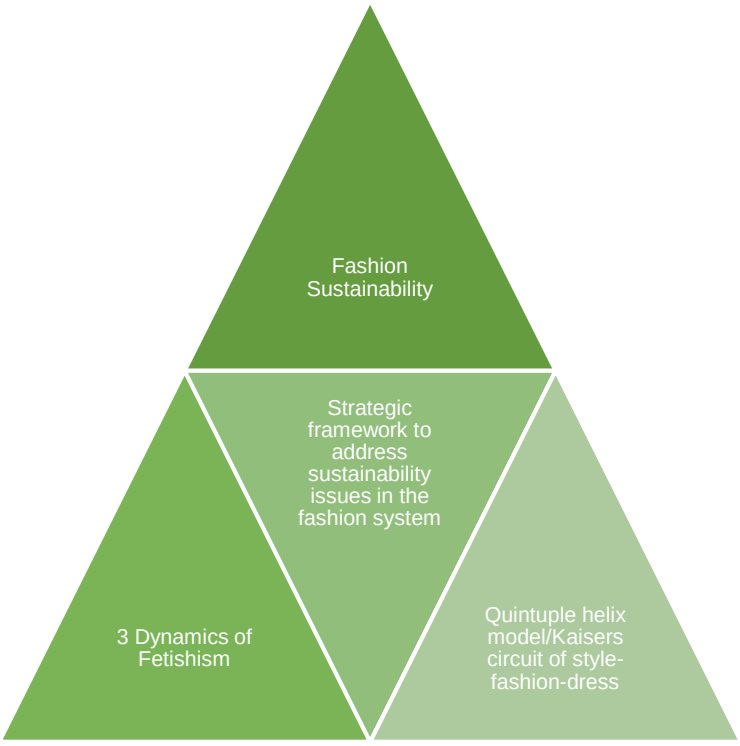
1.5.4 Validity and Reliability

In order for research to be considered valid and reliable, the issues of credibility, transferability, dependability and confirmability need to be addressed (De Vos *et al.* 2011:346). Data was collected carefully and with much caution to ensure credible sources, and justifiable as well as relevant to the purposes of the study (Kawamura 2011:7). By using the criteria of authenticity and accuracy, primary and secondary data were evaluated to ascertain the validity of such data (Salkind 2006:212). The dependability of the qualitative study questions includes whether conclusions make sense in relation to the data that is presented (Merriam 2009:220). Thick descriptions assisted the researcher on avoiding coming to unjustified interpretations of the events being described; therefore, enough data is provided which is discussed in depth to support the purpose of the study. However, unlike traditional qualitative methods, a critical analysis focuses on "argumentation (the action or process of reasoning systematically in support of an idea, action, or theory)" (Wodak & Meyer 2009:31). Therefore, conventional notions of "validity, reliability and objectivity used in quantitative research cannot be applied" to critical analysis unmodified (Wodak & Meyer 2009:31). Rather, issues of how "research can be both intellectually challenging and rigorous and critical" are more critical (Silverman [1993:144] as noted in Wodak & Meyer 2009:31).

The study uses triangulation between fashion sustainability, the three dynamics of fetishism and the quintuple helix model as well as Kaiser's circuit of style-fashion-dress to ensure validity. A mainly theoretical triangulatory approach based on the notion of context is applied (Blanche *et al*. 2006:336), that starts from a complex social problem and phenomenon and not from decontextualised contexts (Wodak & Meyer 2009:14;

Potter & Wetherwell 1987:23). In *Strategies of discourse comprehension* (1983) Teun van Dijk and Walter Kitsch focus on the "construction of meaning at a societal level" from interdisciplinary and critical perspectives (Wodak & Meyer 2009:13). The research explores “general social representations, such as attitudes, awareness, norms, ideologies and values of consumers”. In other words, the “study of discourse triangulates between society/culture/situation[s]” (Silverman 1993:156, as noted in Wodak & Meyer 2009:14). Similarly, the researcher investigates the relationships between fashion sustainability, fetishism for social change and sociocultural perceptions of value. Through the process of triangulation (see figure 1.2) the three paradigms of *fashion, the fetish and the quintuple helix model/Kaiser model*, were used to develop a strategic model, which can target the five embedded domains of the helix and the circuit. The deficits identified in the literature review were discussed, within the framework of the quintuple helix model and the Kaiser circuit in order to strategise possible interventions.

Figure 1.2 Triangulation of fashion, fetish and helix model. Developed by the author.



When engaging in the critical analysis, the notion of confirmability is replaced with complexity and logic of argument (Munro 2014). A list of the sources and in-text

references contained within the document reflect the intention of the study (De Vos *et al.* 2011:347). The researcher is aware that people interpret the world according to their views, so in order to improve the transferability of the study and to counter the subjective nature of lived experience, the strategy of thick descriptions and the process of triangulation were used (De Vos *et al.* 2011:277; Leedy & Ormrod 2005:133; Kawamura 2011:2). The possibility of the transferability of this study to other situations lies in the development of a strategic framework that postulates potential intervention strategies. This framework does not propose to be a definitive model for how to create these interventions, but instead, it aims to provide a theoretical context which allows readers to decide whether the perspectives are suitable for transferral in their specific contexts or not. Once the framework is established through the use of triangulation and thick description, a chapter is devoted to a speculative/creative approach to postulate potential intervention strategies. These potential strategies could not be validated, but their reliability was determined by the seemingly obvious extrapolation from the model or frame. The delimitations of the research are listed in the following subsection.

1.5.5 Delimitations and ethics

The researcher did not attempt to undertake a comprehensive study on fetish theory or of the fashion industry but merely aimed to explore new insights, connections and applications. Severe objectivity cannot be researched by critical analysis, for it is "potentially embedding in the beliefs and ideologies of the analysts" and the researchers' preconceptions (Wodak & Meyer 2009:32). Blanche *et al.* (2006:336) add that although identifying the effects of the theories identified in the text is an essential part of the critical analysis, these effects limit opportunities for certain forms of action and subjectivity while enabling others. Deductive reasoning perspectives are applied and propose a closed theoretical framework and examples to illustrate claims. This study focuses on middle-range theories of specific social phenomena (for example fashion system agents), in specific subsystems of society (for example economy, politics, environment) (Wodak & Meyer 2009:24). Although one may not be able to generalise the findings, one would hope that they will be transferable. The researcher attempts to make the researchers “own

positions and interests explicit while retaining scientific methodologies and remaining self-reflective of their research process" (Wodak & Meyer 2009:5). Although Feminist ethics of care is utilised and offers theory tied to intervention strategies for consideration, ethics of care does not aim to exclude any groups, but offers strategies to address the oppression of any groups in systems, in this case, the fashion system (Eagle *et al.* 2006:500). The researcher remains cognizant of established and institutionalised paradigms of the knowledge-based economy of academia (Wodak & Meyer 2009:5; Parker 1992:100). Researchers are not outside the social hierarchy of status and power and are, therefore "aware that their work is driven by social, economic and political motives" (Wodak & Meyer 2009:7). Therefore, the awareness that methods could be reliant on Western cultural contexts and Eurocentric perspectives is acknowledged (Wodak & Meyer 2009:11; Levett *et al.* 1997:11).

This research is fundamentally constructed around the logical-deductive use of literature and then the speculative-creative use of the findings from the literature to construct and describe potential intervention strategies (Potter & Wetherwell 1987:162). As such, beyond the standard author protection (see Salkind [2006:118] on plagiarism) ethical approaches there are no other ethical concerns. Critically, however, ethics (as opposed to 'research ethics') plays a central role in this research, as the study engages with the notion of 'human flourishing' or *Eudaimonia* in the fashion industry and sustainability; because any intervention based on 'lack', cannot (should not) exploit the lack but use it to identify ethical intervention strategies. Wassenaar (2006:68) and Eagle *et al.* (2006:500) explain that ethics of care and feminist ethics are two of the ethical frameworks that can be used to engage with philosophical principles in social science research. These frameworks are utilised in this research and will be explained in chapter 5. Being critical implies demonstrating high ethical standards, by making the intention, position and "research interests and values explicit", and "criteria as transparent as possible" (Wodak & Meyer 2009:7). Critique is aimed "at revealing structures of power and unmasking ideologies" (Levett *et al*. 1997:11; Eagle *et al.* 2006:500). Ideology is not understood in a positivist way" as it "cannot be subjected to the process of falsification". A definition of ideology is a "coherent and relatively stable set of beliefs or values". When large portions

of society from diverse backgrounds and interests hold similar ideologies, these "dominant ideologies appear 'neutral'" and tend to hold on to "assumptions that stay largely unchallenged" (Wodak & Meyer 2009:8). Moral standards allow the researcher to understand the difference between "power use and abuse" (Billig 2008; Wodak & Meyer 2009:9; Parker 1992:77). However, "power remains mostly invisible" (Wodak & Meyer 2009:10); investigating manifestations of power by investigating the flow of commodities and culture in the fashion system could potentially illuminate and reveal power structures[3] (Levett *et al.* 1997:11; Eagle *et al.* 2006:500). A list of the chapter divisions follows in the next subsection.

1.6 CHAPTER DIVISIONS

1.6.1 Chapter 1

A short background of the study was provided, the key terms that are significant to the study were defined, and the relevance of the study was explained. An outline of the research methods, the research questions, as well as the chapter summaries, have been provided. This chapter provides a contextual background for the study and leads to the environmental sustainability challenges presented in the following chapter.

1.6.2 Chapter 2

This chapter interrogates relevant literature in order to demonstrate the environmental sustainability challenges resulting from the exploitative approaches of consumerism in a capitalist society. The three sectors of unsustainability are explained, which include the economy, the environment and society. The problem with the conventional model of

[3] "Organizations that strive for power will try to influence the ideology of society" for their benefit. "When people in society think alike" and forget "that there are alternatives to the status quo", the Gramscian concepts of hegemony become prevalent (Wodak & Meyer 2009:8,9). "Ideologies are representations of aspects of the world which contribute to establishing and maintaining relations of power, domination and exploitation" (Fairclough 2003:218).

sustainability is identified, namely that positive agency is precluded, and should potentially be central to the systems. The social psychologists Maslow and Max-Neef's theories are used to contextualise and explain consumption in terms of ‘production-value' and ‘added-value' in a fashion context, as it is argued that the gap between these aspects challenges sustainability. The example of ‘utilitarian clothing needs' are contextualised as the ‘production-value' in the fashion system, and ‘fashion wants' are used as an example of ‘added-value' in the fashion system. The chapter demonstrates the loss of positive agency due to consumerism, which potentially leads to unsatisfied societal needs and environmental destruction. The key aspects of the quintuple helix model are introduced, as the model provides domains in which the deficits (namely the unsatisfied societal needs) are located. The literature points to potential intervention strategies which could address value deficits caused by the loss of positive agency. It is theorised that society’s sense of positive agency towards sustainability could be reactivated by focusing on needs (value) instead of purely focusing on wants and profit (surplus-value). Potential strategies such as Chapman’s concept of “emotionally durable design”, and Maslow and Max-Neef’s theories on needs are suggested, so that the regaining of positive agency (by focusing on sustainability as a driver rather than consumerism as a driver) can be developed in the following chapters.

1.6.3 Chapter 3

The environmental and social impacts of the fashion industry are considered in chapter 3, in order to identify sustainability deficits and potential intervention strategies. The literature points to potential intervention strategies to reactivate agency. Part A introduces relevant literature to demonstrate the sustainability challenges in the fashion industry, specifically the contrast between the current fashion system that is driven mainly by profit motives, versus a system that could satisfy human needs more sustainably. Essential terms are clarified regarding the fashion system, and an illustration of the interrelated nature of the fashion system is provided. The impacts of the fashion system are described in the societal, economic and environmental sectors in order to identify sustainability gaps and potential intervention strategies.

Part B explores ways to reactivate the agents of the supply chain by identifying the agents and interrogating the sustainability deficits in the fashion supply chain. The subsection introduces the circuit of fashion, versus a linear production pipeline or value chain and argues that dynamics other than a linear, fixed and oppositional lens are required to examine the dynamics between culture and fashion. The processes of Kaiser's circuit of style-fashion-dress are discussed in order to identify the value gaps in the system which lead to unsustainability. The quintuple helix model is contextualised as it relates to these sustainability issues in the fashion industry. Kaiser's circuit of style-fashion-dress and Craik's diagram of the fashion supply chain further delineate the sectors with the aim of identifying the agents in the fashion system and their loss of agency for environmental sustainability. The last part of the section scrutinises how these dynamics, and the negotiation within cultural discourses, play a role in suppressing the agency of society.

To conclude, in Part C the processes of the supply chain in the fashion system are expanded upon, concerning the impact that these processes have on environmental sustainability. This section describes how the potential choices and the agency of the agents involved in the system, contribute to environmental issues. This chapter explores the situation ‘on the ground’ to demonstrate the tensions in the fashion economy and how they manifest in the various domains. The chapter concludes that due to the bleak depiction of sustainability in the fashion system explicated, rather than aiming for a completely sustainable option, the study’s aim could be for an optimal and ethical fashion system that moves away from exploitation. It is argued that the notion of making ‘optimal’ and potentially more ‘ethical’ decisions, could lead towards positive agency. The following chapter explains how this positive agency could be reactivated by exploiting the gap between wants and needs, through the notion of the fetish with sustainability as a driver.

1.6.4 Chapter 4

The chapter explains how positive agency could be reactivated by exploiting the gap between wants and needs through the notion of the fetish, with sustainability as a driver. Intervention routes offered by the notions of the fetish are identified so that these can be

exploited in pursuit of the regaining of positive agency in the fashion system. The critical dynamics that motivate consumers to make choices offered in the Marxist, Freudian and Baudrillardian notions of the fetish are determined.

Therefore, this chapter sets out first to use Marxist thinking on the fetish, to determine how surplus-value leads to the pursuit of class mobility in consumers, thus aligning the thinking potentially to Maslow's pyramid of needs theorised as the move ‘up' the class hierarchy. Secondly, the chapter engages with Freud's notion of the fetish to suggest the pursuit of individual growth, based on the idea of self-nurturing the individual. Finally, the chapter turns to Baudrillard's notion of the fetish which pursues the concept of developing symbolic actions that foster the growth of belonging to a community. The theories are contextualised in relation to the fashion industry, by building a case on how fetishism exploits the gap between needs (value), and wants (surplus-value), of agents in the fashion industry. These identified intervention routes are explored in Chapter 5 by contrasting the potential fetishes with the deficit areas and therefore strategising ethical intervention routes. Potentially strategies to reawaken ethical agency are uncovered towards a strategic model of intervention.

1.6.5 Chapter 5

Whereas the previous chapter explicated the excesses of the fetish, the purpose of chapter five is to explore counter-strategies to reawaken ethical agency. The dynamics of the fetish are utilised as a lens through which to develop strategic interventions for the reactivation of agency in the fashion system.

The chapter demonstrates how Marxist, Freudian and Baudrillardian theories on the fetish could be used to ethically bridge the gap between needs and wants towards sustainability (instead of exploitation towards profitability). The tool of ethics, specifically *feminist ethics* of caring is used as a moral foundation to access whether the approach is consumption based or ethically grounded. A strategic framework is developed which analyses the deficits in the processes of the supply chain, in relation to Chapman’s concept of ‘emotionally durable design’ as well as Maslow and Max-Neef’s social theories of needs,

through the lens of the fetish, as this could offer potential intervention strategies. Innovative existing strategies towards fashion sustainability are explained and contextualised within the framework, to demonstrate how it could function.

The developed strategic framework provides a model to insert the fetish intervention of Marx, Freud and Baudrillard between two dynamics. Contrasting the dynamics of Kaiser's circuit of style-fashion-dress with each other within the concerns of ethics provided potential ways of reactivating positive agency. The framework targets positive, ethical agency in the fashion system by utilising the notion of the fetish as a lens through which to revalue environmental sustainability issues. This, in turn, leads to the summary of the study.

1.6.6 Chapter 6

This chapter includes a summary of the trajectory of the study. The findings are demonstrated, shortfalls are documented, and the recommendations are discussed. The literature discussed points to the gap between the production-value and the perceived added-value of commodities in the current market**.** The research aims to try and address the problems of consumption in contemporary society. The premise of the study is that the notion of fetishism is used to develop a model for strategic intervention to extend and draw in the current market. The exploration of the quintuple helix of innovation model through the notion of the fetish offers an approach to address dilemmas raised in the helix. The conceptualising of a strategy to address these dilemmas provides potential recommendations for more sustainable and ethical practices in the fashion industry and thereby aims to promote human flourishing.

The following chapter introduces the problem with the current model of sustainability and provides a context for the sustainability contradictions in the fashion system. Potential strategies such as Chapman's concept of 'emotional durable design' and Maslow and Max-Neef's theories on needs are suggested so that the regaining of positive agency (by focusing on sustainability as a driver rather than consumerism) can be developed in the following chapters.

"When working with sustainability ideas and practices, the interrelationships that link materials, socio-cultural and economic systems with nature must be understood" (Fletcher and Grose 2012: 143).

CHAPTER 2

ENVIRONMENTAL SUSTAINABILITY CHALLENGES

2.1 INTRODUCTION

The purpose of this chapter is to interrogate relevant literature in order to demonstrate the sustainability challenges resulting from the system of capitalist consumerism. Such literature will then be consulted to consider the located deficits in the context of the three sectors of “un-sustainability”: the economy, the environment and society (Ashby, *et al.* 2013:63). Emphasis will be placed on aspects that challenge sustainability, such as the gap between the ‘production-value' and the perceived ‘added-value' of fashion commodities (as the extended example). A brief overview of the theories of the social psychologists Maslow and Max-Neef will contextualise and explain the terms ‘production-value' and ‘added-value' in a fashion context. The literature will point to potential intervention strategies which could address value deficits caused by a loss of agency. The quintuple helix innovation model will provide domains in which the deficits can be located. The chapter will demonstrate the loss of positive agency to consumerism so that the regaining of positive agency can potentially be developed (as taken up in chapter 5). In the following subsection, the three sectors of sustainability are explained.

2.2 THE THREE SECTORS OF SUSTAINABILITY

In the paper, "The object of nightingales. Design values for meaningful material", Walker (2017:54) discusses the relationship between creative design and human values. He critiques the "dominant ideology of naturalistic materialism", which has negative "ethical and environmental implications":

> This widespread ideology, combined with the sophisticated capabilities of scientific and technological advancement, a corporate aspiration of unbridled profit and growth and an undefined, yet largely relativistic ethical position, has created a potent recipe for human exploitation and environmental destruction (Walker 2017:54).

Walker's argument reinforces the sense of the loss of human agency, overshadowed by a seemingly uncontrolled emphasis on the ‘importance' of, and ‘necessity' for the expanding use of technology in the service of industry and therefore profit. Furthermore, he contends that the predominant ontological interpretation of naturalistic materialism that is "linked to industrialism" and the "technological conceptions of progress";

> ...with its ill-defined and questionable value system, is inextricably linked to industrialism and technological conceptions of progress, both of which are precariously dependent on energy resources, especially hydrocarbons. In turn, such developments are catalysts of urbanisation, and the promulgation of globalised, growth-based consumer society. It is, therefore, an ideology that not only constricts humanity's notions of meaning and reality, it is also indelibly tied to stripping the planet of its resources at unsustainable rates while simultaneously eradicating the complex interdependencies of biodiversity on which all life depends (Walker 2017:53).

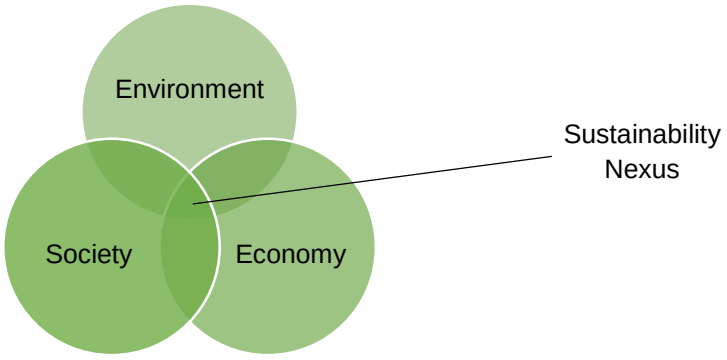
In contrast to Walker's contention, ‘sustainable development' emphasises the interdependence of economic growth and environmental quality. Ehrenfeld (2008:6) adds that sustainability could be argued to be where all the forms of life on this planet are flourishing forever. In the Brundtland Report, *Our Common Future,* sustainability is defined as, “development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (WCED 1987; Welford 1994, in Barclay & Buckley 2002:1). In addition to the Brundtland report, the ‘United Nations Sustainable Development Goals' (UN SDGs) are also relevant. Each of the goals has a list of targets to achieve, and there are 17 global goals set by the United Nations Development Programme, known as the "2030 Agenda". The SGDs cover social and economic development issues including poverty, hunger, health, education, gender equality, water, sanitation, energy, global warming, urbanisation, as well as environmental and social justice.

Particularly significant to this study are SDG 11: Sustainable Cities and Communities, and SDG 12: Responsible Consumption and Production. SDG 11 speaks to challenges caused by rapid urbanisation. Key aspects that this goal addresses include the reduction of pollution and poverty and the improvement of resource use, as well as efficient urban planning and management practices. SDG 11 aims towards a potential future in which

cities can provide opportunities for all, such as access to essential services, energy, housing and transportation. SDG 12 focuses on the problematic increase in material consumption of natural resources and the challenges of air, soil and water pollution. SDG 12 promotes resource and energy efficiency, sustainable infrastructure and the provision of essential services, jobs and a better quality of life for all. The goal aims towards increasing quality of life by reducing resource use, degradation and pollution along the whole life cycle of consumption and production. Within this goal, the focus is placed on the operating of the supply chain and all the agents involved from producer to final consumer. This goal includes the education of the agents in the supply chain regarding sustainable procurement, consumption and lifestyles as well as the provision of suitable information through labels and engagement.

Prior to the Brundtland report, the emphasis on sustainability was on economic performance; the report, however, emphasises environmental and social sustainability. The United Nations Sustainable Development Goals set specific targets which address environmental and social sustainability. Additionally, Ashby *et al.* (2013:63) argue that there is a need to integrate the "three pillars of sustainability", namely the "economy", the "environment" and "society" (see figure 2.1). Through the integration of all three potential sustainability sectors, the sustainability nexus or connection can be explored.

Figure 2.1 The three sectors of sustainability. Modified from (Springett 2003; Vachon and Mao 2008; Hutchkins and Sutherland 2008; Giddings *et al*. 2002) in (Ashby, *et al.* 2013:63).



The sectors of sustainability encompass the societal systems, economic systems and those of the environment[4]. Environmental systems refer to the ecologies within an ecosystem. According to the *Merriam Webster Dictionary*, ecology is a branch of science concerned with the pattern of relationships between living things and their environments. The *Business Dictionary* defines ecological sustainability as, "the capacity of ecosystems to maintain their functions and processes, and retain their biodiversity over the long-term". Ehrenfeld (2008:10) adds that "healthy ecosystems can serve as a metaphor for sustainable human socioeconomic systems". With regards to this perspective, the term 'ecology' could also refer to human ecology: a branch of sociology dealing with human interrelationships between their social, economic and political organisation. When referring to the environment or climate, the term 'ecology' also extends to the complex systems of moral ecology. This overview brings one to the next subsection regarding morals and values in all sectors of society as defining ecological, sociological systems.

[4]. This diagram suggests the potential for speculation on the 'size' of the Nexus. It could be argued, for example, that the smaller the nexus, the greater the threat of unsustainability (and the greater the sense of adversarial dynamics at play in the nexus). Conversely, the 'larger' the nexus, the greater the sense of the harmonising of dynamics in the pursuit of sustainability appears to become. It is accepted that a nexus that encompasses all of the three domains is a utopian concept, but worth striving for.

2.3 THE INTERFACE PROBLEMS

The problem with the current model of sustainability is that the systems seem to be presented as disembodied entities that work independently of people. The consumer as an agent of change is seemingly precluded from the model. In contrast to this, it could be argued that agency is central to systems. Individuals are not just pawns in the economic system; for example, the assumption that through advertising one can encourage people to acquire anything for profit motives seems implied as part of the model. However, in order for sustainability to work the consumer must be reactivated as an agent for change, instead of disaggregating the individual from the model. Figure 2.2 proposes a new model of sustainability in which society's sense of agency could be reactivated. The possibility of the 'agent model' focuses on the needs (or value) not just the wants (or surplus-value) of people, by seeing them as agents of change and thereby reviving their sense of agency. The argument regarding value and surplus-value will be teased out in the sections that follow.

Figure 2.2 The Agent model. Modified from *The fashion industry as a system* by Ashby, *et al.* (2013:26).

Part of the reason for marginalised sustainability practices in the economic system is the capitalist system, in and by which society currently functions. In capitalist societies, power is demonstrated by squandering scarce resources. Spangenberg *et al.* (2010:1486) go

on to state that, “It is the profit motive and not the desire to satisfy human needs which drives the production system”[5]. The implication is that a pursuit of profit has the unfortunate potential to disempower the consumer.

These economic profit-based or growth-based motives promote at best and exploit or target at worst individuals’ craving for novelty and commodities. Fletcher and Grose (2012:132) debate that this desire for cyclical variety is manipulated by commerce – growth-based cultural messages and an overflow of commercial clutter make distinguishing between real needs and fabricated wants challenging. In order to distinguish between the real ‘needs’ versus the fabricated ‘wants’ of consumers or agents, the theories of social theorists will be consulted in the next subsection. A brief overview of the theories of the social psychologists Maslow and Max-Neef will contextualise and explain the terms ‘production-value' and ‘added-value' for this study.

2.4 CONSUMER WANTS AND NEEDS – the notions of profit and surplus

> …sustainability cannot be achieved if only particular individuals or sectors of society see it as an ambition. It requires that society have [sic] universal awareness of its condition before taking the radical steps on the sustainability road (Fuad-Luke 2009:77).

In order to analyse and possibly increase awareness regarding the problematic situation described, this subsection will present the taxonomies of the well-known social theorists Maslow and Max-Neef to determine what drives humans to have these unsustainable desires. The purpose will be to suggest when the utilitarian needs of humans’ transition into the desires (growth needs) for commodities that lead to less sustainable consumption occur.

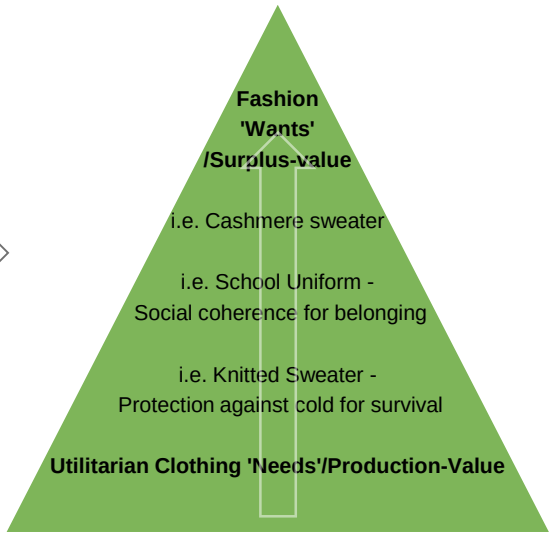
[5] It can, of course, be argued that the pursuit of profit is in and of itself a human need. This matter has been considered in the previous chapter around the definitions of the ‘good life' as captured in the Eudaimonia debate. It was suggested there that an individualised and self-centered notion of ‘the good life' could be theorised to be a product of the capitalist system.

As illustrated in Figure 2.3.A, Maslow (1943; 1954) contended that a person's basic needs like survival, safety, belonging and self-esteem must be met before self-actualisation and growth needs can be achieved. Maslow's capitalist model excluded social and group dynamics, however, the model supports the view that universal needs exist regardless of cultural differences.

According to Fletcher and Grose (2012:133) clothing can satisfy basic utilitarian needs such as protection from heat and cold, but when linked to fashion it could satisfy social and personal desires for belonging and expression. However, the agents that drive commercial trends (specifically design trends) to increase sales exploit these very desires. When fashion is driven by agents with external capitalistic goals, it could drive self-doubt and insecurity as well as unethical social and environmentally unsustainable practices.

Figure 2.3 A. Hierarchy of needs.
Adapted from Maslow (1943;1954).

Figure 2.3 B. Fashion wants and needs.
Developed by the author.



Similar to Fletcher and Grose's theory above, the move from utilitarian clothing 'needs' to fashion clothing 'wants' could be the point of entry for the fashion industry in Maslow's taxonomy. This move from needs to wants is driven by desire[6], and it runs parallel to the move from production-value for clothing, to surplus-value for fashion. On the other hand,

[6]. The nature and dynamics of desire are fully explored in chapter 4, which deals with fetishism.

how can one determine what type of clothing is utilitarian? Within the Maslow taxonomy, it could be determined that utilitarian clothing could be found for each stage in the diagram, as an extended example. Figure 2.3B illustrates the potential move from needs (for utilitarian clothing or production-value) too wants (for fashion clothing or surplus-value). Therefore, it could be argued that fashion might embellish, aestheticise and add symbolic or non-utilitarian value to clothing. Thus, for example, a ‘knitted sweater' for protection against the cold, on Maslow's survival level, could now be a 'cashmere sweater' which adds value to the utilitarian and meets the needs for self-esteem or status. Alternatively, to establish a sense of belonging or social coherence, for example, at schools, school uniforms become a 'belonging utilitarian' set of clothing, such as the colour and style of the clothing, for example. As soon as agents allow variations to the uniform, or hairstyles and accessories, they bring fashion, aesthetics, symbolic value and the like, into play; in essence, homogeneity versus ‘changes to individuality' is potentially activated.

Within the Maslow argument, it could be contended that, once the clothing ‘needs’ of one level are met, the wearer ‘wants’ what is offered at the next level; and the market is too eager to suggest what this might be, and then supply it. In the school uniform idea, for example, once the needs of homogeneity are met, the want for individuality, or self-esteem and status are activated.

Similarly, Manfred Max-Neef identifies nine fundamental human needs and satisfiers that are unique to community and place. The fundamental needs fall into four existential states: “being, having, doing and interacting” (Fletcher & Grose 2012:132). The viability of the community depends upon how and if these needs are satisfied. For instance, some satisfiers seem to satisfy a need but inhibit several other needs, while other satisfiers meet several needs and benefit the whole. Max-Neef’s taxonomy of needs are: “subsistence”, “protection”, “affection”, “understanding”, “participation”, “leisure”, “creation”, “identity” and “freedom”. According to this model human needs can be understood as an interrelated and interactive system.

Table 2.1: Manfred Max-Neef's **taxonomy of human needs** (Fletcher and Grose 2012:132).

FUNDAMENTAL HUMAN NEEDS	BEING (Qualities)	HAVING (Things)	DOING (Actions)	INTERACTING (Settings)
SUBSISTENCE	Physical and mental health	Food, shelter, work	Feed, clothe, rest, work	Living environment, social setting
PROTECTION	Care, adaptability, autonomy	Social security, health systems, work	Co-operate, plan, take care of, help	Social environment, dwelling
AFFECTION	Respect, sense of humour, generosity, sensuality	Friendships, family, relationships with nature	Share, take care of, make love, express emotions	Privacy, intimate spaces of togetherness
UNDERSTANDING	Critical capacity, curiosity, intuition	Literature, teachers, policies, educational	Analyse, study, meditate, investigate	Schools, families, universities, communities
PARTICIPATION	Receptiveness, dedication, sense of humour	Responsibilities, duties, work, rights	Cooperate, dissent, express opinions	Associations, parties, neighbourhoods
LEISURE	Imagination, tranquillity, spontaneity	Games, parties, peace of mind	Day-dream, remember, relax, have fun	Landscapes, intimate spaces, places to be alone
CREATION	Imagination, boldness, inventiveness, curiosity	Abilities, skills, work, techniques	Invent, build, design, work, compose, interpret	Spaces for expression, workshops, audiences
IDENTITY	A sense of belonging, self-esteem, consistency	Language, religions, work, customs, values, norms	Get to know oneself, grow, commit to oneself	Places one belongs to, everyday settings
FREEDOM	Autonomy, passion, self-esteem, open-mindedness	Equal rights	Dissent, choose, run risks, develop awareness	Anywhere

Max-Neef further classifies satisfiers into different categories, such as (1) "Destroyers" – they claim to satisfy a need but make it more difficult to meet other needs. Examples of "destroyers" are censorship and authoritarianism, which are meant to meet the need for protection but also end up inhibiting freedom, participation and creation. (2) “Pseudo satisfiers" they create a false sense of satisfaction and reduce satisfaction over time. Examples of this at work include status symbols versus identity markers, stereotypes versus understanding, and fashion/fads versus identity authenticity. (3) “Inhibiting satisfiers,” which are associated with habits and customs that they over-satisfy a given need, which, then, inhibits the satisfaction of other needs. For example, an overprotective family inhibits the need for freedom, identity, and affection. (4) “Singular satisfiers" satisfy only one particular need, for example, a soup kitchen satisfies subsistence. Lastly, (5) “Synergistic satisfiers” satisfy a need while simultaneously satisfying other needs, for example, growing one's food for "subsistence, understanding, participation, creation,

identity and freedom" (Fletcher & Grose 2012:132). (The satisfiers identified by Max-Neef become very important in chapter 5 for the fetish application. Max-Neef's examples and domains will be used in the pursuit of rechannelling the 'fetish driven lack' of agency for the activation of positive agency).

In addition to this Chapman (2005) invented the term "emotionally durable design" and developed a framework to provide designers with a means to engage with issues of satisfaction with products. Chapman's (2009:34; 2010:61-62) concept of "emotionally durable design" is not simply about designing a product from more durable material (and in this way potentially creating more durable waste). It is about establishing and sustaining relationships with product users, by increasing the emotional "resilience of relationships between consumer and product", and the lived-experience of sustainability. Since the desire for new products is not merely driven by the desire for newer things, there are complex motivational drivers involved in the process of consumption. Chapman (2009:33) developed a six-point experiential framework to initiate engagement with issues of emotional durability and design which includes; "narrative" – users share a unique personal history with the product; "detachment" – users feel no emotional connection to product, and perceive it as favourable due to lack of emotional demand; "surface" – product ages well and develops physical character; "attachment" – users feel a strong emotional connection; "enchantment/delight" – users are delighted by a recently purchased undiscovered product and; "consciousness" – user perceives the product as autonomous, quirky, temperamental, requires practice/acquired skill to interact with. This framework and how it initiates "engagement with issues of emotional durability and design" (Chapman 2009; 2010) will be further explicated in relation to the fashion industry in chapter 5.

Fletcher and Grose (2012:132) add that although the needs are universal and constant, the satisfiers may be different in different cultures and societies. Through the process of communities satisfying universal needs in their environmentally and culturally specific way, their control over the satisfaction of these needs is related to the 'whole-need satisfaction', rather than just the 'surplus-need satisfaction', of their society. The taxonomy developed by Max-Neef is a more universal view of whole systems thinking to

meet human needs for society at large. The framework could, therefore, be a useful lens through which complex and subjective societal problems (such as environmental sustainability) can be viewed and potentially through which interventions could be formulated.

Based on Maslow's and Max-Neef's social theories, if human nature always converts needs to wants, is there a way of ethically exploiting this transition, (or the gap between needs and wants) into something more sustainable? Exploiting the gap between needs and wants through the notion of the fetish with sustainability as a driver could be a way to reactivate the agency of individuals in the fashion system. Therefore, according to this argument, a sustainability counter is to interrogate the reasons for the deficit between clothing and fashion, between the needs and wants of consumers and therefore between the production and surplus-value of fashion commodities.

The purpose of this subsection was to begin to prepare the argument that sets out to unravel fashion unsustainability by questioning the gaps between 'needs' and 'wants' in the general sustainability argument. Therefore, one can apply this to clothing's utilitarian function, and fashion's aesthetic and symbolic function, to see if the recognition and description of these gaps could lead to realignment. The drive for the realignment could, in turn, be utilised to exploit the fetish in an ethical way, with the aim of fostering sustainable paradigms. The following chapters will demonstrate how these tensions play out in the fashion system, and how the notions of the fetish could be reworked to ethically bridge the gap between needs and wants. Firstly, the sectors of sustainability are further expanded upon within the quintuple helix innovation model in the next subsection.

2.5 THE QUINTUPLE HELIX INNOVATION MODEL

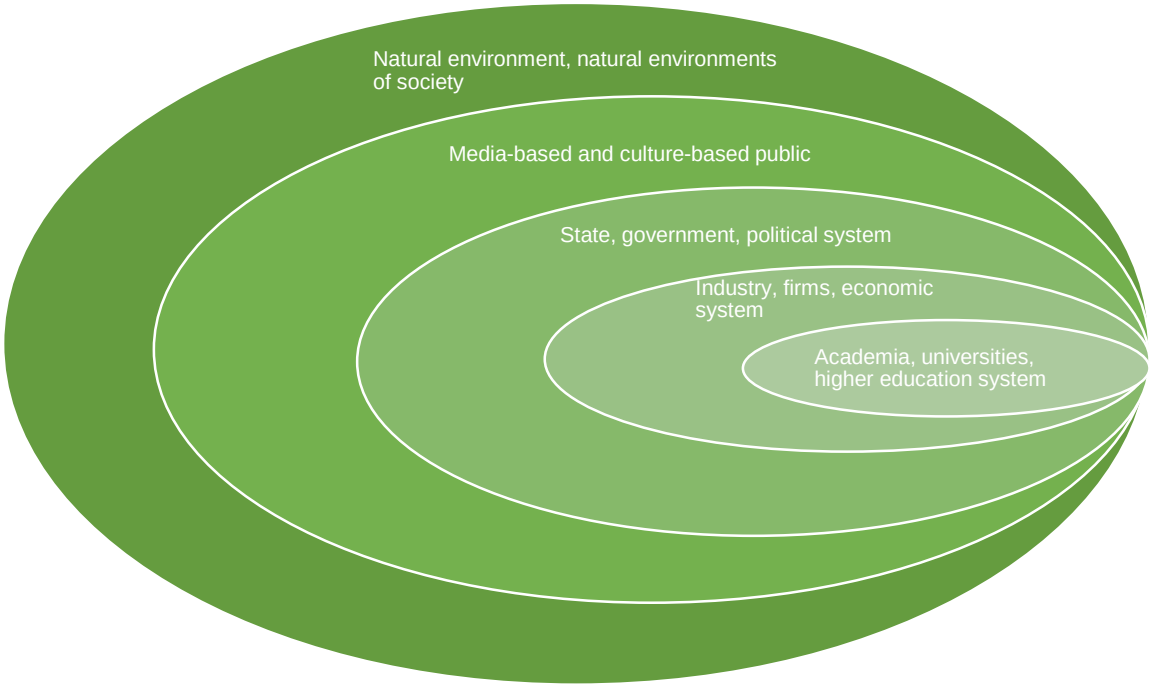
This subsection introduces and explains the key aspects of the quintuple helix model. The five points of the model the, "education system, economic system, natural environment, media-based and culture-based public, and the political system" will be presented (Carayannis *et al.* 2012). By consulting the relevant literature, a clear strategic understanding of the Helix Model will be built into the context of the fashion industry in

chapter 3. This aspect is necessary to determine potential areas where the literature reveals a possible loss of agency, and therefore areas where interventions towards sustainability can occur.

2.5.1 The five dynamic subsystems

The Quintuple Helix visualises the interaction and circulation of knowledge in a state by means of five subsystems. As per figure 2.4, Carayannis *et. al.* (2012:5) and Carayannis and Campbell (2010:46-48) summarize the subsystems of the quintuple helix model as follows: "(1) education system, (2) economic system, (3) natural environment (4) media based and culture-based public, (5) and the political system".

Figure 2.4 The subsystems of the quintuple helix innovation model. Carayannis, *et al.* (2012:6). Modified from Etzkowitz and Leydesdorff (2000:111) and Carayannis and Campbell (2009:207; 2010:62).



Knowledge is the most essential commodity in the Helix (Carayannis *et al.* 2012). The circulation of knowledge between social subsystems, changes to 'innovation' and 'know-how' in society and for the economy are foregrounded. The main differences between the initial triple helix developed by Etzkowitz and Leydesdorff (2000:111-112) and the

quintuple helix model is the addition of the fourth helix of the media-based and culture-based public, as well as the fifth helix of the natural environment. According to Carayannis and Cambell (2009:217-227), the purpose of the addition of the fourth helix is to include the diffusion of knowledge in society as well as the values, experience and traditions which promote knowledge for society. The purpose of the addition of the natural environment is to "establish nature as a central and equivalent component of and for knowledge production and innovation" because it serves for the "preservation, survival and vitalization of humanity, and the possible making of new green technologies". Within this fifth helix, sustainable development and social ecology become part of social innovation and knowledge production through the activation of 'human agents'.

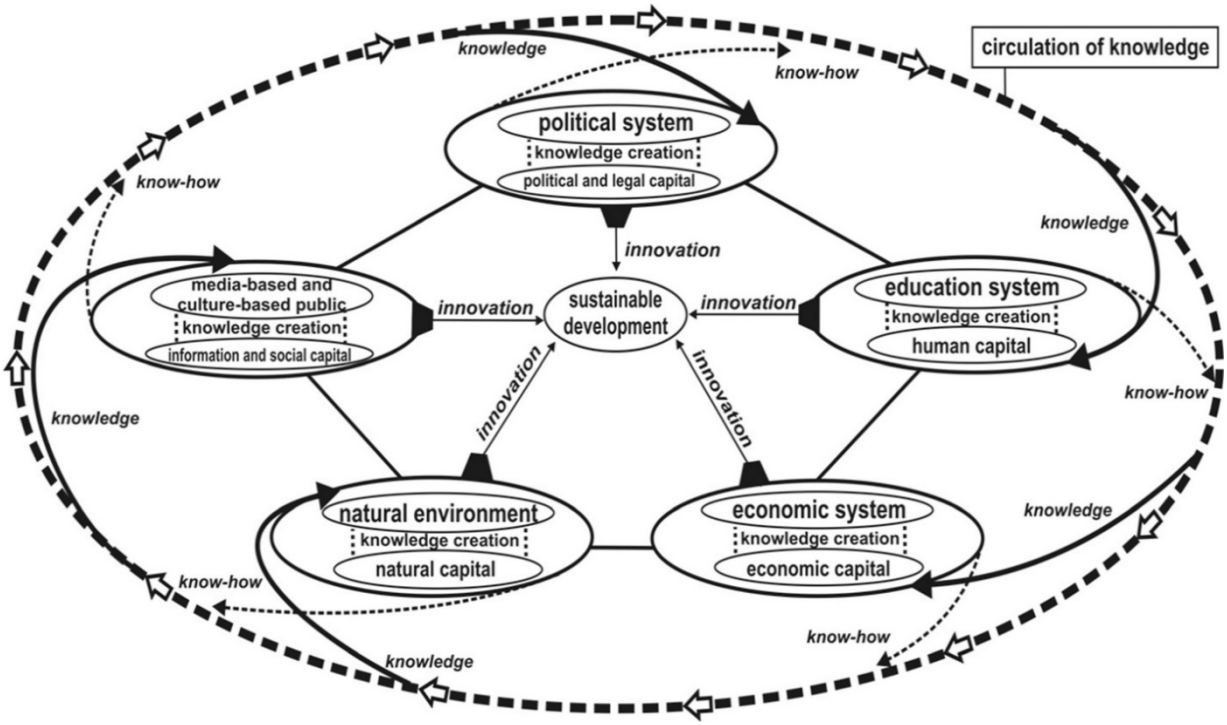
According to Carayannis *et al.* (2012:5-6), when analysing environmental sustainability in the Helix, with sustainable development as the central point, each of the subsystems of the helix has specific resources with social and academic relevance for use. These subsystems are outlined as follows. (1) *The education subsystem* includes academia, universities, higher education systems and schools. Within this helix, 'human capital' is formed by circulation and research of knowledge by students, teachers and academics, for example. (2) *The economic subsystem* comprises of industry, services and banks. This part of the helix emphases 'economic capital' in the state, such as technology, products, money, and entrepreneurship. (3) *The natural environment* as a subsystem provides people with 'natural capital' for potential sustainable development, in the form of resources, plants and animals, for example. (4) *The media-based and culture-based public* as a subsystem is an integrated combination of 'social capital' (such as tradition and values, for example) through the culture-based public, and the 'capital of information' (such as news, communication and social networks, for example) through the media - based public. (5) *The political system* as a subsystem includes 'political and legal capital' in the form of ideas, laws, plans and politicians, for example. It structures and directs the general direction and conditions of the nation-state.

As illustrated in figure 2.5, each of the different subsystems influence each other in order to address the value gap through new, advanced and pioneering innovations in

knowledge[7]Carayannis *et al.* (2012:7) describe the Quintuple helix model as a "theoretical and practical model for the exchange of the resource of knowledge, based on five social (societal) subsystems with 'capital' at its disposal, in order to generate and promote a sustainable development of society". In the functional illustration of the model below, the resource of knowledge moves as a circulation of knowledge which passes through each subsystem. Knowledge creation takes place as the knowledge is contributed to one of the five subsystems and it produces innovations for sustainability in the nation-state, as well as new 'know-how' back to the circulation of knowledge. This specific created 'know-how', then circulates as knowledge for the other subsystems of the Helix. Carayannis *et al.* (2012:7) utilise the Helix to promote sustainable development with regard to global warming; similarly, the researcher will explore the model through the notion of the fetish to target the five systems of the helix towards a move for sustainability.

[7] It is acknowledged that knowledge in and of itself does not bring about change, but it is the start of the process that leads to attitude change, and then on to behaviour change. Thus the target should always be behaviour change, that is to say, the regaining of a state of agency through action.

Figure 2.5 The quintuple helix model and its function (functions). Carayannis, *et al.* (2012:6). Modified from Etzkowitz and Leydesdorff (2000:111) and Carayannis and Campbell (2006; 2009; 2010), and Barth (2011a).



As illustrated in Table 2.2 below, the subdomains of the quintuple helix innovation model (Carayannis *et al.* 2012:5) provide domains in which the sustainability deficits can be located. The three sectors of 'un-sustainability' – the economy, the environment and society – provide the context for potential areas of lack in which the fetish can be engaged with (Ashby, *et al.* 2013:63). The table needs to be seen simply as an example of the approach to identifying lack. Inevitably there are far more moments where the concerns around sustainability are at play in each block. For example, within the education system, in the context of the environment, a potential area of lack to revalue for sustainability could be the low priority given to specific course content regarding environmental sustainability. Similarly, within the education system, in the context of society, a potential area of lack to revalue for sustainability could be education which caters for industry demands, not for sustainable societal futures – education for optimal commercialisation, as opposed to education for optimal sustainability, for example. Lastly within the education system, in the context of the economy, a potential area of lack to revalue for sustainability could be

education catering for technological demands instead of ethical needs. Similarly, areas of potential lack to revalue for sustainability are identified in the domains of the economic system, political system, media and culture-based public and the natural environments of society, as these domains are contextualised within the sectors of sustainability.

Table 2.2 Domains of the Helix in which sustainability deficits are located. Developed by the author, based on (Carayannis, *et al.* 2012:5; Ashby, *et al.* 2013:63)

Domains of Helix	Sectors of Sustainability		
	Environment	Society	Economy
	Area of lack to revalue for sustainability	Area of lack to revalue for sustainability	Area of lack to revalue for sustainability
Education System	Environmental sustainability is given low priority in specific course content.	Catering for industry demands, not sustainable societal future.	Catering for technology demands, not ethical needs.
Economic System (Industry)	Cost effective synthetic fibers instead of more environmentally friendly alternatives.	Meeting fast fashion desires instead of slow fashion potentially synergistic satisfies.	Growth & profit motives, not sustainability.
Political System (State, Government.)	Environmental sustainability not prioritised and implemented.	Censorship and authoritarianism that are meant for protection, but inhibit freedom, participation and creation.	Inadequate legislation and funding.
Media & Culture based public	"Green slogans" for profit goals instead of real environmental initiatives.	Pseudo satisfaction such as status symbols versus identity markers, stereotypes versus understanding and fashion/fads versus identity authenticity.	Added-value for-profit goals.
Natural Environments of society	Limited resources and pollution.	Harmful pollution near neighbourhoods instead of communities for connection.	Investment in the industry without adequate environmental impact considerations.

There are agents involved in every process of the supply chain who engage with capitalist values of profit, or who could engage with sustainable alternatives, that could be targeted

through the notion of the fetish. These aspects will be further explained in chapters 4 and 5. This engagement between agents impacts on the sectors of sustainability, either to exasperate unsustainable environmental practices or to promote sustainability. In the following chapters relevant literature will be consulted to contextualise these located deficits in the context of the three sectors of "un-sustainability", namely the economy, the environment and society (Ashby, *et al.* 2013:63). The literature will point to potential intervention strategies which could address these value deficits. Other strategies will be considered, follow logical deduction from the literature.

2.6. CONCLUSION

The purpose of the chapter has been to demonstrate that the exploitative approaches of consumerism and capitalism, potentially lead to unsatisfied societal needs and environmental destruction. The located deficits were contextualised in the three sectors of "un-sustainability", namely the economy, the environment and society. The theories of Maslow and Max-Neef contextualised the 'production-value' in the fashion system, as utilitarian clothing needs, for example; and 'added-value', as fashion wants, for example. The chapter explicated how capitalist consumerism exploits the gap between the utilitarian-value of clothing, and the added-value, or 'wants' of fashion for its own ends. These added-value concerns will be expanded upon in the next chapter. The literature pointed to potential areas of intervention in which to address these value deficits caused by a loss of agency. The quintuple helix innovation model provided the domains in which the deficits could be located. The chapter demonstrated that there is a need to look at drivers other than consumerism and capitalism; one such driver needs to be sustainability. In the following chapter, relevant literature will be consulted to discuss these located deficits in the context of the fashion industry.

The fashion system is linked to industrialism and growth-based consumer society. Walker (2017:59) argues: “Much contemporary design has become completely bound up with consumerism, transient products and waste”.

CHAPTER 3

SUSTAINABILITY IN THE FASHION SYSTEM

3.1 INTRODUCTION

The previous chapter demonstrated that the exploitative approaches of consumerism in a capitalist system lead to unsatisfied societal needs and environmental destruction. The quintuple helix innovation model provided domains in which the deficits (caused by these unsatisfied needs) are located. The chapter demonstrated that there is a need to look at drivers other than consumerism and capitalism – one such driver needs to be sustainability.

The purpose of this chapter is to interrogate relevant literature in order to demonstrate the sustainability challenges in the fashion system and the agents involved. The environmental and social impacts of the fashion industry will be deliberated upon in order to identify sustainability deficits and potential intervention strategies. A clear strategic understanding of the quintuple helix model will be built into the context of the fashion industry and environmental sustainability.

Kaiser's circuit of style-fashion-dress and Craik's diagram of the fashion supply chain further delineates the sectors with the aim of identifying the agents in the fashion system and their loss of agency for environmental sustainability. This chapter will explore the situation 'on the ground' to demonstrate the tensions in the fashion economy and how they manifest in the various domains.

3.1.1 Outline of Chapter 3

The trajectory of this chapter is divided into three parts, namely Part A, Part B and Part C. Part A introduces the central aspects that provide a contextual understanding of sustainability issues in the fashion industry. Specifically, this refers to the contrast between the current fashion system that is driven mainly by profit motives, versus a system that could satisfy human needs more sustainably. Essential terms are clarified for this study in subsection 3.2, and an illustration of the interrelated nature of the fashion system is provided. Subsection 3.3 explores the impacts of the fashion system in the societal, economic and environmental sectors in order to identify sustainability gaps and potential intervention strategies.

Part B explores ways to reactivate the agents of the supply chain by identifying the agents and interrogating the sustainability deficits in the fashion supply chain. The subsection introduces the circuit of fashion versus a linear production pipeline or value-chain and argues that dynamics other than a linear, fixed and oppositional lens are required to examine the dynamics between culture and fashion. The processes of the circuit of style-fashion dress are discussed briefly in order to identify the value-gaps in the system which lead to unsustainability. The last part of the section scrutinises how these dynamics, and the negotiation within cultural discourses, play a role in suppressing the agency of society.

Finally, in Part C the processes of the supply chain in the fashion system are expanded upon concerning the impact these processes have on environmental sustainability. This section describes how the potential choices and the agency of the agents involved in the system, contributes to environmental issues. This part is divided into five subsections which introduce the environmental issues arising from the fashion system. The areas are categorised and subdivided as follows: Within the *industry and economic system* categories, an overview of *production* (subsection 3.5.2), as well as sustainable production approaches (subsections 3.5.2.1-6) such as renewability, biodegradability, low-chemical use, predator-friendly fibers, people-friendly fibers, and global certification systems, are outlined. This overview identifies the agents in the system and explores existing sustainable production approaches for potential reactivation of agency. Following

this, an overview of the area of *distribution* is provided (subsection 3.5.3). Furthermore, an overview of *consumption* is provided (subsection 3.5.4), including an outline of the environmental impact of consumer choice of product, the care of garments and the processes and impact of textile development (subsections 3.5.4.1-5). To conclude the subsection, sustainable consumption approaches are explored (subsection 3.5.3.5).

The *state, government and political systems* create and enforce regulations and policies (subsection 3.5.5). These policies and regulations have a significant impact on the environment as well as the labour conditions in which the products are made. An outline of regulations that challenge environmental sustainability is provided (subsection 3.5.5.1), and sustainable regulation approaches are explained (subsection 3.5.5.2).

Another process in the fashion system as identified by Kaiser is 'subject formation'. The *media and culture based public* (subject formation and distribution of cultural messages) also have significant impacts on the fashion system and are therefore introduced in subsection 3.5.6. The focus will be on the agents that function in the system such as the media and marketing agents, the designers, fashion forecasters and fashion trendsetters (subsection 3.5.6.1- 4).

The final subsection provides an overview of the *education system* (subject formation in design education in subsection 3.5.7). Once again the agents that function in the education system will be focused on, such as the fashion designers and educators (subsection 3.5.7.1-2), and finally, sustainable design education approaches through ethics and values will be explored (subsection 3.5.7.3).

Part A, B and C of this chapter interrogate relevant literature in order to demonstrate the sustainability challenges in the *fashion system* and the *agents* involved. In chapter 5 a conceptual framework for analysing sustainability needs in the fashion system is advanced. The framework moves towards a reactivation strategy of agency towards sustainability.

Part A:

This subsection introduces the central aspects that provide a contextual understanding of sustainability issues in the fashion industry. The terms ‘fashion', ‘fashion system',‘fashion industry' and ‘fabric', as well as other relevant terms, will be clarified for this study.

3.2 FASHION UNRAVELED

In order to discuss the value deficit that fashion commodities create, the term ‘fashion’ must be further clarified. According to Baudrillard (1972), fashion is one of the most inexplicable phenomena. The term ‘fashion’ comes from the Latin word *facio* or *factio*, which means making or doing (Craik 2009:21). *Factio* also relates to the word “faction”, which has implications politically and suggests how fashion became a process of differentiation of groups of individuals from each other (Kaiser 2012:22). The “French word for fashion – *mode”* which appeared in 1482 meant “the collective manner of dressing” (Kawamura 2011:8). Kawamura (2011:9) adds that fashion can refer to various aspects, not just the way that we dress, but also food, interior design, and a way of thinking about the world. Kaiser (2012:1) argues that

> … Fashion is about producing clothes and appearances, working through ideas, negotiating subject positions and navigating through power positions. It involves mixing, borrowing, belonging, and changing. It is a complex process that entangles multiple perspectives and approaches.

According to Frings (2008:54-55) fashion in clothing or dress is known as the styles accepted and worn by customers that are most popular at a given time. The term ‘style’ is defined as, “any particular characteristic or look in apparel or accessories” (Craik 2009:21). Carol Tulloch (2010:276) considers style as a form of “*agency* in the construction [and presentation] of self through the assemblage of garments, accessories, and beauty regimes that may, or may not, be ‘in fashion’ at the time of use”.

'Dress' is a more neutral term used predominantly for historical and cultural comparative purposes in global fashion theory to describe the traditional, symbolic, or functional use of clothing (Kaiser 2012:7). 'Dress style' refers to the actual items of dress and the way they are combined and worn to create identity and difference. Loschek (2009:134) and Kawamura (2011:2) argue that dress is only considered fashion when it is adopted by a large portion of society.

Tulloch (2010:274) and Kaiser (2012:7) propose the articulation of style-fashion-dress as a complex system that can be broken down into part- and whole-relations between the parts (individual terms) and the wholes (the system that connects them). The "larger articulation of style-fashion-dress locates style in the context of fashion: a social process in which style narratives are collectively *in flux with time*" (Riello & McNeil as cited in Kaiser 2012:7, emphasis in the original). Kawamura (2011:12) refers to the sociological investigation of fashion as "fashionology". She defines it as a system of institutions that produces the concept as well as the practice of fashion. This process includes the production, distribution, diffusion, reception, adoption and consumption of fashion.

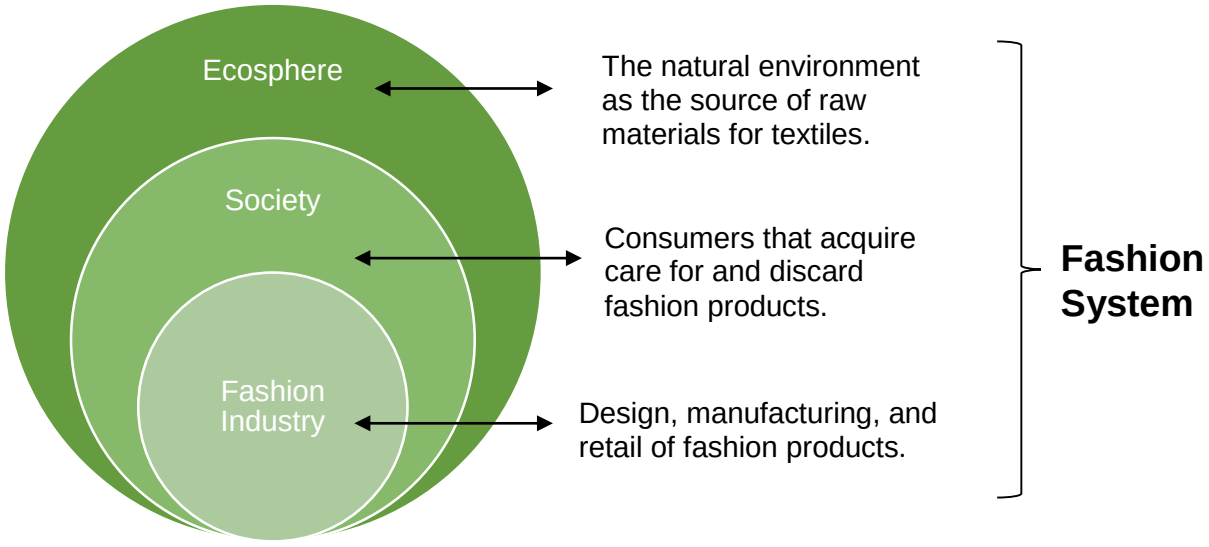
Kaiser (2012:98) adds that class's relation to the production, distribution and consumption processes form part of the circuit of the fashion system in which cultural status is acquired through consumerism (rather than other more meaningful cultural practices). According to Hertz (2011:17), "Fashion depends on individual's physical and emotional relationship with apparel, desire for frequent change, and the availability of a global supply chain mechanism that is eager to respond to this desire". Additional factors that need to be taken into account when discussing fashion are the history of clothes, the fashion industry, status and cultures of gender, and individual taste (Craik 2009:7).

Clothing could be defined[8] as apparel or garments that meet human's basic need for covering and protection against the elements (Craik 2009:3). Unlike the term 'clothing' or 'dress', with their implications of stability and banality, fashion offers change and prestigious imitation (Craik 2009:21). Fashion is to embellish, aestheticise and add

[8] See key terms in chapter 1.

symbolic and not utilitarian value to clothing (Craik 2009:2). Craik (2009:3) describes fashion as, "a prevailing custom or style of dress, etiquette, procedure; a shared and internalised sense of modish style of the time". It is a cultural practice which relates to identity and status for individuals and as members of groups. Cultural status is acquired through consumerism or the acquisition of social value through the purchase of goods (Craik 2009:2). While fashion encompasses more than clothing, for this study, the term style-fashion-dress and other items related to the term such as ‘accessories' and ‘adornment' will be referred to as ‘fashion' as these are the products of the fashion industry. The term ‘fabric' will be used to refer to textile-related components in clothing and fashion products. The term ‘fashion industry' will be used to refer to the design, manufacturing and retailing for the consumption of fashion products. The term ‘fashion system' will be used to refer to the whole of the fashion industry and the process from the raw material to the consumption of the fashion products by the consumer in society (see Figure 3.1). This diagram provides a visual representation for the fashion industry as a system.

Figure 3.1 The fashion industry as a system. Modified from Cataldi, Dickson and Grover (2013:26).



The theoretical paradigm of the study draws on design theory and systems theory paradigms in order to advance an understanding of fashion. These paradigms view fashion design as part of an interrelated system which operates within a framework in which each component is best understood within their contextual relationship with other

components (Lavelle 2013:25). Lavelle (2013:18) add that fashion design as a practice, functions within a system of interrelated activities that must adapt to cultural and environment flux. Since the components of the fashion system are interrelated, it follows that the fashion industry will impact on the societal and environmental sectors in which it is located. These impacts will be explored in the following section.

3.3 FASHION 'UNSUSTAINABILITY'

This subsection introduces the central aspects that provide a contextual understanding of sustainability issues in the fashion industry. Specifically, the contrast between the current fashion system that is driven mainly by profit motives, versus a system that could satisfy human needs more sustainably is suggested.

While the concept of sustainability has many definitions, fashion sustainability covers diverse perspectives including the environmental impact of materials, the political system (for example, social justice and workers' rights) and the fashion industry's economic system. The education system and the media and culture-based public are also key aspects (Black 2008; Carayannis, *et al*. 2012:5). Palomo-Lovinski and Hahn (2014:89), and Walker (2017:64) argue that contemporary fashion must at once be affordable, constantly new, and allow for a wide variety; this is antithetical to the needs of sustainability. Additionally, sustainable practices are largely marginalised by agents within the fashion industry, and this causes the system to operate in an inefficient manner that creates waste and exploits workers (Palomo-Lovinski & Hahn 2014:87). The term, "the fashion paradox" was used by a design academic Sandy Black to describe the contradictory nature of the fashion system; for example, the tensions in the system that lies between meeting human needs versus a system that makes the planet less inhabitable (Fletcher 2013:x). Kaiser (2012:18) discusses how industrialisation changed the dynamic between the production and consumption of fashion garments. In the past, "the production of fibers, textiles and apparel was intimately connected with the consumption of these materials. Only wealthy people could afford to have many garments, which were often prized possessions" (Kaiser 2012:18).

However, since the mid-twentieth century, consumerism has been represented as a democratic way to express personal freedom. These social and individual desires can be expressed through clothing. The fashion industry responded to, and encouraged, consumerism, which has helped to create a demand for a wide range of affordable products with customers that have little thought for the origin of products or the impact of discarding them (Palomo-Lovinski & Hahn 2014:89). While people of more classes were able to access affordable clothing because of the industrialisation of clothing and textile production, the fashionable dress was often still too expensive for people of the lowest classes (Kaiser 2012:100). Kaiser (2012:101) contends that consumption is paradoxical when it comes to class – the globalisation and development of fast fashion contributed to the sites of production and garment labour becoming increasingly invisible, which made income inequality even less visible.

> On the one hand, there is at least an appearance of democratic fashion, because fashionable clothes are simultaneously available at multiple price points. On the other hand, the quality of the materials and the lack of compensation for the labour that goes into the clothes' production are less visible, so class often gets a "pass" from critical scrutiny (Kaiser 2012:101).

The mass-market practices of continually evolving trends and quick product turnover results in expensive waste and excess – in addition to this, manufacturers often rely on cheaper fabric and lower labour outlay to cover the difference between the price of the product and what customers are willing to pay. This often poorly made clothing is quickly discarded, resulting in more consumption of disposable goods (the source of fast fashion – see 'fast fashion' in chapter 1). Third World countries are polluted with discarded goods that become second-hand clothing and suppress their local economies or end up in landfills (Farrer & Hawley 2011, as cited in Palomo-Lovinski & Hahn 2014:89). Black (2008) and Craik (2009:229) add that the fashion cycle adds to instant unfashionableness and contributes to high levels of waste in the system. These environmental concerns are barely addressed with an underwhelming change in the issues of raw material sustainability, carbon footprints, harmful chemical waste and solid waste disposal.

The purpose of this subsection was to begin to unravel the question of sustainability in the fashion context. The following subsection will explore ways to reactivate the agents of the supply chain by identifying the agents and interrogating the sustainability deficits in the fashion supply chain. The subsection introduces the circuit of fashion versus a linear production pipeline or value chain and argues that dynamics other than a linear, fixed and oppositional lens are required to examine the dynamics between culture and fashion. The processes of the circuit of style-fashion dress are discussed briefly in order to identify the value gaps in the system which lead to unsustainability. The last part of the subsection scrutinises how these dynamics and the negotiation within cultural discourses plays a role in suppressing the agency of society.

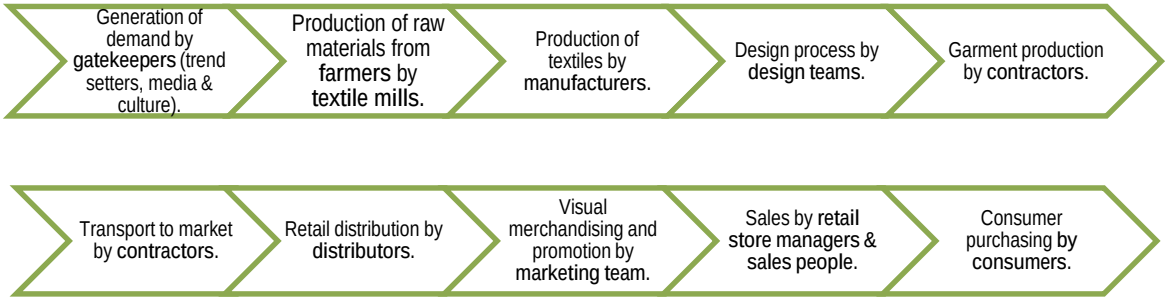
Part B

3.4 REACTIVATING THE AGENTS OF THE FASHION SUPPLY CHAIN

According to Craik (2009), the fashion system can be seen as a supply chain, from the production of raw materials to the manufacture of garments for retailing, and the consumption of these products (see figure 3.2, below). In addition to this Craik (2009:206) divides the supply chain into four subsystems:

> …a *manufacturing system* that produces the materials for and products of apparel manufacture; a *creative system* that designs the products, produces the merchandising and promotion, and underpins consumer tastes; a *managerial system* that organizes and controls the coordinated stages of sourcing, manufacturing, and distribution apparel; and a *communication system* that produces product information and advertising of apparel, which highlights salient attributes for consumers.

Figure 3.2 Agents in the Fashion Supply Chain. Adapted from Craik (2009:206).



This study aims to enable and reactivate the people or agents involved in the fashion industry towards sustainability, but who are these agents? The agents in the fashion supply chain can be identified as the *farmers* that grow the raw fibers; the *textile mills* and *manufacturers* who produce and purchase materials, design products, manufacture and distribute them; the *contractors* who arrange production, packaging and delivery; the *designers* who develop samples for production; the *retailers* and/or *wholesalers* who commission the manufacturing process, and sell the final product to the customer; as well as the *customer* who purchases the product (Craik 2009:206). Within the retail head offices, the agents can be identified as the *marketing and promotion* teams that advertise and promote products, and the company brand; the *managers* and *buyers* and *planners* that select and place the order for stock. Within the retail stores, the agents are the *store managers* that supervise staff and monitor stock levels and sales figures, and the turnover and the *salespeople* who sell fashion merchandise by informing and assisting customers (Craik 2009:207). External agents such as *fashion editors, designers, trendsetters* and *media and culture* (such as films, music, and advertising) in society generate demand and act as gatekeepers in the process. The processes of the supply chain will be discussed briefly in order to identify the value gaps created by human agents in the system; the resulting sustainability issues will be explained in the later subsections.

Within the fashion supply chain wholesalers and contractors seek to satisfy several "fast-fashion" collections at cheaper and faster rates. As a result of this, an increasingly outsourced supply chain to manufacturers around the world has made the coordinating of the fashion industry extremely complex (Craik 2009:207). Hines (2006:3-19) adds that within the supply chain there are specific features that are supply driven. Firstly, the

consumers as end-users do not generate the demand; instead, the gatekeepers (as explained in the previous section) create the demand through advertising. Secondly, each process within the supply chain operates within its cycle, and each cycle has its time frame (for example, growing and harvesting of raw fibers like cotton or wool; production of synthetic fabrics; securing fibers and contracting the textile mill; manufacture of apparel; distribution; promotion strategy and retail cycles, and so forth). Thirdly, the nature of the raw material production is expensive and heavy in resources and is still labour intensive, and comparatively small in scale. In this regard, it lacks the agency to respond rapidly to the changing circumstances and pressures. According to Craik (2009:208), this imbalance in the contemporary fashion industry reproduces historical imbalances which emerged during the Industrial Revolution.

The contemporary fashion industry evolved due to the introduction of raw materials from colonial outposts, technological developments for mass production, urbanisation of the workforce and the birth of modern consumer culture. Similarly, Leopold (1992:102) argues that in the past the fashion industry failed to fully embrace mass production techniques, which produced an imbalance between the conditions of high-fashion consumption and display, and the terrible conditions of those at the production and manufacture end of the fashion system. Even today, much of contemporary manufacture of clothing is still craft labour intensive rather than machine produced. Despite new developments in machines, (for the attachment of buttons, buttonholes, blind stitching and over-locking, for example) skilled labour still handles individual garments. In addition to this, machine finishing (such as machine embroidery) revalues the status of genuinely handcrafted manufacture done by artisans in developing countries, which results in an imbalance in the supply chain prices (Craik 2009:208). Poor working conditions in developing countries (for example, low wages and the lack of job security) are compounded due to the outsourcing of workers in unregulated conditions. Arguably the advent of synthetic fibers has also exacerbated imbalances in the supply chain. On the one hand, cheaper synthetics reduce unit costs even further, while retail prices increase because of the prestige value of the new synthetic materials (Craik 2009:208).

According to Craik (2009:208), “the structure of the industry and its internal power relations and cost structure imbalances drive the consumer side of the fashion equation far more than the consumers themselves do". Due to this irregular structure of the fashion industry, the "economic gap between industrialised countries and developing countries has undermined the viability of productive capacity and manufacturing sustainability” (Craik 2009:209). In addition to this, global companies move to different places when economies fluctuate, resulting in fashion designed in one place, manufactured in another, and retailed to global western markets. Craik (2009:210) refers to this as the “push” and “pull” dynamic between supply and demand. “Products and materials are pushed onto markets to seduce consumers, while a pull system engages in extensive market research of customers to determine tastes, habits, and trends, which are fed into the industry and its product development”.

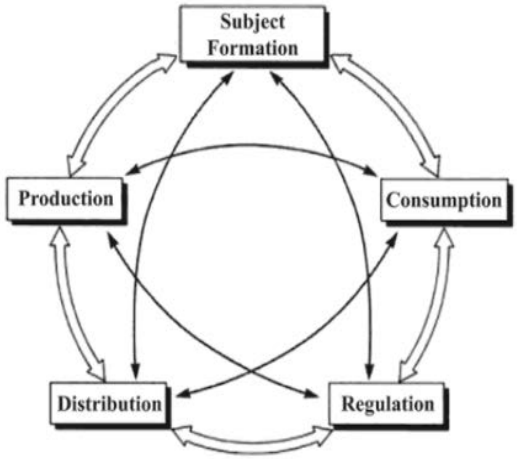
However, fashion is not just a linear production pipeline or value chain; it is a circuit of multiple sites that are interconnected and flow in multiple directions (Kaiser 2012:13). Additionally, fashion functions within a transnational world, across diverse cultures and value systems. Since this study is aiming to address more than just the physical manufacture and consumption process, but rather what drives people in a cultural system to consume, it is necessary to examine fashion through a lens that is not merely oppositional, fixed and linear. Kaiser (2012:12-13) has adapted the “circuit of culture” developed by du Gay, Hall, James, Makay, and Negus (1997:3) to examine how fashion and culture dynamically interact and overlap. The next subsection will scrutinise how this negotiation within cultural discourses plays a role in suppressing the agency of individuals in society.

3.5 FASHION AS CULTURAL CAPITAL

Kaiser (2012:12) argues that cultural and fashion studies can be an effective lens through which to view the concepts of fashion and culture. ‘Culture’ can be defined as “distinctive ideas, customs, social behaviour, products, or way of life of a particular society, people, or period”. According to the *Oxford Dictionary* (2010) ‘Fashion’ on the other hand “is

defined as a ‘prevailing custom, a current usage’ esp. one characteristic of a particular place or period of time”. Both terms include the concept of *custom*; or a habit or usual way of acting. In this respect, fashion could be a "custom for time", and culture a "custom over time” (Kaiser 2012:12). Both culture and fashion continually change, and both are social processes and material practices. Cultural and fashion studies are combined in the circuit of style-fashion-dress by Kaiser as illustrated in figure 3.3.

Figure 3.3 Circuit of style-fashion-dress. Adapted by Kaiser (2012:14).



The original “circuit of culture” model contains the elements of: “representation, identity, production, consumption and regulation” (Kaiser 2012:13). As per figure 3.3, Kaiser (2012:21) adds ‘subject formation' instead of identity and ‘distribution' in the place of representation. Rather than the linear value chain presented in figure 3.2, Kaiser's (2012:14) circuit of style-fashion-dress represents a circuit rather than a line in order to connote the idea of multiple interconnected sites and movements that flow in multiple directions in the fashion system. Each concept in the circuit is a process of the fashion supply chain, and diverse cultural paradigms and practices are interconnected into the chain through the concept of subject formation.

Within this circuit, Kaiser (2012:20) describes ‘subject formation’[9] as ‘subjection’ (being subjected to something structured by others) and ‘subjectivity' (having the agency to

[9] Kaiser (2012:20) used the term rather than identity in the original “circuit of culture” model (du Gay *et al*.1997).

express one's way of being). Kaiser adds that ‘subject formation’ prioritises the process of "becoming" over merely "being”. Similarly, as explained in the ‘key terms’ section of chapter 1, the term “agency” could also refer to the notion of role-players in the fashion system, demonstrating agency through active engagement in the success of the enterprise. Thus agents with the potential to “do good” can be seen as ‘role-players’, as opposed to the notion of “stake-holders" in the fashion system with less altruistic determinations (such as motives of consumption or profit), despite the potentially harmful impact of these choices.

In chapter 5 a conceptual framework for, ‘analysing sustainability needs in the fashion system’ is advanced. The framework moves towards a reactivation strategy of agency towards sustainability. Firstly, however, the processes of the circuit of style-fashion-dress will be discussed briefly in order to identify the value gaps in the system which lead to unsustainability.

3.5.1 REACTIVATING AGENTS IN THE SUPPLY CHAIN

Agents are involved in every process of the supply chain; these agents could potentially engage with capitalist values of profit or sustainable alternatives through the notion of the fetish (this notion will be explained in chapter 4). This engagement impacts the sectors of sustainability; either to exasperate unsustainable environmental practices or to promote sustainability. Hertz (2011:15) adds that "capitalism in western societies saturates our lives in material clutter, promis(ing) us happiness and self-fulfilment through accumulation and ownership". He elaborates that "growing ecological and ethical concerns have given rise to the mobilisation of ‘eco-fashion' movements that critique ‘fast fashion' by pointing out the environmental and humanitarian costs of the current system of clothing production, distribution and marketing” (Hertz 2011:16). Within the fashion supply chain, the main environmental impacts of the clothing industry arise during *production* (raw materials, manufacturing and transportation), *use* (consumer care) and *disposal* (incineration and landfilling). Kaiser’s circuit of style-fashion-dress intersects with the fashion supply chain, and therefore with the quintuple helix innovation model as well as

the sectors of society introduced in chapter 2. The fashion system is applied in the quintuple helix model – figure 3.4, visualising a fashion supply chain in which agents are central in each of the sectors of the helix model. Each of the systems resides within the natural environment and the natural environments of society, and within each of the systems, individuals have the potential agency to make positive or negative choices.

Figure 3.4 Fashion System Agents in the Quintuple Helix Innovation Model. Carayannis, *et al.* (2012:6). Modified from Etzkowitz and Leydesdorff (2000:111) and Carayannis and Campbell (2009:207; 2010:62).

The processes of the supply chain in the fashion system will now be expanded upon with regard to the impact on environmental sustainability. The following subsections introduce the environmental issues arising from the fashion system. The areas are categorised as follows: the industry and economic system (production, distribution and consumption); the state, government and political system (regulation); the media & culture-based public (subject formation & distribution of cultural messages); and the education system (subject

formation in design education). Each of these systems functions within the natural and societal environment. Potential strategies to address the identified environmental issues will be explored in chapter 5. The process of converting raw fiber into fabric is necessary in order to produce fashion garments. The following subsection provides an overview of the process of developing textiles from the raw fiber, and it describes how the potential choices and the agency of the agents involved in the system contributes to environmental issues.

Part C

3.5.2 Industry and economic system – *Production*

Kaiser (2012:19) refers to 'production' as the making of clothes from fibers and textiles. *The production* (raw materials, manufacturing and transportation) of the fashion industry impact on the environment (Fletcher & Grose 2012)[10]Craik (2009:220) adds that production has a history of exploitation, unethical employment practices and that there is a considerable gap between the retail price and the unit cost of fashion garments.

The processes of production contribute to water use, pollution (chemicals and pesticides), and the creation of waste in the environment (Fletcher & Grose 2012:12).

Depending on the textile, the production phase causes environmental impacts through the use of chemicals and pesticides. Manufacturing practices in less-developed countries are generally less efficient than in the developed world. The waste of energy, water, and materials and pollution as a result of this lack of efficiency is detrimental to the environment and the workers in these countries (Fletcher & Grose 2012). Within more developed countries such as the US, there are certain structures and controls in place to

[10] There are limited scholarly data available on fashion sustainability; therefore, the work of Kate Fletcher and Lynda Grose is used widely in some of the following subsections. Both authors are established researchers in fashion design, and their work is supported by authors such as Black (2008), DeLong (2009), Hethorn and Ulasewicz (2008), Armstrong and Lehew (2011), Clark (2008) and Smal (2016).

deal with these issues; less developed countries like South Africa still have some way to go. For example, according to the sustainable challenges taken from the report, *The Material Issues Facing the South African Textile and Apparel Industry* and compiled by Southern African Sustainable Textile & Apparel Cluster (SASTAC) the following social, environmental and economic challenges to sustainability are identified:

- High energy usage causes the depletion of natural resources such as coal, oil and air. The energy-intensive nature of operations is worsened by the lack of the use of energy-efficient technologies (SASTAC 2014:17).
- Water scarcity issues in South Africa are intensified due to the heavy use of water and unsustainable practices during the irrigation of commercial fabric crops, and the dyeing, finishing and laundering process (SASTAC 2014:18).
- Pollution is caused by the lack of effective chemical management throughout the value chain. Chemical pollutants cause risk to human health and receiving ecosystems during the entire value chain, from fertiliser, pesticides and herbicides used on crops, to the industrial chemicals used at all stages of production (SASTAC 2014:18).
- Liquid effluent and material waste generation are worsened due to lack of implementation of value recovery from waste such as "upcycling"[11]Again the profit motive is prevalent, as waste-related issues are not dealt with unless there is a direct cost or compliance implication (SASTAC 2014:18).
- Climate change that is impacting on textile-related agriculture supply and change in seasonal demand for products due to changing weather patterns (SASTAC 2014:19).

These impacts differ in type and scale between fibers and involve a complex set of compromises depending on the fiber composition and the sustainability issues (Fletcher & Grose 2012:13). Fletcher and Grose (2012:26-29) indicate that natural fibers generally

[11]. Recycling involves the reclaiming fibers from existing fabrics through mechanical (all fiber types) or chemical methods (mainly synthetic fibers) (Fletcher & Grose 2012:73). Upcycling occurs when used, and discarded fibers can be reused into valuable products (Braungart *et al*. 2007:1346).

utilise less energy during the manufacturing process than regenerated and synthetic fibers in which fiber production and processing are very water intensive. The processing of unsustainable fibers adds to the rising levels of pollution and the reduction of the already limited supply of clean water. For example, in order for fiber crops to be renewable, there must be a balance between the rate of use and the time it takes for those crops to regenerate (Fletcher & Grose 2012:14). Oil-based fibers can be classified as non-renewable, while crops like hemp, lyocell (extracted from cellulose in trees) and cotton can be described as renewable. By using this classification system, fibers can be divided into natural fibers (cotton, wool, silk, viscose and fibers made from polylactic acid PLA) and manufactured or non-renewable fibers (polyester, nylon and acrylic). Natural fibers like cotton can be grown organically, without the use of chemicals and fertilisers in order to improve the environmental sustainability and the safety for the workforce. 'Low-chemical use' in the growth and processing of fabric fibers like cotton is an alternative to the hazardous chemicals that are applied to crops and used to process the raw fibers (Fletcher & Grose 2012:24; Smal 2016:88; Black 2008:113).

Fletcher and Grose (2012:14) maintain that in order to enhance the social and environmental value of fibers the entire production process and the life cycle of the garment must also be taken into account. Factors such as *energy consumption, water use* and *chemical inputs*, as well as *garment durability*, and the impacts on the *ecosystem* and *workers* must also be considered. In order to take these factors into account, the following subsections provide an overview of the approaches that can be considered for sustainable production. Numerous approaches can be considered regarding environmental sustainability including, *renewability, biodegradability, people-friendly fibers, low-chemical use, low-resource use* and *predator-friendly fibers.* These approaches will be explored in the following subsections.

3.5.2.1 Sustainable production approaches – *Renewability*

In order for fiber crops to be *'renewable'***,** there must be a balance between the rate of use and the time it takes for those crops to regenerate (Fletcher & Grose 2012:14). In this regard low impact, renewable fibers take preference over non-renewable, oil-based virgin

fibers. However, the renewability of fibers alone does not ensure sustainability (bamboo, for example, is a natural fiber that grows quickly, but the processing of the fiber cellulose requires high-impact water and leads to air waste emissions). Therefore, a holistic approach to safe, resourceful production and fibers that cause the least damage should be considered, not just the renewability of fibers (Fletcher & Grose 2012:14,16).

3.5.2.2 Sustainable production approaches – *Biodegradability*

The level of *'biodegradability'* of a garment is determined by the type of fiber from which the product is made. Fletcher and Grose (2012:17-20) regard biodegradability as an ecosystem-inspired and proactive response to sustainability in the fashion industry. There are three classes of biodegradability in fibers, including biodegradable fibers (natural polymers) that meet the minimum standards of decomposition, non-degradable fibers (synthetic polymers) that do not break down, and degradable fibers (synthetic polymers) that decompose over several years. The biodegradability of the fiber, as well as the biodegradability of various components of the garment, is a consideration. Fiber blends (cotton and polyester blends) and various trims (buttons and zips) may not be equally decomposable. If fibers and garments are not designed responsibly non-degradable fibers and trims will add to textile and garment waste and the overflowing landfill sites. However, by extracting value from high energy products through the recycling of garment waste more sustainable economies could be promoted.

Designers and agents from textile mills experience a potential loss of agency when only price and profitability are the determining features, and sustainable options such as biodegradability (in the development of fiber blends and the choice of garment components) are not considered. A reactivation strategy could include education (so that agents understand the importance of biodegradability), recycled and recyclable options, and the additional budget allocation to grow the development and viability for sustainable trims. Recycling and re-using a product, in order to develop another is known, as 'cradle-to-cradle', a concept developed by William McDonough and Michael Braungart in the book *Cradle to Cradle, remaking the way we make things* (2002).

3.5.2.3 Sustainable production approaches – *Low-chemical use*

'Low-chemical use' in the growth and processing of fabric fibers like cotton is an alternative to the hazardous chemicals that are applied to crops and used to process the raw fibers (Fletcher & Grose 2012:24; Smal 2016:88; Black 2008:113). These pesticides contaminate water that runs off the fields, posing health risks to humans and threatening biodiversity in the environment. Several alternatives attempt to address these issues, including genetically modified (GM) cotton, organic cotton, non-genetically modified cotton, and growing cotton using integrated pest management systems. Each of these solutions has positive and negative aspects; for example, while organic cotton addresses the chemical pollution problem, crop yields are often only 60 per cent of those of conventionally grown cotton. GM cotton, on the other hand, has been genetically modified to be more pest resistant, but the threat of evolving genetic resistance in insects is problematic (Fletcher & Grose 2012:23). Farmers experience a loss of agency when they are compelled to produce high chemical crops, to ensure sufficient yields for economic viability. Initiatives, such as the organic cotton movement, educate potential customers regarding the benefits of low chemical use crops so that the higher prices for organic products are contextualised. These initiatives, in turn, create a demand for organic fibers, and reactivate farmers' agency, by making low chemical use crops more economically viable.

3.5.2.4 Sustainable production approaches – *Predator-friendly*

'Predator-friendly' fibers concern how farming with wool reduces biodiversity specifically concerning predators that are culled to reduce livestock losses. This aspect creates imbalances in the ecosystem and can have devastating long term effects (Fletcher & Grose 2012:30-32; Smal 2016:89). Economic challenges of livestock loss due to predators can be offset by adding value to predator-friendly fibers through innovative co-operative approaches. Farmers have experienced a loss of agency as they are compelled to cull predators to prevent the economic challenges of stock loss. Innovative cooperative approaches could add value to predator-friendly fibers to offset these losses and reactivate agency. The various approaches to environmental sustainability in fibers discussed, including renewability, biodegradability, low-chemical use, low-resource use

and predator-friendly fibers, are crucial to the process of converting raw fiber into fabric. People-friendly fibers are another approach.

3.5.2.5 Sustainable production approaches – *People-friendly fibers*

Finally, Fletcher and Grose (2012:20-22) argue that *'people-friendly fibers'* take into consideration the working conditions, and health and safety, of producer communities during the harvesting, production, and manufacturing of fashion products. Global trading systems, responsible business models as well as better working conditions, and access to unions and better living wages, guide this approach. Issues that influence workers' lives, such as labour issues occur during production in the cut-and-sew factories, where garments are assembled. Farmworkers that harvest the fiber crops experience health issues like pesticide poisonings, and labour issues such as child labour, low pay, migrant work and loss of land due to fluctuating commodity prices which shrink profits. Farmers have experienced a loss of agency as they are compelled to use harmful chemicals on their crops to ensure the economic viability of their farms. This issue, in turn, has resulted in a loss of agency for farm workers who are obligated to work in dangerous toxic environments to earn a living. Additionally, (due to fluctuating commodity prices) manufacturers experience a loss of agency when they are compelled to offset lower prices, by compromising on factory working conditions, and through practices of underpaying workers. These compromised ethics, which prioritise profit motives despite the harm caused, must be revalued, for the potential reactivation of agency in the fashion system.

3.5.2.6 Sustainable production approaches – *Global certification systems*

Global certification systems like Fairtrade exemplify the global scale of the problem. On an *economic level*, there are issues of *values* in the systems of trade and business. For example, there is political pressure by producer countries to convert food crops into textile cash crops like cotton to generate foreign income. This aspect places the food security of developing countries that now have to import produce at risk. Farmers in producer countries experience a potential loss of agency (such as the loss of food security, for example) when politicians are mainly driven by profit motives, and not by more empathetic

approaches that relate to the needs of people living in developing countries. The globalisation of the fashion industry has resulted in a system where connections within supply chains are lost; where the designer and the company no longer know the conditions under which the product is produced by the manufacturer (Fletcher & Grose 2012:24). Whether the values that one holds are based on belief in technology to resolve complex problems such as GM cotton, or on nature-based, co-operative solutions such as the organic movement, Fletcher and Grose (2012:25) contend that the type of interventions that are chosen (like choosing a particular fiber) are intimately connected to global problems and personal values. Improving the sustainability of fibers, and thereby connecting fibers with garments and their users can have a significant impact on the behaviour of users (Fletcher & Grose 2012:12).

Designers and companies experience a loss of agency when connections within the supply chain are lost due to globalisation. This lack of transparency in supply chains results in possible poor manufacturing conditions, as well as issues for farmers, labourers and people in the community. By improving the sustainability of fibers through co-operative solutions, like the organic movement, the people friendly fibers approach, and the reinvigoration of global certification systems like Fairtrade, there is potential to reconnect the link between fibers, manufacturers and end-users. This reconnection could in turn progress the drive to reactivate the agency of people in the fashion system. The production of fibers and fabrics, as well as the system of distribution, has significant environmental impacts within the fashion supply chain. The previous subsections provided an overview of production in the industry and economic system, as well as sustainable production approaches. The following subsections will outline the other two areas within the categories of the industry and the economic system, namely those of distribution and consumption.

3.5.3 Industry and economic system – *Distribution*

Distribution could refer to the physical distribution of products to retailers, as well as the advertising that fosters desire through fashion branding (Kaiser 2012:19). The distribution of fashion commodities connects the process of production and consumption. Retail

buyers, designers, photographers and journalists and all the fashion intermediaries act as agents in this process of the fashion system that connect and distribute products, and cultural messages (Kaiser 2012:20). Environmental damage occurs during the physical distribution phase, due to logistical inefficiencies, caused by the decentralised nature of the industry (SASTAC 2014:17). From a cultural perspective, advertising that fosters desire through fashion branding encourages a culture of consumption, and increases the deficit between the production-value or 'utilitarian-value' and the consumption-value or 'added-value' of fashion commodities; and proliferates sustainability issues. Issues resulting from advertising in the media systems will be further discussed in subsection 3.5.5. Long, decentralised supply chains lead to logistical inefficiencies and result in a possible loss of agency for distributors. Shortened supply chains could potentially reactivate agency for distributors as they have more control in minimising environmentally unsustainable inefficiencies.

In addition to this, manufacturers have to carry larger inventories of stock for long periods in order to meet rapid replenishment requests of retailers on time. This results in environmental waste due to excess inventory and production, and the loss of agency for manufacturers (Fletcher & Grose 2012:54). Radio Frequency Identification (RFID) tags on products and the development of analytical systems help to optimise the flow of garments through the supply chain. However, these systems also enabler faster distribution of more products, often resulting in 'end-of-season' retail waste (Fletcher & Grose 2012:54). Fletcher and Grose (2012:55) argue that technologies such as RFID seem to optimise distribution only for commercial gain and often at the expense of sustainability. As sales are only expressed in data to inform analysis, designed and made fashion is reduced to nameless units, their value judged merely on the volume of throughput (Fletcher & Grose 2012:55). The people involved in the system are, in this way, seen as *just* enablers of material flows, lacking agency and links to natural, social and cultural environments. While the physical and cultural distribution of products has environmental impacts, *consumption* within the categories of industry and the economic system also has a significant impact, and will, therefore, be explained in the following subsection.

3.5.4 Industry and economic system– *Consumption*

This subsection provides an overview of the factors that drive consumption and the environmental impact of the consumer choice of product, the care of garments, and the processes and impact of textile development. To conclude the subsection, sustainable consumption approaches are explored. The first subsections outline consumer attributes, the lifestyle of customers, consumer behaviour, and the motivational drives of consumers. The subsections after that outline the importance of colour, as well as fiber composition and development, as these aspects relate to consumption.

3.5.4.1 Consumption – *Consumer attributes*

Kaiser (2012:19) refers to *'consumption'* as the use and wear of clothes. *The use* (consumer care) and *disposal* (incineration and landfilling) of products in the fashion industry impact on the environment (Fletcher & Grose 2012). According to Craik (2009:215-217), *consumer attributes* shape fashion behaviour and consumer trends. These include race and ethnicity, income and social class, place of residence, lifestyle, physiognomy, psychographics, religion, stage of life and demographic trends. People from different *ethnic groups* who identify with their diasporic or customary culture are a key market segment (for example, traditional Basotho cultural clothing). *Income and social class* are linked to consumption, specifically discretionary expenditure or willingness to buy. The combination of occupation prestige, income, and education levels make up social class and play a part in how a consumer identifies with the fashion market. For example, "one consumer may only buy designer labels or department store specials, while another consumer is potentially driven by seasonal fads or preference for a particular colour" (Craik 2009:215). In addition to this, fashion is used as a status symbol to indicate aspirational cultural attributes or social positions. The *customers' natural environment* or place of residence influences subsequent fashion knowledge and consumption. For example, fast fashion tends to appeal to inner-city consumers, traditional country styles are more applicable to rural consumers, and students often identify with a younger, 'modern' look. Furthermore, leisure wear is more often found in coastal areas and holiday towns (Craik 2009:215).

3.5.4.2 Consumption – *Consumer lifestyle*

The *lifestyle of consumers* contextualises appropriate clothing behaviour, such as their occupation (for example, suits or 'blue collar' attire), marital status, hobbies and frame of reference (for example, travel exposure or community). *Physiognomy* refers to the body type of consumers; this affects fashion choices (Craik 2009:217). Examples of these include, large sizes to accommodate obese consumers in the west, structured fitted garments for petite Asian consumers, or adjusted patterns for predominantly curvy African figures. *Psychographic* market research is a key element for fashion forecasting. Attributes such as personality, values and attitudes are analysed to determine consumer susceptibility (as early or late adopters) to fashion trends. The *stage of life* and *demographic trends* of consumers influence whether they are more or less fashion conscious. For example, single consumers tend to be more fashion conscious then married couples with young families (Craik 2009:217). Lastly, *religious beliefs* can influence clothing choices, such as Muslim veiling or traditional Amish clothing.

3.5.4.3 Consumption – *Motivational drives*

In addition to considerations of consumer attributes that influence consumption, consumer behaviour is an important aspect. The *motivational drives* that persuade or discourage people from consuming fashion products are essential to distinguish between target markets (Craik 2009:217). Since the fashion industry is based on profit motives, the focus of market analysts is on identifying market segments based on income and social class stratification, not based on actual consumer needs. According to Craik (2009:218) and Constantino (1998:29), these segments are divided into six groups: "'upper/upper-middle class" (managerial or administrative), "middle class" (middle management, professions), "lower-middle class" (supervisors, junior managers, clerical), "skilled working class" (skilled manual labourers), "working class" (semi/unskilled manual workers) and "pensioners, casual workers, the unemployed and welfare recipients". These categories are used to reflect the assumed tastes of the target groups in the marketing campaign and media.

Similar to the ‘Maslow hierarchy of *needs* framework’ developed in chapter 2, other techniques use psychographic data to understand consumer motivations linked with lifestyle factors that shape consumer behaviour (Craik 2009:217). According to Craik (2009:217), “this places fashion at the far end of [the] practical, and views fashion as bearing attributes such as self-esteem and status, group membership, and self-actualisation". Other methods classify consumers based on *personality types*, AIOs (activity, interests, opinions), and *self-concept types* (self-image, ideal self-image, social self-image, ideal social self-image) (Costantino 1998:31-32). Through the use of trend-setters (celebrities), prominent stimuli, and brand bonds with consumers, the fashion industry uses novelty and hedonism to make products appear as though they fulfil social needs and that they are relevant to consumer lifestyles (Craik 2009:218). This imitation of social need fulfilment by marketing campaigns results in a potential loss of agency for consumers who are yearning for their ‘real’ social needs (such as connection or recognition) to be met. These models of consumer choice are proposed through market research by drawing on theories of innovation theory, reception, and self-concept formation. Consumers are kept in suspense and susceptible to new fashion fads through this manipulation of supply “push” forces (through knowledge gained from market research and fashion forecasting of trends) and in demand "pull" forces created by the fashion industry (Craik 2009:218).

Retailers use these factors regarding consumer motivations and types to select the specific retail environment such as discount or factory outlets, department stores, online shopping, or luxury stores (Craik 2009:218). Retailers calculate *price-points* in various ways, but the basic calculation is based on cost plus the mark-up (or the maximum a customer is prepared to pay for a product). Various profit based approaches (that are questionable from a moral perspective) are standard practices for setting price points. For example, prices set by using various pricing strategies, including, “buyer-based” pricing – how much a buyer is prepared to pay, not necessarily how much they should pay; “psychological pricing” – a product *appears* to be a bargain; and “competitor-based” pricing –undercuts a similar product price of a competitor to gain market share (Craik 2009:218). These types of profit-based approaches result in a loss of agency for

manufacturers, who for example, are compelled to produce a product at a more competitive price due to competitor-based pricing strategies. These pricing strategies could also result in a loss of agency for consumers. For instance, customers potentially pay more than what they should, because price points are not calculated based on how much the product 'should' sell for, but rather based on its perceived 'added-value'. The fashion retail sector changed substantially in the new millennium; most garments are mass produced in industrial factories without special craft attention given to garments when compared to couture collections of the past (Craik 2009:225). Nowadays the "selling environment" or store design, advertising, visual display and visual communication for the shopping experience, is as important as the garment design (Jackson & Haid 2006:64). In addition to the selling environment, the commercial appeal of apparel and products is primarily influenced by the 'colour' of the products. *Colour* is important because of the lead time required for mills to produce yarns in particular colours which, in turn, feeds the production of new textiles (Craik 2009:213). The *type of fiber, dyestuff* and the *dye process* can affect the quantity of water used as well as the water effluent. Therefore, the processes of developing textiles from raw fibers, and the subsequent environmental impacts as these processes, will be outlined in the next subsection of the consumption category.

3.5.4.4 Consumption – *Processing for commercial product appeal*

Coloured fibers are produced in textile mills through dye processes that use different types of chemical dyestuffs. These dye colours have varying impacts on the environment depending on the type of fiber, the colour and the corresponding dye process used. For example, dye colours such as turquoise and bright blues have a more significant impact on the environment because they require copper (a heavy metal water pollutant) to achieve colour fastness (Fletcher & Grose 2012:38). The colour-fastness of dye is known as the 'fixation rate'. The higher the fixation rate, the lower the 'exhaustion rate', or the dye that remains in the dye bath. Darker colours are also less sustainable because they have a lower exhaustion rate, and therefore have higher levels of dye chemicals that remain in the wastewater. Various chemicals are used to dye different fibers. For example, salt is used to achieve greater exhaustion in cellulosic fibers, and dispersing

agents and carriers are used for polyester fibers. These processes divert water from nature, and toxic effluent is dispelled into streams after the dyeing process. A combination of various water-cleaning treatment systems, such as flocculation, biological digestion, and filtration systems can be used to treat water, and recycle it back into the mill, in a closed-cycle with no external contamination (Fletcher & Grose 2012:38). However, despite these technologies, Black (2008:158-159), and Smal (2016:90) maintain that the dye process remains a linear system in which resources enter, are processed and are dispelled, rather than a more sustainable circular system. Fletcher and Grose (2012:33-34) add that ‘bleaching' and ‘dying' processes consume large amounts of water, energy and chemicals. The wastewater from chlorine-based bleaches and the water-intensive colour-dying processes can have adverse polluting effects on humans and the natural environment. The process of bleaching prepares fabrics for the dying processes and impacts on the colour-fastness and durability of the fabric. Therefore, the environmental impact of bleaching needs to be balanced against the durability and the visual desirability of the garment for the consumer (Fletcher & Grose 2012:35). Alternatives to bleaching include the use of hydrogen peroxide or ozone. These processes are more expensive than chlorine bleaching and require higher energy use; however, the cost of cleaning wastewater is reduced when utilising these alternative bleaching processes. A further alternative to bleaching is the use of enzyme technology. Enzyme proteins catalyse specific reactions, such as cleaning wastewater or creating textures on the surface of fabrics. However, due to enzyme treatments being derived by genetic modification (GM), the use of enzyme treatments is prohibited by the Global Organic Textile Standard (GOTS) (Fletcher & Grose 2012:36).

Linear dye processes pollute water sources with toxic effluent. Agents that run dye houses experience a potential loss of agency when they are compelled to select harmful dye methods due to the economic viability of these processes, instead of less harmful sustainable options. This loss of agency extends to producer and local communities affected by polluted affluent for their household consumption. Further developments of natural and regionally available dye processes and circular recycling systems could

potentially reactivate agency (perhaps with government support to assist with the economic viability of these endeavours).

Fletcher and Grose (2012) offer other alternatives such as smaller dye lots, which could utilise ‘natural dyes' or ‘regionally available dyes' (utilising the natural colour of fibers) as a more sustainable option, but these approaches are not economically sustainable solutions for volume production. However, Fletcher and Grose (2012:41) argue that due to commercial mass dyeing practices “the ubiquitous aesthetic of commodity clothing and the surface relationship with garments” is erased when the narrative or history of the unique character of fibers is stripped by the textile industry, in order to provide a homogenous range of synthetic colours. Fletcher and Grose (2012:44) go on to promote a ‘slow textile’ approach, in which projects are completed around the seasonal availability of natural plant dyes. They argue that the visual characteristics of natural colour can be a less overt form of communicating a products’ “green” (environmentally sustainable) benefit, and of promoting it to justify its price and value. Fletcher and Grose (2012:43) argue that in contrast to synthetic colours, natural colour can connect consumers more closely to people, their local economies and the land.

Customers experience a potential loss of agency when they are seeking individual expression through their selection of garment colours, but these customers only have access to homogenous ranges of synthetic colours. This aspect regarding colour also increases the visual divide between the manufacturer and end-product as the individual narrative and history of the fiber is stripped away. Natural colour could potentially reactivate agency through the visual connection it could provide with people and their local economies of land. These new connections could potentially promote ‘real’ social[12] benefits of products (such as connection in the community), rather than the illusion of added-value.

[12] This aspect is taken up in chapter 4 in the section on Baudrillard.

Additional processes during garment construction can also impact on chemical and energy use, including the washing processes (such as acid and stone washing to achieve a distressed garment, for example), steaming and pressing processes, and printing processes, to name a few examples. Once the garment has been purchased by the customer, the *laundering* and *consumer care* have environmental implications as well. Garments that require hot wash cycles and dry cleaning are water and energy intensive and add to liquid and chemical pollution. Once the garments are *discarded* by customers, the non-biodegradability of individual components of the garment adds to solid waste pollution. Garment fiber and trim composition, as well as consumer care, are important considerations regarding the environmental impact of garments during their lifecycle. Craik (2009:230) argues that the growth in demand for luxury fashion, as well as affordable "disposable" fashion that is often only worn once, adds to ethical trade issues and environmental issues. Craik (2009) adds that in order to change the industry consumers need to evaluate their consumption habits.

Disposal fashion results in a loss of agency for consumers, as their consumption choices result in sustainability issues throughout the fashion system. Sustainable consumption approaches will be explored in the next subsection beginning with second-hand clothes, as this concept could potentially reactivate agency by providing a creative way to express authenticity[13] and reduce environmental impacts.

3.5.4.5 Sustainable consumption approach – *Second-hand clothing*

An alternative to a fashion system in which only new clothes are valued is the second-hand clothing market (Craik 2009:242). In the past, second-hand clothes were associated with poverty, today however the terms; *retro, pre-loved or vintage* remove the stigma of second-hand. New hierarchies of consumption allow consumers to choose to buy clothes for environmental, aesthetic and political reasons. In a search for unique group identities and subcultural authenticity, countercultures have worn recycled clothing of previous eras. In this way the allure of anti-fashion statement replaces the need for prestige only

[13] This notion is explored further in the section on Marx on identity, in chapter 4.

through new fashion, and provides a more ethical choice to reduce environmental impact (Craik 2009:242). Similarly, second-hand clothing can have economic value when it is sold to developing countries. In this respect, western clothing can represent modernity and progress, and the consumer plays an active role in creating a fashionable look (Craik 2009:243). There are additional creativity and interpretation involved in styling the second-hand clothes by the customer, and greater individuality (Hansen 2005:103-118). On the other hand, clothing from developing countries often represents exotic fashion in a western context (for example, Indian saris and Japanese kimonos). This reactivation of clothing in different contexts reflects multiple ways of 'being in fashion'.

While on one hand the flood of masses of second-hand clothing into third world countries can suppress the local economies (for example, the loss of agency of local fashion designers who cannot compete with the price of cheap second-hand garments, or the loss of agency of locals who have to contend with the pollution of overflowing landfills). On the other hand, as Hansen (2005:103-118) argues, second-hand clothing could reactivate agency by offering a form of visual presentation of modernity and progress. Recycling could create new business models for designers in which they could tailor and personalise[14] existing garments, or new business opportunities for the recycling and upcycling of second-hand fabric and components.

While the consumption and the consumer care of garments, as well as the processes required to create fabric affect the value and the environmental impact of a product, the *economic system* and *labour conditions* in which the products are made also have a significant impact. Therefore, these aspects will be discussed in the following subsection. The previous subsections introduced the environmental issues arising from the fashion system, as they relate to the category of the industry and economic system (production, distribution and consumption). The following subsection provides an overview of the state, government and political system – the systems of regulation.

[14] The section on Marx on class structure in chapter 4 engages with this aspect.

3.5.5 State, governments and political system – *Regulation*

According to Kaiser (2012:23), the '*regulation*' of subject formation can be formal, such as labour laws, dress codes and uniforms; or informal, such as social pressures and cultural discourses. Regulation controls the production, distribution, and consumption of clothing. Concerning production, it includes regulating garment workers' rights, world trade legal agreements, environmental and consumer safety policies and labelling issues. Regulation in relation to consumption may involve restrictions on what not to wear or what to wear; for example, uniforms (Kaiser 2012:23). On an economic level, regulations are affected adversely because of issues with values in the systems of trade and business (Kaiser 2012:20). Global certification systems like Fairtrade demonstrate the worldwide scale of the problem.

3.5.5.1 Environmental sustainability challenges – *Regulation*

In the *Waste Minimisation Guide for the Textile Industry*, Barclay and Buckley (2002:13) argue that many environmental challenges are facing the industry. For example, in the South African industry, these include the increasing cost of water, *regulations* regarding the discharge of waste, new policies (Carbon Tax of 2016 and the Waste Amendment Act of 2014), as well as bills and acts detailing pollution liability. Other sustainable challenges from the report *The material issues facing the South African textile and apparel industry,* compiled by the Southern African sustainable textile and apparel cluster (SASTAC) cover the social, environmental and economic challenges of sustainability. The fashion systems' sustainability is affected due to the seeming lack of agency in the capitalist system. Issues, such as the implementation of policies, misaligned investor focus and the lack of comprehensive industry-wide strategies by the government, halt change. For example, the investor and business community focuses on short-term profits rather than long-term sustainable growth – this emphasis placed on profit means that sustainable practices are neglected (SASTAC 2014:3). There also appears to be an absence of collaboration between leaders in the industry (SASTAC 2014:7). Additionally, an argument can be made that there is a lack of implementation of policies and insufficient policing – Carbon Tax and Waste Tax have a further negative impact on the competitiveness of the local industry. Moreover, the limited resources dedicated to policing the implementation of

legislation and regulation, resulting in the illegal importing of products into South Africa (SASTAC 2014:12).

In addition to this the *labour issues, health and safety problems*, and the lack of ethics in the industry, contribute to unsustainability (SASTAC 2014:8). For example, labour issues arising from managers treating workers as assets, rather than engaging with them as people and labour related problems caused by ineffectual management and insufficient efforts to create shared social value. With regards to these aspects, leadership needs to be acutely aware of the social and economic reality of the workforce; previously disadvantaged communities struggle with poverty, crime and poor health. To this can be added the shortage of critical skills due to low levels of education, especially poor numeracy and literacy. Additionally, low productivity and high absenteeism of workforce due to the poor health and poor living conditions of workers and insufficient health and safely enforcement – issues include the exposure to harmful chemicals during dyeing and finishing processes, inhalation of small particulates during knitting and weaving, ambient temperature, and pest control, and finally the lack of ethics and integrity across the industry.

3.5.5.2 Sustainable regulation approach – *Creative industry policies*

From another perspective, Craik (2009:212) argues that the production system has been regarded as a 'normal' industry policy by governments who are keen to promote the importing and processing of raw materials, the increased commodity trade and the transfer of skills. For example, England's textile industry in the past promoted the construction of harbours, mills, and factories and placed less focus on the production of raw materials. Additionally, regulations and import tariffs on finished goods created a barrier of protection for local fashion industries. The focus was not on customer interests, as consumers faced higher prices and fewer options. However, preserving national culture was seen as a justification for these privations. Craik (2009:212) adds that industrialised countries also instituted regulations to improve working conditions through trade union demands.

However, the fashion industry as a cultural industry is different from other industries. Craik (2009:12) refers to this difference as “value-adding, ... where the impulse to purchase goods is not driven by need but by the desire to acquire certain attributes associated with the fashion item or the label it carries". Because of this the marketing, promotion and retailing of fashion are crucial for the acceptance of new trends. Except for certain governments such as Italy, New Zealand, Belgium, Spain, Singapore and Hong Kong, most governments do not engage with the cultural side of fashion. Unlike other countries, these governments incorporated local fashion design in their creative industry policies to initiate local design, education, manufacture, research and the promotion of fashion in their domains. Craik (2009:12) argues that the benefits of these approaches contribute to visible national culture, create export opportunities and stimulate the growth of cultural subsectors such as cultural tourism, and the design of a global image for the country.

Customers experience a potential loss of agency when the impulse to purchase goods and invest in new trends is not driven by need, but by the desire to acquire certain illusionary attributes that are created by fashion marketing and promotion agents, and associated with the fashion item. Because these attributes are illusionary the consumer is ‘compelled’ to procure products again and again in the search for satisfaction of real needs, such as self-expression, recognition and connection. These aspects, drive the fashion cycle and result in further sustainability issues. The recognition of the fashion industry as a unique cultural industry by governments, and a drive towards education, local design, cultural tourism and industry-specific research, could result in better-aligned strategies and more sustainable policies throughout the industry. These resulting strategies and sustainable policies could subsequently reactivate the agency of role-players in the fashion system. Several issues were highlighted in this subsection, specifically the indication that in order to encourage sustainable and ethical practices in the fashion industry, national governments will need to develop the right legal frameworks to stimulate the development of a sustainable industry which considers the economic, social, environmental, legal and technological aspects (Allwood, Laursen, Malvido de Rodriguez & Bocken 2006:3).

The previous subsections introduced the environmental issues arising from the fashion system as they relate to the category of the industry and economic system (production, distribution and consumption), as well as the state, government and political system (regulation). Another process in the fashion system as identified by Kaiser is 'subject formation'. The media and culture-based public (subject formation and distribution of cultural messages) also have significant impacts on the fashion system as they relate to subject formation, and will, therefore, be introduced in the next subsection.

3.5.6 The media and culture based public – *Subject formation*

Kaiser (2012:20) describes subject formation as 'subjection' (being subjected to something structured by others) and 'subjectivity' (having the agency to express one's own way of being). Kaiser goes on to state that, "individuals generally have some degree of *agency*: the freedom or ability to exert one's voice and to resist power relations in some way". For example, fashion could enable the agency for self-expression, differentiation and similarity. The mediums for this expression are the technologies, mass media and popular culture through which fashion is advertised and represented. They are also key contributors to the development of the contemporary fashion system (Craik 2009:245). Forms of representation, such as fashion magazines, films, photography and illustration, create suitable channels to showcase fashion. Specialised fashion professions such as fashion editors, stylists and commentators, developed to promote fashion styles and fads (Craik 2009:245). In this regard, the media and marketing team of companies and the external agents such as the *fashion editors, forecasters, designers and trendsetters* in society generate demand and act as gatekeepers in the process.

3.5.6.1 Subject Formation – *Media and marketing agents*

The *media and marketing* agents in the fashion industry have various strategies to gain consumer loyalty, brand familiarity and brand identification in order to stimulate consumer desire for fashion products. Craik (2009:220) explains that the success of a new product depends on how effectively the brand can introduce a new style, the innovation of the product (for example, a new running shoe) or the technology involved (for example, smart fibers), and how these aspects communicate a social (symbolic) meaning. The perceived benefits, ease of use, visibility and compatibility of the innovation determine the success of the product. However, sustainability in the fashion industry is a contentious matter, as customers tend to choose cheaper imitations over exclusive labels (Demasi 2003:1). Short term outlooks and consumer behaviour modifications of the capitalist system of marketing and retailing result in cycles of "boom-and-bust" in the industry (Craik 2009:20). According to Demasi (2003), there is evidence that consumers are disillusioned with the imitation of social meaning and the high prices of products. There is a move towards an emphasis on the quality of reasonably priced products rather than luxury branded products at inflated prices (Demasi 2003:1). The reason for this move can be explored in the history of fashion marketing. The wearing of branding on the outside of garments (T-shirt logos) became popular in the 1970s and 1980s; during this period the licensing and generation of royalties from branding became a profitable deviation from traditional marketing (Craik 2009:225). Moreover, the sale of luxury goods occurs on a global scale; therefore, there is fierce competition between major brands (Craik 2009:228).

In contrast to this loss of agency that involves the influence of marketing teams to determine customer choice, Demasi (2003:4) maintains that branding is becoming less important, as today's wiser consumers look for a combination of individualised garments that offer better value for money and transparency in their supply chains. Smaller labels are increasing, and there is a return to customisation and tailoring. Technologies, such as body scanning for personalised garment measurements, and customising one's own sneakers (Adidas) may begin to compete with mass fashion in time (Craik 2009:229).

3.5.6.2 Subject Formation – *Designers*

The activities of *designers* are also influenced by the retailing and marketing aspects. Craik (2009:20) argues that there is not enough literature that covers the place and profession of fashion design in the fashion system. Originally design emerged from tailors and dressmakers in the fashion industry that apprenticed in a design house to learn the business. Contemporary capable designers are sought out by fashion houses to create collections under the name of the house. However, since the original designer's name often upholds the brand in haute couture houses, designers are often compelled to reproduce the name in new collections (Craik 2009:221-222). This situation has created challenges for the design industry as it has shifted the perception of designers as 'skilled assets' to a perception of designers as 'dispensable commodities' that can be bought and discarded by fashion brands and houses (Craik 2009:231). In addition to this, what fashion designers create could be seen as cultural products; however, these products can easily be reproduced by the fake-fashion industry with cheap counterfeits. Therefore, in order to maintain market share, aggressive marketing and retail practices are required to make fashion labels distinctive and embodying of desirable attributes. According to Craik (2009:223),

> …usually, these values are emotional or symbolic, attaching not so much to the product but to the wearer of the product, as enhancements of the person. The challenge for the marketer is to transform a product into a feeling or mood that can be advertised through the product.

Once a product has value-added status, the price of the product can be increased to reflect its status. This implied guarantee of value encourages consumers to pay more for the product (Craik 2009:224). Designers have to balance consumer demand and affordability with the brand uniqueness – if the brand is too readily available it loses its exclusivity and becomes ordinary (Craik 2009:225). For example, despite the waste of resources, big brands like Burberry reportedly burned millions of unsold fashion products to avoid the devaluing of the brand image, as a result of discounted products flooding the market (Fashion Journal 2018).

Designers experience a potential loss of agency as values in the industry become more and more profit based, in contrast to potential 'people focused' motives; for example, the shift from designers as skilled assets, to designers as dispensable commodities. Similarly, as creators of cultural products, designers experience a loss of agency when the focus of design houses is only on profitability and exclusivity. The lucrative fake-fashion industry and competition in the capitalist system increases unsustainable practices; such as the burning of surplus products. These pressures could mean that there is less room to research and experiment with sustainable alternatives. These alternatives may not be as economically viable in the short term but may offer more sustainable options towards the future. All of these factors contribute to fashion unsustainability and a loss of agency. The factors that influence the education of designers will be discussed in later subsections; however, firstly the role of the demand generators will be further explained.

3.5.6.3 Subject Formation – *Fashion forecasters*

Fashion forecasters, as 'demand generators' and agents in the fashion industry, have distinctive challenges. Craik (2009:213) argues that one such challenge is for fashion forecasters to predict trends several months in advance as a result of long lead times from design development to the retail store. Not only does it involve the linking of demographic information about customer segments and sale statistics to predict consumer habits, but fashion forecasting also combines the choice of colour and fabrics with the socioeconomic perceptions and cultural perceptions of the fashion *zeitgeist*. In addition to this, fashion forecasters predict social trends as well as merchandising trends. Trends may trickle up from street fashions, trickle down from high fashion, or trickle across from one market segment to another. The fashion forecaster attempts to predict these flows and predict which styles will be accepted. Some fashions resonate with public moods, while others are rejected. Once a trend is identified it is linked to a target market and their income level or class (Craik 2009:213). These challenges add to the potential loss of agency of fashion forecasters, as relying on trends and statistics from previous fashion cycles restricts the flexibility for new innovative, and *sustainable* fashion

approaches. The gatekeepers in the industry play essential roles in the subject formation as well.

3.5.6.4 Subject Formation – *Fashion trendsetters*

Fashion trendsetters are the influential gatekeepers or role models who are represented in the media; their styles are copied by the fashion business and repackaged for potential consumers (Welters 2007:275). This phenomenon came about historically as only the upper social classes could afford the luxury of being fashionable, so they became a showcase for the general public of what was in fashion (Craik 2009:248). Today the advent of new modes of communication, and departmental stores with elaborate shop displays, also play important roles in disseminating and representing fashion. *Fashion editors* promote the new fashion trends, and techniques for how to look, how to consume, and where to buy the latest fashions in fashion magazines. Since fashion trendsetters, editors and retail corporations are often caught in the capitalist fashion system explicated in the previous subsections; these agents often demonstrate insufficient agency in changing the status quo of the fashion industry. However, why is this the situation?

Williams (1980:47) claimed that one reason that people purchase many more products than they need is the system of advertising and related cultural practices that transform consumption into a process of the human desire for promise, pleasure and power. Spangenberg *et. al.* (2010:1489) argue that the symbolic value of consumer goods and not just the initial function of the goods frequently influence consumer buying habits, and add that “[t]he individuals and institutions that control the mediation of symbolic resources potentially hold significant sway over individual consumers and organizations, and their spending patterns”. Fletcher and Grose (2012:157) add that, “[t]he scope of what is communicated by a company is shaped by an organisation's image, corporate culture, customer base and … its obligation to sell products". They add that the ability to reimagine how the fashion industry might fit within the Earth's natural systems is impoverished when, "communication around sustainability is reduced to simple slogans on existing products

with limited environmental or social" qualities; especially when this communication is to a 'pre-ecological' consumer with little knowledge or awareness of sustainability (Fletcher & Grose 2012:157).

In this way, profit and not sustainability is the focus in marketing campaigns in which fashion connects people to commodity-based cultural systems, not sustainable-natural or relationship-focused ways of being. A desire for these dynamics implies a potential lack thereof for the individual – the system of advertising, for example, enters this space of "lack". Similarly, these spaces of lack are also reproduced in design education and practice. The previous subsections introduced the environmental issues arising from the fashion system, as they relate to the category of the industry and economic system (production, distribution and consumption), as well as the state, government and political system (regulation) and the media and culture-based public (subject formation and distribution of cultural messages). The following subsection provides an overview of the education system (subject formation in design education).

3.5.7 Subject formation– *Design education*

In their article on "Design for Sustainability" (DfS), Spangenberg *et* al. (2010:1485) argue that sustainability plays a minor role in design education and practice, despite the social and environmental impacts caused by production in the industrial age. This current framework of education is mostly uncritical and continues the practices of unsustainability (Palomo-Lovinski & Hahn 2014:99).

3.5.7.1 Design Education – *Fashion designers*

Traditionally fashion design is taught as a consumer instigated process, but it is the fashion designers who should offer consumers a quality product that is sustainable (Palomo-Lovinski & Hahn 2014:94). According to Palomo-Lovinski and Hahn (2014:88), designers are responsible for new products and can influence which fabric is sourced and how clothing is produced, cared for and discarded. This has a direct influence on cost, quality control and durability. However, part of the fashion system's inertia in addressing policies of environmental and social issues is due to the lack of designers who feel

enabled or empowered to create change in the sustainability domain; many designers do not understand the negative environmental impact that their garment designs have, and how to change this negative impact (Palomo-Lovinski & Hahn 2014:93). Due to this lack of understanding and knowledge concerning the principles of sustainable design, the problems of poor engagement with sustainability principles and practices continue; therefore, often designers do not consider sustainable strategies as opportunities for innovation (Palomo-Lovinski & Hahn 2014:99).

Designers tend to have a lack of awareness about the processes involved in developing fabric and the resulting environmental impacts. This issue widens the knowledge gaps and marginalises the role of designers in developing solutions (Fletcher & Grose 2012:33).

Palomo-Lovinski and Hahn (2014:98) declare that while colour, texture, and proportion are considerations in design, true innovation means that environmental and social considerations should be central to the design process while also suggesting new forms, aesthetic qualities or uses. Palomo-Lovinski and Hahn (2014:100) maintain that fashion design educators should make sustainable practice inherent in all class briefs and it should be seen as the fundamental problem rather than the extra consideration in only a single or singular class. Palomo-Lovinski and Hahn (2014:97) add that, instead of just considering the initial stages of production, manufacture, and aesthetic qualities of a product, designers must consider the entire life of the product they create, as well as how it is cared for and its disposal. Fundamental design issues that must be considered when designing sustainable products should include the ease of disassembly and recycling, the use of biodegradable or recyclable materials and the minimisation of energy and resource consumption. Furthermore, other design issues to consider are the promotion of clean energy, and products with longer life cycles to reduce environmental impacts (Fletcher 2008). Palomo-Lovinski and Hahn (2014:101) add other clothing-specific areas that could also be considered, including balancing and promoting equitable work environments within and outside of local communities, considering ways to allow for visual change while eradicating waste, and re-examining the relationship between the designer and the consumer. Furthermore, opening the parameters of innovation to encourage greater

problem-solving, creating sustainability advocacy in design studies and management, and consumer awareness could be considered, as well as encouraging the more profound engagement with sustainable practices (Palomo-Lovinski & Hahn 2014:101). Moreover, the focus of design must return towards responsible innovation, instead of the perceived competitive marketability, which often makes it difficult for manufacturers to attain a profit (Palomo-Lovinski & Hahn 2014:98).

3.5.7.2 Design education – *Fashion qualifications*

Lavelle (2013:1-2) maintains that advanced qualifications in fashion design need to be underpinned by an appropriate theoretical and disciplinary base that nurtures the understanding of fashion systems (seen as the nexus of design, environment, society and the economy) and contextualises design problems accordingly. Lavelle recommends education in an integrated fashion system that equally values issues of production, distribution, adoption and consumption in the practice of fashion design. Although there have been technological advances in the industry regarding the functioning of design, production, and manufacture, not enough is being done to reduce the negative environmental impacts. Part of the problem is the lack of sustainability-focused fashion programs in which fundamental issues around, and the tensions between, sustainability and practical innovation are adequately addressed. Fashion needs to encapsulate the traditional economic ideas such as profitability, efficiency and aesthetic qualities (Palomo-Lovinski & Hahn 2014:104), but it will also have to become genuinely sustainable; for example, though completely biodegradable products or a closed-loop system of recycling. Fashion educators can negotiate the relationship between the perceived needs of the fashion industry and the future sustainability needs suggested by research (Palomo-Lovinski & Hahn 2014:88). Lavelle (2013:18) adds that, in order for the discipline of fashion design to develop academically, the nature of fashion as a social phenomenon, as well as the changing role of the fashion designer within society, needs to be explored. Agents in the system need to create methods of holistically addressing environmental and social issues by using sustainability as a vehicle for design innovation.

3.5.7.3 Sustainable design education approach – *Values*

Based on the literature discussed above, in the move toward sustainability, there is a need for values (around ethics and ecology), and sustainable design practices to be integrated into design education so that future fashion designers can begin to transform the fashion system. The lack of integration of values, sustainable design practices and systems thinking escalates the negative environmental and social impacts of the current fashion system. Similarly, Spangenberg *et* al. *(*2010:1490) maintain that, "...morals and ethics are an indispensable element of social fabric", and that "there is a need to re-introduce values into design education, as it brings design closer to its end users". According to Fletcher and Grose (2012:157),

> In order for sustainability ideas and practices to transform the fashion sector fully, a more in-depth and broader communication and education movement have to develop to build 'literacy' in the general population around ecology and natural systems and their interconnections with human systems.

Due to sustainability seemingly playing a minor role in design education and practice, designers experience a potential loss of agency to point the fashion industry towards more sustainable practices. There needs to be greater emphasis on sustainability in design education. Environmental and social consideration should be central to the design process, and a focus on the entire lifecycle of the product, from fiber production to the end of product lifecycle. With these considerations in place, designers could begin to place more emphasis on sustainable, people-friendly product and process design. Customers, in turn, could have more sustainable options, and be empowered to make better choices potentially.

The previous subsections provided an overview of some of the fashion systems environmental impacts. Each of the aspects of the supply chain, from the production of raw materials to the manufacture of garments for retailing, and the consumption of these products, have environmental implications. As explained, the industrialism and growth-based consumer paradigm of the current fashion system is in contrast to the principles of sustainability and results in a loss of agency for people in the fashion system.

3.6 CONCLUSION

The purpose of this chapter has been to interrogate relevant literature in order to demonstrate the sustainability challenges and the loss of agency in the *fashion system*. The quintuple helix innovation model provided domains in which the deficits can be located. Kaiser's circuit of style-fashion-dress model further delineated the sectors, with the aim of identifying the agents in the fashion system, and their loss of agency for environmental sustainability. As explained, there is a loss of agency for designers when the education system caters for industry demands and does not place enough emphasis on sustainability. There is a loss of agency for the manufacturers, designers, contractors, distributors, retailers and consumers within the economic system when growth and profit are the driving motives, instead of the more holistic approach of long term sustainability. There is a loss of agency for government officials and policymakers when misaligned values result in an insufficient legislature.

Furthermore, when there is an inadequate allocation of funding, to regulate unsustainable practices, and encourage sustainable practices, in local and international economies potential change agents are disempowered. There is a loss of agency for the gatekeepers and marketing teams within the media and culture based public. This loss of agency is due to the system of subject formation, and the distribution of cultural messages that create the illusion of added social value (versus the creation of opportunities for real meaningful interactions). Moreover, finally, there is a loss of agency for farmers and textile mills in the natural environment, due to limited resources, and the pollution caused by the choices of other agents in the systems (such as, the wrong choices they make, or the lack of better alternatives).

This chapter explored the situation 'on the ground' to demonstrate the tensions in the fashion economy, and how these tensions manifest in the various domains. Because of the rather bleak depiction of the sustainability issues in the fashion system explicated in this chapter, perhaps aiming towards a completely sustainable option may be too optimistic… perhaps one can rather hope for an 'optimal and ethical' fashion system, that moves away from the current system of exploitation. The notion of being 'optimal' could

perhaps open a path for making decisions that are ‘ethical’, and ‘making decisions’ could in turn potentially lead towards positive agency.

The chapter demonstrated that there is a need to look at drivers other than consumerism and capitalism; one such driver needs to be sustainability. Based on Maslow and Max-Neef’s social theories; if human nature always converts needs to wants, is there a way of ethically exploiting this transition, (or the gap between needs and wants) into something more sustainable? Exploiting the gap between wants and needs through the notion of the fetish, with sustainability as a driver, could be a way to *reactivate the agency of individuals in the fashion system***.** Analysing the processes of the supply chain in relation to Max-Neef’s social theories of needs could potentially offer strategies to reactivate consumer needs in a traditionally profit-based supply chain.

Chapter 5 will demonstrate how the notions of the fetish (drawing on the work of Marx, Freud and Baudrillard and their different understandings of the concept of the fetish) could be reworked to bridge the gap between needs and wants ethically. However, firstly, chapter 4 will explain how the fetish could be utilised as a lens through which to view and transform the process of the supply chain. The fetish as a lens could illuminate ways to exploit the gap between "needs" and "wants" towards sustainability, instead of exploitation towards profitability.

“One way that we construct our identities is through the consumer products that inhabit our lives” (Belk 1988:142).

CHAPTER 4

THE CRITICAL DYNAMICS OF MARXIST, FREUDIAN AND BAUDRILLARDIAN NOTIONS OF THE FETISH

4.1 INTRODUCTION

Chapter 3 demonstrated the loss of positive agency to consumerism; this chapter aims to develop strategies towards the regaining of positive agency. In the previous chapter relevant literature was interrogated in order to demonstrate the sustainability challenges in the fashion system and the agents involved. The quintuple helix innovation model provided the domains in which the deficits were located in the context of the fashion system. The chapter explored the situation 'on the ground' to demonstrate the tensions in the fashion economy and how they manifest in the various domains. Kaiser's circuit of style-fashion-dress and Craik's diagram of the fashion supply chain further delineated the sectors with the aim of identifying the agents in the fashion system. The literature pointed to potential intervention strategies to reactivate agency.

The central argument of this chapter is that, when society encounters a lack of value, nurturing, or belonging, intervention strategies can be formulated via the fetishes to fill these lacks. However, this could result in a loss of positive agency as these 'substitutes' may not be genuine or synergistic satisfiers at best, or ethical, at worst. The purpose of chapter 4 is to identify intervention routes offered by the notions of the fetish so that these can be exploited in pursuit of the regaining and the redevelopment of positive agency. The identified intervention routes will then be contrasted and explored in Chapter 5 so that the routes might be ethically proposed for potential exploitation. The critical dynamics offered in the Marxist, Freudian and Baudrillardian notions of the fetish will be determined. These dynamics include, for example, Marxist notions of surplus-value, Freud's theories on nurturing, and Baudrillard's theories on belonging, which will be explored as potential fetishes that could be identified and revalued for positive intervention. The theories described will then be contextualised in relation to the fashion industry. A case will be

built on how emotional fetishism exploits the gap between needs (value), and wants (surplus-value), in the agents within the fashion industry. The determining factors that motivate consumers to make choices will be explored through the lens of these theorists. The outlined dynamics of the fetish will be used to identify deficit areas and therefore strategise potential intervention nodes for positive agency reactivation in the fashion system.

Therefore, this chapter sets out first to use Marxist thinking on the fetish, to determine how surplus-value leads to the pursuit of class mobility in consumers, thus aligning the thinking potentially to Maslow's pyramid of needs theorised as the move ‘up' the class hierarchy. Secondly, the chapter engages with Freud's notion of the fetish to suggest the pursuit of individual growth, based on the idea of self-nurturing in the individual. Finally, the chapter turns to Baudrillard's notion of the fetish, which pursues the concept of developing symbolic actions that might foster the growth of belonging to the community.

In all of this the fetish, as a particular kind of commodity that is used in a particular way is central to the argument. A commodity is recognised as such, as soon as it offers the potential for consumption. Strategically, this implies pursuing an understanding of people’s motivational drives that lead to consumption. Therefore, the next subsection introduces the dynamics of commodity consumption.

4.2 THE APPEAL OF THE COMMODITY

This subsection aims to unravel the dynamics at work in the notion of the fetish and to consider if it can provide a basis for a critical approach to the problems of consumption in contemporary society. Specifically, this poses how fetish theories could be used to untangle the determining motivators for consumer choices.

According to Böhm (2005) as well as Böhm and Batta (2010:346), fetishism is a useful theoretical category for understanding contemporary capitalist society and subjectivity. Marx, Freud and Baudrillard (drawing from Marx and Freud) all discuss the idea of the

fetish in their writings. For these social theorists, the fetish implies the connection between objects and humans, specifically the idea of attributing human properties to objects that they do not have (Dant 1996:2). While Marx deals with the exchange-value of commodities in economic relations of production, he leaves the consumption or use-value of commodities unexplored.

Marx does, however, address how commodity fetishism exploits the gap between needs (value) and wants (surplus-value) of consumers. In the previous chapters, the deficits between needs and wants are contextualised in relation to the fashion industry, through Maslow and Max-Neef's theories – where use-value or production-value is the utilitarian consumer need for clothing, and surplus-value is the consumer desire for fashion clothing (in the context of this study).

Freud's fetish, on the other hand, explores how objects are consumed and desired as a substitute for nurturing or an appropriate sex item. In both of these instances, consumers seem to be seeking fulfilment due to lack in their lives, such as the lack of nurturing. This search for fulfilment could be rechannelled into the pursuit of less positive external sources (like Freud's fetish objects), or it could be rechannelled by pursuing fulfilment through self-nurturing.

Drawing on both theorists, Baudrillard's analysis of fetishism demonstrates the human relation with imaginary objects. Baudrillard investigates the formation "of value in objects through the social exchange of sign values" (Dant 1996:2). By drawing on various texts, including Böhm and Batta, Pietz, Dant, Jhally and Baudrillard's writings regarding Marxist and Freudian theories, the term 'fetishism' will be explored.

4.3. WHAT IS THE FETISH?

4.3.1 Origins of the term ‘fetish’

Walter Benjamin (1973:166), a Marxist literary theorist, wrote that "[f]ashion prescribed the ritual by which the fetish commodity wishes to be worshipped” (as cited in Steel [1996:89]). Terms like ‘ritual’ and ‘worship’ bring us to the original discourse of fetishism which was religious and anthropological (Simpson 1982:127). Charles Taylor (2007) and Gregor McLennan (1996), influential historians of philosophy and religion, held that in the 19th and 20th centuries the concept of fetishism fostered a shift of attention away from the relationship between people and God (which was seen at the time to be ‘real’), to focus instead on a relationship between people and material objects, and that this, in turn, allowed for the establishment of false models of causality for natural events. Alternatively, possibly false realities were ‘patented' to be real because they were attributed to God. These aspects they saw as central problems, historically and sociologically.

The term “fetish” originated from early trade relations between different cultures during the late middle ages (Pietz 1987:24). According to William Pietz (1985:5-17) who conducted ethnohistorical studies of the fetish, the term could only emerge due to the ongoing cross-cultural relations of groups with different social values and religious ideologies. The late medieval Portuguese word *feitiço* meant “magical practice” or “witchcraft.” *Feitiço* originated from the Latin adjective *facticius*, which meant “manufactured”. Traders used the term “fetish” to describe objects worn by West Africans, which seemed to be worshipped because of the ‘magical’ powers the objects were believed to have (Wiener 2013:175; Dant 1996:4; Simpson 1982:127). Pietz (1985:5) distinguishes between actual African objects known as “fetishes” in Europe, and the idea of any other object to which the term "fetish" applies. In other words, within an African community, the object had spiritual value, but to the European trader this belief was "obviously" false, and therefore the object was deemed a fetish by the European trader.

Marx’s usage of the term “fetishism” is clear and documented anthropologically. Marx read Charles de Brosses’s 1760 work on religious practices of worshipping objects and

derived his definition of the term fetish as the ‘religion of senses’ in 1842 (Dant 1996:4,5). The subsequent subsection provides a further context for how the term acquired its meaning, beginning by emphasising its use in different contexts.

4.3.2 Context for the term ‘fetish’

The term acquired its meaning in the context of colonial trade that transpired between cultures that struggled to understand each other because of their vast differences. Böhm and Batta’s (2010) article on commodity fetishism explains that this mutual lack of understanding resulted from a distance that could not be overcome by trade relations, but may have been reinforced by these commercial relations. In this context ‘distance’ could possibly be seen to be used in terms of a geographical distance, but could also potentially be seen as a difference in, or ‘distance’ between, social values, religious beliefs and ideologies, that is to say, between two groups engaging in a cross-cultural system of bartering (Pietz 1985:5-17). It can be argued that the greater this ‘ideological distance’, the greater the misunderstandings.

Drawing from Pietz’s (1987:24) theories, Böhm and Batta (2010:348) add that Marx’s writing on commodity fetishism may be an extension of this creation of distance. If indeed this distance creates fetish objects, perhaps the gap between the production-value and the perceived added-value of commodities can also be attributed to this lack of understanding; in this case in the ‘distance’ between producers and consumers. Baudrillard (1975:127-8) and Jhally (1990:12) add that monopoly capitalism has shifted the emphasis of control away from production to consumption, with control over demand. Sahlins evaluated why society chooses a specific set of goods it produces, and how these goods are consumed. Baudrillard (1981:130-131) concluded that because Marx linked fetishism only to exchange-value, and therefore within the dynamics of a symbol system, use-value lies outside of this code and does not appear in Marx as a relation (as noted in Jhally 1990:37).

This distance or difference also extends to how objects are valued by different groups – be it for the use-value, status or imagined meaning. An object obtains social value through

the ‘displacement of meaning’ or desire, shown by the worship, admiration or fascination with which it is regarded (Gamman & Makinen 1994:45). This desire or meaning accumulates ‘in’ an object based on its religious, economic or sensual value to the consumer. This meaning (and/or use-value) of the fetish is independent of the actual capacity of the object to manifest the attributed power. Rather, “the ‘specialness’ with which the object *is treated* makes it special” (Dant 1996:6, emphasis added). This ‘specialness’ of the fetish object influences the actions and modifies the beliefs of those that revere or worship it. It is not only reflecting the beliefs and the ideas of its worshippers, but it is also changing or transforming them as well (Callon 1991). The symbolic powers of the fetish can be reproduced, be it in an engraved image of a deity or an endless collection of shoes exchanged as commodities (Dant 1996:6). Distinctions are made in the meaning of an object, such as whether it is regarded as rubbish or just utensils, or whether objects are venerated – thus creating a fetish. Through sets of practices within cultural codes, these distinctions emerge (Dant 1996:6).

Decoding the fetish in a transcultural way is problematic from a realistic mode as what is regarded as a *real* distinction in one cultural code may be regarded as *unreal* in another. To engage in cultural critiques in the use of the term ‘fetish’ is to identify another’s reality as a “simulacrum” (a Baudrillardian (1994:1) term for ‘simulation’ in, *Simulacra and simulation*). The 19th century saw the introduction of two theories of fetishism outside what was typically considered as the domain of religion. The first was Karl Marx's idea of commodity fetishism, in which the social relationships involved in the production are experienced not as relationships among people, but as value-relationships between things (commodities – including labour – and money). The second was Alfred Binet's term ‘sexual fetishism’– the sexual attachment to an object in place of a person (Dant 1996:5). Dant (1996:7) argues that Marx and Freud engage in realistic modes of cultural analysis when using the term fetishism. Adding to both theorists Baudrillard’s analysis of fetishism demonstrates the human relation with ‘unreal objects’. Baudrillard examines the social exchange of symbol values, and how this exchange creates value in objects (Dant 1996:2).

The critical dynamics of the Marxist, Freudian and Baudrillardian notions of the fetish will help to further draw out the three fields of fetish analysis, beginning with Marx's commodity fetishism. In the following subsections, an outline of the generic dynamics of these fetishism theorists will be provided, so that these dynamics can be potentially activated in a drive away from consumerism in fashion, towards sustainability in fashion, as will be attempted in Chapter 5.

4.4 MARXIST THEORIES OF THE COMMODITY FETISH

In the first subsection, an outline of the generic dynamics of commodity fetishism theorists will be provided[15]. The notion of the fetishism of commodities plays an essential role in consumer practices. Marxist notions of surplus-value will be explored as potential fetishes that could be identified and revalued for positive intervention. These theories will then be provisionally contextualised in relation to the fashion industry through examples of social class in order to concretise the theoretical position. A Marxist case will be built on how commodity fetishism exploits the gap between needs (value) and wants (surplus-value) of agents in the fashion industry. Finally, potential strategies to reawaken ethical agency will be posited, for further and in-depth exploration in the next chapter.

Commodities are defined as things that are bought and sold in a social system of exchange. Fetishism adds value to products of labour as soon as these products are produced as/entered into as commodities within the consumer society. Fetishism refers to a fascination and wishes for an object, and how it is esteemed in its cultural or class setting. Marx (1975) describes consumers and their view regarding private property as "fetish worshippers". Marx (1975:365) contends that although objects of private property[16] appear to have power, they become substitutes for human connection as a product of alienated human labour. While pro-anthropology fetishism refers to the cultural

[15] Some of the outlines on Marx, Freud and Baudrillardian theories on the fetish presented here are similar to those of Dant (1996) in *Fetishism and the social value of objects*. However, unlike Dant's argument, the outline of these theories will be used for the revaluing of fetishes for positive intervention (sustainability) in the following chapters.

[16] In *Economic and Philosophical Manuscripts,* Marx (1975:365) refers to the "sensuous glitter" of money as a fetish as well.

significance and the utilisation of objects, in Marx's explanation fetishism is used to criticise the ideological position on and about the 'value' of capitalist culture (Dant 1996:6).

Similarly, in *Capital* Marx (1976:165) is concerned with delving beneath the appearance of generalised commodity production. The cultural forms which mistake fantasies for authenticity are assessed critically by Marx in his study of commodity fetishism. It is not the material form of the commodity that creates "real" value, but rather the quantity of labour required for its production as a social relation (Dant 1996:7). According to Marx (1976:51), the social relations between people assume a form of relation between things. Producers of products (or rather, those who own and control the modes and means of production) are only concerned with the value of the product and in what proportion they can be exchanged. Marx further distinguishes between the *use-value* of commodities (the use they have to a consumer in their everyday, functional lives) and the *exchange-value* of commodities (a fetishised form of value as commodities that move beyond function and/or utility – the start of the exchange-value theory). According to Marx, there is nothing mysterious about the use-value of a commodity, but the exchange-value brings about the mystification or fetishisation of commodities. Marx asserts that social reality under capitalism presents itself in a way that mystifies those who live in it. This mystification is political because it conditions human beings to accept circumstances of inequality and exploitation.

4.4.1 Marx and social 'class'

In *Social Class and Stratification,* Levine (2006:1) explores Marx[17] and Weber's theories on why the different social and economic hierarchies exist in contemporary society. Although the current class structure is much more complicated than it was in the 19th and 20th centuries, Levine argues that these inequalities can be better understood by engaging with historical ideologies and historical events that led to modern culture, social structure and the global economy. A critical understanding of how social class arises from the process of mystification or fetishisation clarifies the distribution of resources and who has access to them – which in turn has implications on and for public policy and political strategy for reducing social inequality and stratification systems (Levine 2006:2).

Demographics such as race, gender and age are also taken into account when conceptualising class. In Marx's critique of the emerging industrialist capitalist society and inequality, the conflict between high and low social classes is important. Marx explained social class in terms of ownership and paid labour, which he terms *social relations of production* (Levine 2006:3). Marx's analysis of social class is to be found in what he calls *market or exchange relations* – income and purchasing power. Conceptually for Marx (1959:604), capitalist society was composed of three classes: the capitalists (people in control of production – the bourgeoisie), the workers (labourers who earned wages – the proletariat), and the petit bourgeoisie (self-employed 'traders' seemingly outside of capitalist relations of production) (Ollman 1968:573, 580). (The category of the peasant can be added to these social levels – a subsistence farmer for example). In these groups, all value was produced by the workers, so capitalists could not exist without them (Ollman 1968:573).

The *means of production, as* Marx termed it (Levine 2006:3), or rather each classes' relationship with production, differentiated the classes. According to Marx this relationship between capital and labour (i.e. the bourgeoisie and the proletariat) in the capitalist production system was based on *exploitation*. In this context, exploitation refers to the

[17] Marx (1976:126-128).

nature of a relationship. Workers in the fashion industry have only the commodity of their labour which they exchange for wages. The wages or money is, in turn, exchanged for consumable commodities to meet their basic needs like food, clothing and shelter. In contrast, capitalists start with capital, which they exchange for labour power, which makes more capital in the form of monetary profit. In exchange for their labour, workers produce commodities of value; however, the wage that they receive for this labour is not equivalent to the total value produced. Marx termed this *surplus-value* or the value that forms the profit for the capitalist. The capitalist can only be a capitalist with this profit that is further invested in making more money (coined *capital accumulation* by Marx). Therefore, as noted in Levine (2006:3), exploitation for Marx (1976:126-128) is surplus-value, and the process of exploitation is the root of inequality in capitalist society.

4.4.2 Marx and needs

In the context of this research, Marx's social class categories, contrasted with Maslow's (1954) hierarchy of needs, could be a useful analogy for exploring how commodity fetishism functions in the fashion industry. In this context peasants at the poorest end of the spectrum would be working to meet their basic survival needs; they would, for example, dress accordingly in affordable, practical clothing for protection from the elements. On the next social level labourers would be able to meet their basic needs, and would experience safety and belonging. For example, they would wear durable work attire for safety and group coherence[18]. Similarly, in the category of the petit bourgeoisie (self-employed), having met their need for safety and belonging they would pursue a sense of economic coherence as traders and owners of shops.

[18] This could be why trade unions very often foster group coherence of labour through the use of uniform dress (see Maslow and Max-Neef's theories in previous chapters).

For example, similar uniforms could reflect the need for the social coherence of belonging to the trading class[19]. The wealthiest capitalists at the top of the spectrum would have their need for survival, safety and belonging met, and would strive towards self-esteem and further self-actualisation. They could, for example, acquire the costliest fashions and commodities to display their social status. According to Maslow's hierarchy of needs, once the needs are met on one level the individual wants what is offered on the next level; in Marx's categories each social class would generally strive or desire to move up in the social class ladder.

Similarly, as clothing needs are met on each social level, the wearer desires what is offered on the next level. They would desire to move up the social class ladder, but due to inequality and exploitation (in which all profit or 'surplus-value' goes to the capitalist), this would open up the desire for commodities like luxury fashion garments to counter this gap (lack) by simulating the upward mobility. Since this lack could not be met in reality (because of the oppressive capitalist regime), they would, perhaps (for example) try to dress in a way that mimicked the dress patterns of the higher class. This resonates with the Marxist commodity fetish. In this analogy, the luxury fashion garment could represent the surplus-value or the inequality/exploitation. The potential fetish lies in the desire for class mobility.

What does it mean to 'make a fetish' of something in the context outlined in the previous subsection? It means to invest powers into an object that it does not have (or to assume or believe that those powers 'exist'). For Marx (1976:126-128) commodity fetishism consists of things appearing to have value inherent in them when in fact it is the relationship between humans that produces value (in the form of the labour of workers who produce things of value to others). In *Fetishism and the social value of objects*, Dant

[19]. The petit bourgeoisie dressed to display group coherence as traders, but also in a way that signified a higher social level than the proletariat; however, they could not dress so ostentatiously as to be confused with the bourgeois, as it might alienate their lower class customers. Contemporary clothing retailers evaluate similar visual indicators when selecting products to cater to the needs of consumer target markets (Craik 2009:218; Constantino 1998:29 & Ollman 1968:575).

(1996:6) adds that Marx's analysis obscures the connections concerning 'use-value' and 'exchange-value' as well as the processes of consumption. The conferring of value to social goods is through the exchange, consumption and the decisions made about the use-value or quality of similar commodities. The judgements of commodities to meet a need (be they aesthetic quality, durability or function) result from the exchange of symbols concerning the relative qualities of these objects. Dant (1996:7) contends that Marx overlooks the complex social value that objects may have in order to emphasise the economic value of human labour. However, Sahlins (1976:148-161) elaborates that in the *Grundisse* Marx shows how the use-value of objects materialises in the process of consumption. Marx uses the example, of how gratifying a biological need like 'hunger' by eating prepared food with the use of utensils is dissimilar than "that which bolts down raw meat with the aid of hand, nail and tooth"[20]. In this way, production constructs the product as well as the demonstrable and intuitive way in which the product is consumed (Marx 1973:92).

Marx describes the use-value of objects concerning biological needs like hunger, but Dant (1996:8) argues that in reality use-value and fetishised forms are less easy to distinguish, in the process of consumption and production the meaning of objects differs as well as the use-value. Sahlins (1976:151) suggests that Marx fails to deal with the socially constructed meaning of objects; the socially constructed meaning of objects develops through the particular use-values of objects depending on the varying ways of consumption. This idea resonates with the notion that 'fashion mimics class', and therefore the idea reinforces the fetishisation of class mobility.

Leiss (1983:10-22) reworks the Marxian contribution of "commodity fetishism". He agrees with Marx that goods are fetishised; but like Sahlins, he notes that this fetishism is a feature common to all human societies. A fetish is something made; it provides an embodied representation of the current social conditions and aspirations of any given society. Jhally (1990:15) and Onufrijchuck (1985:13) argue that fetishism of commodities

[20] This paradigm can be referenced to Maslow, suggesting here the 'eating for status' as opposed to 'eating for survival'.

is an unbalanced perception of proper or rational relation between use and symbol. They add that a person-object relation has lost its link with culture and history, and is characterised by its inadequate account of social relations in society. Both these views are taken up again in the section on Baudrillard.

Based on the critical dynamics of commodity fetishism, humanity seems to draw from fetishes to make up for a lack. For example, commodity fetishes could be used as a substitute for wellbeing caused by a lack of value and identity. However, this substitution could result in the loss of positive agency. Acquiring commodities does not replace a genuine sense of value and identity, but simply an illusion of these qualities.

An alternative to this illusion and the potential loss of agency could be a paradigm in which identity is fluid and therefore allows for the movement across class, and accessing (or attempting to access) a higher class (through the use of material objects) through fetishes. This fluidity of identity is explored in Kaiser's (2012:14,20) circuit of style-fashion-dress, in which the fashion system is presented as a fluid, circular system with multiple interconnected sites. Identity is replaced with "subject formation", and this implies the move towards 'subjectivity', or the agency to express one's way of being, rather than being 'subjected' to others structure. In this paradigm, individuals could express 'agency', through fashion as a medium to express cultural diversity, individuality, and self-expression. The problem with the pursuit of subject formation is that the fetish can be seen as a driving force behind the motivation for change. By acknowledging this problem, a move towards intervention routes can be initialised. Intervention routes will be explored to address the identified areas of lack towards sustainability in the following chapters. However, first Freud's theories regarding emotional fetishism will be examined with regards to how society draws from fetishes to make up for social deficits, such as the lack of nurturing.

4.5 FREUDIAN FETISHISM (EMOTIONAL AND PSYCHOLOGICAL)

In the previous section, the generic dynamics of commodity fetishism theorists was critically examined, with an emphasis on Marx's theories of valuing. In this subsection, an outline of Freud's theories on fetishisation and how it links to nurturing will be explored. These aspects will then be contrasted with symbolic and commodity fetishism in the following chapter. These potential fetishes could then be identified and revalued for positive intervention.

Alfred Binet coined the term "sexual fetishism" in 1887 as documented by Falaky (2014:32). Fetishism assumes a growing importance in critical thinking about the cultural construction of sexuality (Steele 1996:18). Binet wrote about sexual fetishism as imaginary fetishism or "psychic quality" and contrasted this to religious fetishism where an object is reverenced and attributed mysterious power (Falaky 2014:32). In other words, the fetish drive is internalised and becomes the product and process of the individual. The term 'fetishism' took on its cultural meaning of "something irrationally reverenced" by the middle of the nineteenth century (Dant 1996:5). Nye (1993:14) suggests that fetishism in the nineteenth century resulted from unease about population size and health. Benjamin (1973:166) associated fetishism with "the sex-appeal of the commodity". Sexologist, Havelock Ellis (1936:1,3) argued that fetishism had normal foundations and expressed the human ability to construct symbols and read meaning into objects. Freud (1927) argued that the fetish is a substitute for the mother's phallus that the little boy once believed in, and does not want to forfeit; for if the woman was castrated, then his phallus is in danger. Freud (1927:154) maintained that grown-up boys repress these fears, and they persist as unconscious fantasies that are ready to return. The adult fetishist uses the fetish object as a substitute phallus to help compensate and protect against this imagined castration anxiety which threatens their masculinity. Inanimate objects, such as a leather boot or a black corset, act as a phallic substitute in order for the adult to become sexually aroused (Steele 1996:34). This theory is insufficient, as it interprets the castration complex in a narrow sense. The idea of castration must be enlarged to include the problem of physical and emotional vulnerability (and 'loss') caused by separation anxiety

or trauma (Steele 1996:37,38). It can be postulated (and argued below) that such vulnerability and anxiety seeks a counter in the dynamics of nurturing.

Based on the critical dynamics of psychoanalytical/emotional fetishism, humanity seems to draw from fetishes to make up for a lack. For example, emotional fetishes could be used as a substitute for nurturing, such as the substitute for love and support, caused by a lack of affection in the social environment. Alternatively, emotional fetishes could be used as a substitute for the lack of protection by government policy for freedoms like equal rights, leisure time or a safe, natural environment without harmful pollution. All of these can be seen to be environments that foster nurturing. However, this substitution could result in the loss of positive agency. Acquiring commodities does not replace a genuine sense of nurturing, safety and freedom and the pursuit of fulfilment through self-nurturing; these are temporary illusions of these qualities.

Intervention routes will be explored to address the identified areas of lack, in the next chapter. First, Baudrillard's theories regarding symbolic fetishism will be examined to explore how society draws from fetishes to make up for social deficits, such as the lack of belonging to a community. Put another way, Baudrillard suggests that a fetishised community works on the level of the symbolic – a simulated society and environment, for example – and not on the level of the 'real.'

4.6 SYMBOLIC FETISHISM

In the previous subsection, Freudian fetishism was critically examined. In this subsection an outline of Baudrillard's theories on the fetish and how these theories of the fetish link to belonging will be explored. These aspects will then be contrasted with emotional and commodity fetishism in the following chapter. These potential fetishes could then be identified and revalued for positive intervention.

Baudrillard and Sahlins disagree with Marx's theories. They argue that the relationship between use-value and exchange-value that Marx contrasted prevented one from understanding the *symbolic element* of utility and consumption. For Baudrillard, the integration of signs (symbols) within a symbolic code gives objects meaning and not the physical constitution of an object. According to Dant (1996:11), Baudrillard's writings focus on the connection between the particular object and the social subject.

For Baudrillard, the *merging* of the object and subject is the site of the fetish. Unlike Marx's analysis of commodity fetishism, Baudrillard (1994:131) argues that the use-value is a fetishised social relation similar to the exchange-value. The object that transforms into the exchangeable commodity must be valued in terms of a code of functionality (Baudrillard 1994:130-134). The use-value is not a built-in value of objects nor is it the functional reflection of inherent human wishes or requirements (Dant 1996:11). Baudrillard (1994:63) contends that "the object is nothing but the different types of relations and significations that converge, contradict themselves and twist around it". Baudrillard (1994:75) comprehends the process of consumption[21] as a social exchange of values and symbols, not of economic exchange or as the realisation of objective needs.[22]

Viewed through this lens Baudrillard explains objects as symbols in a code of value which alternate between a pendulum of functionality and extravagance. According to Baudrillard (1994:32), an object can be both functional and extravagant, "pure gratuitousness under cover of functionality, pure waste under the cover of practicality". It follows that an object is turned into a fetish when it displays extravagance as a symbol of value that accumulates to the consumer of the object (Dant 1996:11). Baudrillard (1994:54-56) uses the example of a "pure fetish" as a broken television that retains its

[21] See Veblen's conspicuous consumption in *The Theory of the Leisure Class: An Economic Study of Institutions* (London: Unwin Books, 1899:60-80).
[22] Alternatively, in other words, the use-value and exchange/surplus-value are one and the same thing. In Marx, use-value is materialistic, but, by combining the two (material and social value), the object is fetishised into the symbolic. Symbolic = material *plus* sign use. The material used *is* the sign use, and therefore the symbolic.

cultural status value where only a select few can afford one. Conversely, in western society, the habits that involve the object, such as television watching, for example, are what create the fetish appeal. The television mediates communications, but it is also consumed in itself. By owning the television in a social context, it signifies membership of the community as a "token of recognition, of integration, of social legitimacy" (Baudrillard 1994:54). “[S]ystematic, non-selective viewing and the apparent passivity of long hours of viewing” are the consumer’s ways of ‘worshipping’ the television (Baudrillard 1994:55). The small degree of social status that the television grants requires a certain commitment level, and the reorganisation of objects in the home. Individual objects, such as the television have a greater symbolic-value than use-value (Dant 1996:12). In addition to this, “a hierarchical code of significations” provides the comparative contextual value and meaning of different objects (Baudrillard 1994:64).

4.6.1 Baudrillard and consumption

Baudrillard (1994:83) terms the classification and exchange of objects as symbol values as “consummativity”. He juxtaposes this changing aspect of capitalist society with the concept of efficient productivity. Dant (1996:12) adds that “consummativity” is the system of needs (such as the need for choice) for commodities forced on individuals. Baudrillard (1994:85) expands that individual drivers of essential needs, craving or pleasure are not how needs are derived. The “strategy of desire” is an ideological result of the social system, attained through the generalised exchange of symbols that mobilise individual consumer needs (Baudrillard 1994:85). The use-value of objects is determined through the dissemination of objects as symbols (Dant 1996:12). To consume, therefore, is both to belong to, and to sign that one belongs to the particular social system. Social system signing is consumption, and social system consumption is signing.

Baudrillard contends that Marx uses fetishism to evade further investigation of the ideological labour implicated in consumption. Kellner (1989:36-39), on the other hand, points out that Baudrillard’s reading on Marx is limited, and argues that Marx does offer sociohistorical accounts of needs in relation to consumption in his work. The fetishism of the signifier is what creates the fetish object (Baudrillard 1994:90). Fascination and

worship of the *code* of signs and differences represented by objects is the fetishism of commodities (Dant 1996:12). The difference between the psychoanalytic use of fetishism and that of the commodity fetishist is that the desire of the latter is continuously changing as the next desirable commodity becomes available.

4.6.2 Baudrillard and the commodification of the body

According to Baudrillard (1994:94), the attractiveness of the figure is fetishised as well, and garments, jewellery and textiles as an extension of the body become part of "the mark which fascinates" and the "artefact that is the object of desire". It is the process of 'marking' the figure through dressing up that transforms it into an object of symbolic value. Thus 'dressing up' as an action locates belonging in society – the sign of the action (the garment addition) simulates the desire to belong, on a symbolic level.

A shift from the exchange of symbolic value (i.e. adding extra *religious* meaning to the original meaning) to the exchange of sign value (i.e. to add extra *ideological* meaning) is characteristic of modernity and establishes the ideological process (Baudrillard 1994:98). To illustrate this concept through an example, it is the shift from sun worship in Egyptian and Aztec cultures as an object for basic survival, to the object as a sign for modern cultures which is exchangeable (the sun-lamp, vacation sun, the gym) in an ideological system (the suntanned body) that demonstrates the fetishisation dynamic. In this context, the fascination with sign values that have been validated by individual and groups of consumers is fetishism (Dant 1996:13). In modern cultures, it is not a fetishism of representative exchange based on lived ritualistic experiences and relations with objects. Modern fetishism seems to occur as the subject is merged into the object through the 'marking' or decorating of the body that transforms the object into a sign for circulation and exchange. One is one's dress that is to be admired, for example.

In Baudrillard's (1993:101) other work he adds to how the adornment of the human figure creates the merging of object and subject; however, the focus lies on the concept of a "symbolic articulation of lack" expressed as fetishism. Baudrillard (1994:94) draws on the psychoanalytic theory of Lacan and Freud, in which the marking and adornment on the

surface of the human body divide it in parts, into a symbol of that which is missing (the phallus). This process separates “the signifier from the signified” and transforms the human figure and decoration into an object, a sign/signifier for valuing and consumption (Baudrillard 1993:107). Kellner (1989:100,199) branded Baudrillard as a “sign fetishist” due to his tendency to reduce sexuality, political economy, and all social and material experience to signs.

This paradigm of the body and its decoration as a fetishised commodity plays out in a system that “exploits the productivity of the body through the commodification of labour” and it “exploits the ‘consummativity’ of the body” (and the *action* of adornment) by revaluing it as a fetishised object of desire (Dant 1996:14). In Baudrillard’s (1990a; 1990b:11) later work, he contrasts the “irreversibility of a material culture based on symbolic exchange” with a “reversible postmodern mode of relationship between subject and object” (as cited in Dant 1996:15). He argues that this way of being came about not because of the rejection of old values, but instead because of an excess of old values or "hyperdetermination" as a result of uncertainty (Baudrillard 1990b:12). To Baudrillard (1990b:114) the fetish transforms into a symbol “of the power of the object to determine the subject, to reverse cause and effect” (as cited in Dant 1996:15). For Baudrillard (1990b:118) the pure fetish and ‘absolute commodity’ is an artwork – an intentionally made, subject/object which cannot be condensed to use-value or exchange-value and is beyond function.

Seen this way, however, one can argue that, to combat this exteriority or alienation of the sign, one would need to reverse it, so that the opposite of alienation might arise. Such an opposite could be found, not in the desire to ‘be the artwork' or to be scrutinised as an artwork, but as a subject that ‘belongs to the domain, actions and values of other, perhaps similar, artworks'. In an attempt to counter alienation and the feeling of the ‘absolute commodity' the subject desires belonging to a community. It is the process of ‘marking’ the body through dressing up that transforms it into an object of symbolic value. Thus ‘dressing up’ as an action locates belonging in society – the sign of the action (the garment addition) simulates the desire to belong, on a symbolic level.

4.6.3 Baudrillard and society

In Baudrillard's paradigm, social conditioning leads to two different ways of 'being' in the world: the 'real society' and the 'symbolic society'. For example, in contemporary society, advertising exploits the commodity fetish for commercial gain, or that of the body and its decoration as a fetishised commodity, exploited for its productivity and "consummativity". Developing symbolic actions that foster the growth of belonging to a community could move the focus from this "simulacrum"[23] or simulation to encourage a value system that celebrates the community and denies hierarchy (Baudrillard 1994:1-2). This symbolic society eludes real connection and relationship in the community in favour of a simulated class system. These aspects of Baudrillardian ideologies provide the potential for engagement in sustainability. While advertising exploits the fetish for commercial gain, this new paradigm could exploit the fetish more ethically for sustainable gain, and the body, instead of a fetishised commodity, becomes an entity for self-actualisation and ethical community integration.

As Marx, Freud and Baudrillard engage in cultural critique with the aim of freeing human nature from the ties of culture, they uncover the displacement of authentic, meaningful human relationships by illusory objects through distancing and the inversion of fetishism. For Marx, the processes of production, consumption and exchange are driven by a biological need for material objects in a societal *class structure*. For Freud, on the other hand, normal sexual biological needs are misdirected due to lack of nurturing and are manifested in *individual* desires towards valued fetish objects. By contrast, Baudrillard incorporates Marx's theory on need and consumption and Freud's concept of desire into the connection between objects and individuals. For Baudrillard, the product of the dissemination of objects as symbols in the *community* produces the need. When examining the use-value of how objects are consumed and fetishised, the capacity for

[23] Baudrillard (1994:1-2) refers to the simulation or illusion of postmodern cultural reality as the 'simulacra'. In Baudrillard's first 'order' of the simulacra associated with the pre-modern period, the image imitates the real and is distinguished as an illusion. The second order of the simulacra is associated with the 19th-century industrial revolution, in which mass production duplicates products and misrepresents or masks the underlying reality. Finally, in the third order of the simulacra associated with the postmodern age, representation comes before, and determines reality; there is no distinction between reality and the illusion, only the simulacrum.

these objects to fulfil real needs and the possible motivating factors and social practices of consumption will be explored.

4.7 CONCLUSION

The Marxist ideology of capitalism lies on the premise that acquiring extra commodities is a reflection of one's upward mobility in class. These aspects of Marxism provide the potential for an alternative engagement, towards sustainability. The ideological position is for general society to aspire to be in the higher state, so they try to mimic the higher classes. The aim is to point to revaluing strategies that change the focus from the outer exterior to an inner mode of doing. The focus is moved away from the *trappings* of the higher class and aimed to a value system where a class is not determined by money, but by *ethical standing*. The 'surplus-value' concept is changed from a 'surplus-value' to an ethical value.

In contrast to this, the Freudian psychoanalytic paradigm of society suggests that in the pursuit of individual growth, the need for nurturing is substituted by fetish objects that obscure real, underlying emotional needs. These aspects of Freudian ideologies provide the potential for engagement in sustainability. The aim is to promote individual growth strategies and a move towards *self*-nurturing.

On the other hand, in the Baudrillardian notion of the fetish, societal paradigms move to the 'unreal' domain through the social conditioning based on a hierarchical system. These aspects of Baudrillardian ideologies provide the potential for engagement in sustainability. This symbolic society eludes real connection and relationship in the community in favour of a simulated class system. Developing symbolic actions that foster growth of belonging to a community could move the focus from this simulacrum to encourage a value system that celebrates the community and denies hierarchy. While advertising exploits the fetish for commercial gain, this new paradigm could exploit the fetish more ethically for sustainable gain.

The purpose of chapter 4 was to develop intervention routes for the regaining and redevelopment of positive agency. The critical dynamics of Marxist, Freudian and Baudrillard's notions of the fetish were determined. Marxist notions of surplus-value and class structure, Freud's theories on nurturing, and Baudrillard's theories on belonging were explored as potential fetishes that could be identified and revalued for positive intervention. These dynamics of the fetish were used to identify deficit areas and therefore strategise potential intervention nodes for positive agency in the fashion system. These intervention routes will be explored in Chapter 5 by contrasting the potential fetishes with the areas of lack that were identified in the sectors of sustainability in Table 2.1 of Chapter 2. Potentially strategies to reawaken ethical agency (specifically with regards to the motivating factors for consumer choices) will be uncovered.

“... the global economy is immersed in the worst crisis since 1929. Among its causes are “ethical lacunae”. Factors such as failings in corporate governance, speculative tendencies, the deficient training of managers in ethics and a reductionist view of the economy have had severe consequences. There is now a “thirst for ethics”. It is essential to recover the relationship between ethics and the economy” (Kliksberg 2012:307).

5.1 INTRODUCTION

The previous chapter explicated the excesses of the fetish in the fashion system through the lenses of Marxist, Freudian and Baudrillardian theories. The purpose of chapter five is to explore possible counter-strategies to reawaken ethical agency. Feminist ethics of care could provide a moral foundation to counter these excesses for social and environmental sustainability. This chapter contrasts and combines the concepts of *fashion, sustainability and fetishism* (see figure 1.2 in chapter 1). The lenses of Marxist, Freudian and Baudrillardian theories of the fetish are used to explore the various areas of the fashion system through the quintuple helix model. The purpose of this chapter is to explore ethical strategies towards a model for sustainable fashion.

The tool of ethics, specifically *feminist ethics* of caring will be used to access whether the approach is consumption based or ethically grounded. By contrasting the processes in Kaiser's circuit of style-fashion-dress within the concerns of ethics of care, a strategic framework is developed. Sustainable intervention routes towards positive agency are identified by exploiting the gap between wants and needs through the lens of the three notions of the fetish.

> … many environmental and social problems in the fashion sector have no purely technical or market-based solution: rather, their solutions are moral and ethical… (Fletcher & Grose 2012:75)

5.2 ETHICS

In contrast to the problematic situation discussed in the previous chapters, fashion could be a mechanism to meet needs and to help humans flourish. Fletcher and Grose (2012:12) and Briggs (2005:81) argue that cloth makes fashion's symbolic production real by providing consumers with a physical means with which to form a social identity as well as a modern mechanism for expressing personal identity. In contrast to a fashion system driven by a growth and profit motive, Fletcher and Grose (2008:1) explain how the rich culture of fashion could help us to meet our human needs for identity and participation, and argue that celebrating this role of fashion could improve individual well-being and allow new opportunities for sustainability to emerge.

According to the Webster's *New World College Dictionary*, ethics can be defined as the system or code of morals of a particular person, religion, group, profession, and so forth, or a study of standards of conduct and moral judgment. Paulins and Hillery (2009: xv) reason that the root of ethics is about the making of decisions that are good versus poor. Ethics exists because individuals have choices. Often these choices are conflicted, as acting in favour of personal interests or organisational interests can be at the expense of a better group or societal outcome (Paulins & Hillery 2009:3,4,9). Ethical values and standards depend on societal cultures (such as religion, ethnicity, and environment), as well as morals and values (Küng 2012:37). The specific contexts determine whether ethics is involved in decision-making. Behavioural choices may have ethical roots; however, deceptively benign actions that are not usually rooting in ethical thought; such as a consumer's clothing choice, may have ethical benefits or consequences.

Worldwide, ethical constructs vary widely and change over time. Technological development and globalisation accelerate the pace of change and cause uncertainty about pre-existing values, and conflicts on social and personal fronts. The economic, financial and environmental crisis exacerbates this worry and reveals ethical deficiencies in the actions of many institutions. In *Values and ethics for the 21st century,* González

argues that a set of universal values could be a guide and a factor of stability for facing up to these difficult situations.

> …we need shared values and ethics; they are vital for the proper functioning of the economic, political and social network and, therefore, for the well-being and development of the potential of every world citizen (González 2012:9).

Küng (2012:37-39) reasons that this global ethic is based on principles of humanity and reciprocity, as well as the basic standards of non-violence, fairness, truthfulness and partnership. These would include environmental protection, public health and safety and would require reverence for life – all life, including that of animals and plants.

5.2.1 Environmental ethics

> …linear, cradle-to-grave flow of materials through industrial systems…presuppose a system of production and consumption that inevitably transforms resources into waste and the Earth into a graveyard (Braungart, McDonough & Bollinger 2007:1337).

Environmental ethics began in the early 1970s by challenging human-centered ethics and emphasising the value of ecological wholes like ecosystems (Shrader-Frechette 2012:317-318). In this paradigm, natural things have intrinsic value (biocentrism) and are not just seen as an instrumental means to human ends. On the one hand, Aristotle (1948) claims that "nature has made all things specifically for the sake of man", on the other hand, philosophers like O'Neil (1992) and Jamieson (2001) argue that it is humans' *prima facie* duty to protect beings of intrinsic value. Kant (1963) also noted that cruelty towards animals is wrong, as it might encourage desensitisation to cruelty towards humans. Leopold (1949:224-225) defended that when an action keeps the integrity and stability of the biotic community, it is right, but did not justify his position with ethical theory. However, in biocentric ethics, there are operational problems when solving conflicts of interests between humans and the natural environment (Shrader-Frechette 2012:320). Which and whose interests should be primary? In these types of conflicts only beings of free will, who are capable of being moral agents (humans), can be held accountable. For example, "[b]ees cannot be ‘blamed’ for stinging people, although people can be” (Shrader-Frechette 2012:320).

Based on this brief background Shrader-Frechette (2012:311,18,21) argues that "[e]cology theory provides necessary but not sufficient, grounds for environmental ethics and policy". She explores the following three options for philosophers and ethicists: "ethical default rules to use in situations of ecological uncertainty, scientific-case-study environmental ethics, and recognising human rights against life-threatening pollution".

Medical groups like the American Public Health Association (APHA) and the European Union Law apply the ethical default rule by adopting the "Precautionary Principle" in which uncertain, potentially life-threatening, situations should be assumed harmful until proven safe. In other words, even if the facts are uncertain potentially severe environmental and, public-health harm should be prevented.

> If polluters know that, in the absence of reliable data about their pollutants and products, the government will follow the Precautionary Principle, they will be less likely to prolong uncertainty or discourage doing the requisite scientific studies (Shrader-Frechette 2012:322).

Furthermore, basing environmental ethics and policy on case-specific studies that involve only one or two species rather than general ecological theory or model could be used in environmental problem-solving (Shrader-Frechette 2012:323).

5.2.2 Environmental ethics for the fashion industry

Chapman (2009:31) argues that there are two drivers for change: legislative demands by governments and unions for more sustainable policies, and the growing awareness and ecological consciousness of consumers and designers. Chapman offers an access route to environmental ethics with his notion of "emotionally durable design". Chapman's (2009:34) concept of "emotionally durable design" is not simply about designing a product from more durable material and in this way potentially creating more durable waste. It is about establishing and sustaining relationships with product users, by increasing the emotional resilience of relationships between consumer and product, and the lived-experience of sustainability. Since the desire for new products is not merely driven by the desire for newer things, there are complex motivational drivers involved in the process of

consumption. Chapman (2009:34) argues for the journey towards the ideal self, in which material artefacts illustrate an individual's aspirations as symbols of what the consumer is attempting to become. He adds that consumer motivation and human need constantly evolve and adapt, yet products stay static, and therefore humans outgrow the products in a cycle of destructive, unsustainable consumerism. It is the incapacity of products to evolve and grow that renders most products incapable of sustaining and establishing relationships with users (Chapman 2009:35). Chapman (2009:33) developed a six-point experiential framework to initiate engagement with issues of emotional durability and design[24].

In addition to considerations of emotional durability in product design, another option is the “There is no alternative” (TINA) approach; Esty and Winston (2009:12) refer to the TINA[25] approach, as no alternative but to consider an ethical point of view for each decision; using this approach sustainable versus unsustainable options, must be considered. Tina could be an entry point to encourage the re-evaluation of products, so that issues of value, such as environmental sustainability, are given more weight in the product selection process. In this regard, the sustainable concept of the circular economy is important (Ellen MacArthur Foundation 2017). The circular economy is based on ‘cradle-to-cradle' products, in which products fall into two spheres of manufacture, either being wholly compostable or completely disassembled and recycled indefinitely into its purest form (Palomo-Lonvinski & Hahn 2014:97; Braungart 2002). According to Braungart, *et al.* (2007:1337) cradle-to-cradle design and eco-effectiveness present an alternative production and design concept. Instead of just seeking to reduce the negative consequences of production and consumption, eco-effectiveness focuses on the “conception and production of goods and services that incorporate social, economic and environmental benefit”. These strategies have the potential to enable and reactivate agency towards sustainability in the fashion industry. Eco-effectiveness provides

[24]. The framework includes, "narrative, detachment, surface, attachment, enchantment/delight and consciousness" to initiate "engagement with issues of emotional durability and design" (Chapman 2009:33). Refer to chapter 2 for a more in-depth explanation.
[25] Tina is an acronym used by the oil giant Shell, to explain that considering environmental impact in business decisions is no longer optional (Esty & Winston 2009:12).

approaches towards circular, closed-loop systems through the redesign of material flows, by addressing long-term economic growth and innovation concerns, and by addressing toxicity issues (Braungart *et al*. 2007:1337). Cradle-to-cradle design provides a transition to eco-effective industrial systems by eliminating undesirable substances and reinventing products by considering how they could optimally fulfil needs, while still being supportive of social and ecological systems (Braungart *et al*. 2007:1337).

The International Labour Organisation (ILO) aims to promote just and fair labour issues in manufacturing by stopping child labour violations that occur in the fashion industry, especially among subcontractors and home workers (Fletcher & Grose 2012:50). Corporate Social Responsibility (CSR) ensures that codes of conduct are in place and enforced and that financial gains are distributed to workers. The expansion of Fairtrade programmes for whole garments and not just fibers such as Fairtrade Labelling Organizations International (FLO) for garment assembly are encouraged. Furthermore, multi-stakeholder initiatives improve labour conditions by providing factory support through training, monitoring and grievance channels.

5.2.3 Feminist ethics of caring

Another means of improving environmental ethics and policy could be by promoting awareness of how environmental pollution and destruction affects human health. Environmental scientists like Ehrlich and Ehrlich (1996:154) claim that industrial pollutants cause up to 33% of cancers in the USA. However, fatalities are not borne equitably among the population. According to the World Health Organization, children, for instance, are more sensitive to pollutants and can develop cancers and severe, lifelong mental and physical disabilities from exposure to industrial particulates, chemicals, and neurotoxic compounds like pesticides (NRC 1993: 61; Shrader-Frechette 2012:324-326). In addition to this, minorities, children and the poor are exposed to higher pollution and harm due to the proximity of poor neighbourhoods to environmental risks such as landfills and industry (APHA 2000).

> To the degree that individuals have participated in, or derived benefits from, social institutions – such as poor government pollution controls – that have helped cause life-threatening or rights-threatening

> environmental harm; one can argue that these individuals have *prima facie* duties either to stop their participation in such damaging institutions or to compensate for this harm by helping to reform the institutions that allow the harm (Shrader-Frechette 2012:326-328).

In this regard, traditional ethics can be a powerful tool to defend the environment, as people bear an ethical responsibility to help stop life-threatening harm caused by pollution, and a democratic responsibility because people have fundamental human rights to equal consideration. The pursuit of environmental sustainability is a driving moral position that speaks to human rights and counters the "survival of the fittest" (versus "survival of the organism-plus environment") (Bateson 1972:350). However, sometimes the most ethically responsible choice is not that straightforward. What if the most ethical choice is unsustainable? The poverty-stricken mother who is forced to purchase cheap, unsustainable clothing (produced in unfair work environments) in order to keep her children warm might be seen as a case in point, albeit a possible extreme one.

When dealing with human rights issues, utilitarian rules, principles and guidelines do not always provide all the solutions to ethical conduct. In such cases other aspects like community, connection, and relationships that “feminist ethics of care” address must also be considered. Feminist ethics revises traditional ethics as traditional ethics appears to devalue aspects of women’s moral experience. According to the feminist philosopher Alison Jaggar (1992:363-364), feminist ethics of care emphasises feminine traits and ways of moral reasoning which consider aspects such as community, connection and relationships.

> …traditional ethics overrates culturally masculine traits like “independence, autonomy, intellect, will, wariness, hierarchy, domination, culture, transcendence, product, asceticism, war, and death,” while it underrates culturally feminine traits like “interdependence, community, connection, sharing, emotion, body, trust, absence of hierarchy, nature, immanence, process, joy, peace, and life.” …finally, it favors “male” ways of moral reasoning that emphasize rules, rights, universality, and impartiality over “female” ways of moral reasoning that emphasize relationships, responsibilities, particularity, and partiality" (Tong & Williams 2016).

These “ethics of caring” will be taken into account later in this chapter. However, it is important to note that feminist ethics aims to address the oppression of any group in all systems (Jaggar 1992: 363-364). One such system is the fashion system. The next subsection will explore the concept of sustainability in the fashion system as it could address basic human needs and rights.

As defined in chapter 1, the concept of value is a pivotal issue in ethics regarding the moral significance or worth that people attach to things. To say that something has value, in this sense, is to acknowledge that it weights the choices and decisions people make and that it should guide their behaviour (Dupré 2013: 12). In contrast, Craik (2009: 27-28) explains that the desirability of western goods is evaluated not concerning the value of the goods, but regarding their "worth". ‘Worth', in this context, refers to traits of esteem and social organisation – for example, selecting Nike rather than Adidas sneakers – depending on how different groups identify with products based on their worth and social ranking of the products.

> For without a process of scrutiny of the established structures, motivations and business practices, the pursuit of environmental and social quality will remain at a superficial level and will never transition to the point of flourishing (that is, of sustainability) for human and non-human systems alike (Fletcher & Grose 2012:75).

5.2.4 Transition to positive fetishes

A move towards *Eudaimonia* (see chapter 1) or human flourishing involves the reactivation of agency to “do good”. This reactivation involves the revaluing of agents as *stakeholders* (engaged for selfish motives) towards “do no harm”, to that of agents as *role players* (active, altruistic engagement) to actively “do good”. Doing good is known as the ‘beneficence’ principle; in Latin, the term means *bene* or ‘good’, and *ficio* or ‘doing’ (Munro 2014:122, 127). However, in chapter 4 it was argued that this agency is currently driven by fetishes, which are "fed" by the consumerist society that relies on the fetishes to deal with "lack". These fetishes were grouped around three core approaches Marxist (the lack of belonging and the desire to move up in social class), Freud (the lack of nurturing) and Baudrillard (the lack of community). Currently, these fetishes manifest in non-sustainable ways. This project aims to reposition them to address environmental sustainability, in

other words, to transform the "negative fetishes" into "positive fetishes". This approach of "positive fetishes" resonates strongly with the feminist ethics of care – prospering, nurturing and belonging towards human flourishing are very positive and central feminist ethics of care concerns. The literature suggests that the feminist ethics of care interrogates and engages with a particular situation and its dynamics. By engaging with the current demands of context in the 'here and now', feminist ethics of care becomes a vehicle driving valuable actions, such as positive agency (for example to nurture, protect, foster, remedy and flourish) *at the moment that decisions have to be made*. Feminist ethics of care asks, "what is good now, here, under these circumstances and for us?" and not, "what is the general good, for everyone, for all time, irrespective?" Hence the complexity of the situation is acknowledged and engaged with, and solutions are personalised for specific situations, cultures and communities, and not generalised towards "one size fits all" approaches.

This project has suggested that analysing the domains of the quintuple helix model (Carayannis *et al.* 2012:6) in the context of the three sectors of sustainability could provide potential areas of lack for intervention towards positive agency. However, the helix model is based on generalised universal ethics – arguably characteristics of male-centred ethical approaches. As argued in the ethics section of chapter 5, these utilitarian rules, principles and guidelines do not always provide all the solutions to ethical conduct, in which aspects such as community, connection and relationships are considered (Jaggar 1992: 363-364). Therefore, despite the effectiveness of the helix in illustrating how knowledge circulates through the social subsystems, and how it changes to innovation and 'know-how' in society – it could be argued that the model is not in-depth enough (or is perhaps too rigid and delineated) to effectively consider aspects orientated with feminist ethics of care. Therefore, this study aimed to develop a strategic framework that could consider ethics of care within Kaiser's circuit of style-fashion-dress. The helix domains and Kaiser's model demonstrate where harm could be, or is being caused. These domains are inevitable, or, expressed differently, and they cannot be changed. However, the attitudes of the agents within the domains have the potential to change from negative to positive agency. For example, the attitude of stakeholders (speculatively, the term implies, "what can I get out of the situation?") could be changed to those of role-players (the term

suggests active engagement in, and implied contribution to, the pursuit of the enterprise succeeding). In other words, once the agents are identified, the aim is to activate them as role-players in the domains, for sustainable practices.

Additionally, within the three core fetish approaches there are possibilities to engage with the fetish in each domain of the helix model, and subsequently (and perhaps far more subtly and with greater nuance) within the Kaiser circuit of style-fashion-dress model as situated in the domains. However, firstly, section 5.3 will illustrate how the fetish can be utilised to target areas of lack. It does this by using the quintuple helix model as a base.

Following this, subsection 5.4 arrives at the heart of this research project, namely the offering of a Strategic Framework to pursue positive agency in the fashion industry. This section sets up and explains the way the framework operates and provides examples to illustrate the process. (It then points to a comprehensive carrying-through of the framework, presented as Addendum A). Once this is in place, the section explores examples of innovative approaches to sustainability in the fashion system in order to identify existing strategies which could inform the study, and how these strategies interact with the developed framework.

5.3 UTILIZING THE FETISH TO TARGET AREAS OF LACK

Table 5.1 Domains of the Helix in which sustainability deficits are located.
Developed by the author, based on (Carayannis, *et al.* 2012:5; Ashby, *et al.* 2013:63).

Domains of Helix	Sectors of Sustainability		
	Environment	**Society**	**Economy**
	Area of lack to engage with the fetish	**Area of lack to engage with the fetish**	**Area of lack to engage with the fetish**
Education System	Environmental sustainability low priority in specific course content. ⬇ *-Make environmental sustainability central in all course curriculum.*	Catering for industry demands, not sustainable societal future. ⬇ *-Community engagement and service learning so that learners can identify and solve issues in local communities. -Open-sources for sustainable practices, patterns and designs.*	Catering to technology demands, not ethical needs. ⬇ *-Balance technology demands with education and awareness of sustainability need so that technology can be used for good.*
Economic System (Industry)	Cost effective synthetic fibers instead of more environmentally friendly alternatives. ⬇ *-Local fiber, production and slow fashion. -Innovative approaches such as biomimicry, new fibers, less harmful manufacturing and production processes. -Zero-waste, upcycling, circular affluent use systems, less harmful dyes and chemical processes etcetera.*	Meeting fast fashion desires instead of slow fashion potentially synergistic satisfies. ⬇ *-Support local manufacturers and slow fashion brands. -Adaptable, modular (composed of interchangeable components) and half-way design products for extended use. -Support brands with transparent supply chains. -Reduce, reuse and repair.*	Growth & profit motives, not sustainability. ⬇ *-In-house second-hand stores, recycling and end-of-life take-back solutions. -Collaboration with other industries for cross-material flows in different industries. -Transparency in the supply chain, as well as relative-value product education for consumers.*
Political System (State, Gov.)	Environmental sustainability not prioritised and implemented. ⬇ *-Policy to extend company responsibility for end-of-use recycling and production waste solutions.*	Censorship and authoritarianism meant for protection, but that inhibit freedom, participation and creation. ⬇ *-Policy for just and fair labour issues and manufacturing. -Tax breaks to reduce the cost of labour for reuse and repair. -Extend, corporate social responsibility.*	Inadequate legislation and funding. ⬇ *-Extend, Fairtrade labelling policy and producer responsibility legislation. -Tax for unsustainable products to fund sustainable initiatives.*
Media & Culture based public	"Green slogans" for profit goals instead of real environmental initiatives. ⬇ *-Promote transparency in farming and production processes so that the real value of products becomes apparent.*	Pseudo satisfaction such as symbols and fads versus identity, stereotypes versus understanding. ⬇ *-Encourage interactive marketing approaches, such as fashion-hacking, co-design, participatory-design, and halfway products.*	Added-value for-profit goals. ⬇ *-Promote the benefits of environmentally sustainable products through open-source designs, anti-media campaigns and crowdfunding initiatives.*
Natural Environments of society	Limited resources and pollution ⬇ *-Transition to circular cradle-to-cradle systems.*	Harmful pollution near neighbourhoods instead of communities for connection. ⬇ *-NGO's that promote upcycling and recycling initiates to clean up pollution and reconnect communities. -Community training centers for garment repair, best garment washing practices and skills training.*	Investment in the industry without adequate environmental impact considerations. ⬇ *-Address the environmental impact of industry growth and move to renewable energy and circular systems.*

As illustrated in table 2.2 from chapter 2, the subdomains of the quintuple helix innovation model (Carayannis, *et al.* 2012:5) provide domains in which the sustainability deficits can be located. However, in table 5.1 the three sectors of "un-sustainability"; the economy, the environment and society (Ashby, *et al.* 2013: 63) now provide the context for potential areas of lack within which the *fetish* can be engaged. For example, within the education system, in the context of the environment, a potential area of lack with which to engage the fetish concept could be the low priority given to specific course content regarding ethics and environmental sustainability (Palomo-Lovinski & Hahn 2014: 88,101,104; Spangenberg *et. al.* 2010:1490; Fletcher & Grose 2012:157; SASTAC 2014). A potential alternative to engaging with the fetish could be to make environmental sustainability central in all course concerns. Similarly, within the education system, in the context of society, a potential area of lack with which to engage with the fetish could be education which caters for industry demands, not for sustainable societal futures. A potential alternative to engaging with the fetish could be community engagement and service learning so that learners can identify and solve issues in local communities. A further potential alternative could be providing open-sources for sustainable practices, patterns and designs. Lastly within the education system, in the context of the economy, a potential area of lack with which to engage with the fetish could be education which currently caters for technology demands, not ethical needs. A potential alternative to engaging with the fetish could be balancing technology demands and skills with educational, ethical and philosophical engagements, leading to an awareness of sustainability needs.

Similarly, areas of potential lack to engage with the fetish are identified in the domains of the economic system, political system, media and culture-based public and the natural environments of society, as these domains are contextualised within the sectors of sustainability. The previous subsections illustrated how the fetish could be utilised to target and identify areas of lack. In the next subsection, a strategic framework to target sustainable positive agency is developed and explained with emphasis on how the fetish intervention can potentially reactivate positive agency.

5.4 A STRATEGIC FRAMEWORK TO TARGET SUSTAINABLE POSITIVE AGENCY

> Social capital holds a wide variety of meanings but most agree that it concerns connections between and within social networks that encourage civic engagement, engender trust, create mutual support, establish norms, contribute to communal health, cement shared interests, facilitate individual or collective action, and generate reciprocity between individuals and between individuals and a community (Fuad-Luke 2009: 7).

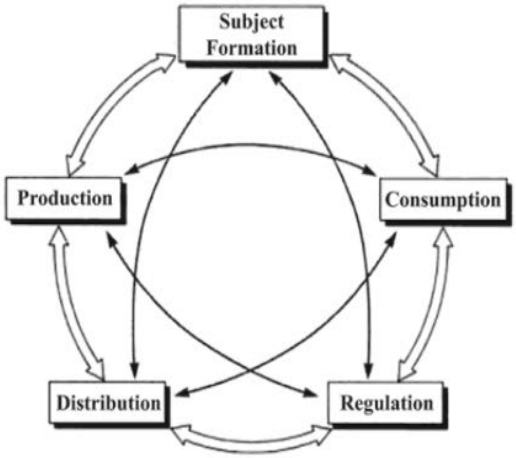
The strategic framework to target sustainable positive agency (also refer to Addendum A) provides a framework where the central strategic step is to insert the fetish interventions emanating from the previous chapter's engagement with the fetish concepts of Marx, Freud and Baudrillard, between two dynamics. These dynamics are identified from and in Kaiser's circuit of style-fashion-dress. The strategy calls for a 'playing off through the lens of the fetish' of one dynamic with another (for example, how one dynamic of the circuit might influence or be influenced by the other) within the concerns of ethics, in the pursuit of determining whether this strategy could potentially provide ways of reactivating positive agency.

5.4.1 STRATEGIC FRAMEWORK

The strategic framework contrasts the interconnected domains of the Kaiser circuit of style-fashion-dress. For example, as shown in figure 3.3 below (refer to chapter 3 for more detail on the figure) the aspects of subject formation and consumption could be contrasted as they interact and influence each other. Alternatively, the aspects of distribution and regulation could be contrasted as they interact and influence each other. Distribution interacts (individually, for the sake of argument, but also collectively – an approach not taken here) with regulation, subject formation, consumption, production and, of course, with itself when the two 'distribution' dynamics straddle the fetish. Similarly, each node interacts with each other node, offering a potential to identify a lack,

and, consequently, drawing on a fetish, an opportunity to realign the negative fetish into a positive fetish and hence to activate a positive agency. While addendum A provides all of the linkages, the following subsection provides two examples of how this approach could work, as it ties into the fetish towards reactivation strategies.

Figure 3.3 Circuit of style-fashion-dress. Adapted by Kaiser (2012: 14).



The first, randomly selected set of dynamics to be contrasted as examples of how the framework could function, are subject formation[26] and consumption[27]. The dynamic of the first term (subject formation) will be established as being present in the Circuit, and normally, in a consumerist society, it draws on a lack that is potentially captured in each of the three theorised fetishes. The second term (consumption) is also present in the Circuit and also manifests in a fetish built on lack. However, by manipulating the fetish for this second dynamic so that it manifests as providing the possibility for positive agency, it can then be applied to address the demands implied by the first term (in this case,

[26] Subject formation implies here both 'subjection' (being subjected to something structured by others) and 'subjectivity' (having the agency to express one's own way of being) (Kaiser 2012:20). The mediums for this expression are the technologies, mass media and popular culture through which fashion is advertised and represented (Craik 2009:245).

[27] 'Consumption' is seen as the use and wear of clothes (Kaiser 2012:19). The use (consumer care) and disposal (incineration and landfilling) of the fashion industry impact on the environment (Fletcher & Grose 2012). Consumer attributes shape fashion behaviour and consumer trends. The motivational drives that persuade or discourage people from consuming fashion products are essential to distinguish between target markets (Craik 2009:215-217).

subject formation). This approach to manipulating the second term to reach or engage with the first term will be applied throughout the table. Thus, each aspect can be phrased in a series of questions within the fetish section of the table, and potential interventions for each question are proposed under the 'possible interventions' section of table 5.2.

5.4.1.1 Marxist lens: Consumption ↔ subject formation[28]

Table 5.2 Consumption ↔ subject Formation. Developed by the author.
(Refer to Addendum A for the full framework).

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Consumption ↔ subject formation	I. How can subject formation be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards consumption?	Modular and adaptable clothes (Hirscher 2013: 57) create new service and business opportunities and allow for new ways of consumption. For example, if garments can grow and adapt to the wearer, the consumer will potentially be willing to spend more on the individual garment as it would replace several items of clothing. Therefore, higher profit margins could make up for reduced consumption, and additional funds can be used to design better quality products, and engage in research, for further sustainable design innovation and profitability.
	II. How can subject formation be changed to enhance **Freudian** (nurturing) towards consumption?	Designing incomplete half-way and anti-media products (Fuad-Luke 2009; Hirscher 2013a), activate and enable users to embed personal meaning into the products and to finish products according to their own needs. Consumers can interact and participate in the production and branding process in order to create personal meaning. Consumers have a more significant potential to experience synergistic satisfaction such as creative expression, participation and self-expression (rather than relying on the imitative branding of commercial products).
	III. How can subject formation be changed to enhance **Baudrillardian** (belonging/simulation to real) towards consumption?	Retail spaces could potentially sell services rather than trying to sell more wasteful products. Services such as customer matching with customised designers or manufacturers, eco-friendly cleaning, networking and best practice sharing hubs for open-source (Van Abel, *et al.* 2011) training and product hacking options. Consumers experience connection and better social need fulfilment.

For example, when manipulating subject formation through the lens of the Marxist fetish to intervene with consumption, the question could be phrased as follows: how can subject formation be changed to enhance the *Marxist* (ethical standing/upward class mobility) way towards consumption? A possible intervention could be modular (composed of interchangeable components that allow customers to repair, reuse and customize

[28] It should be noted that this is the reverse of what has just been described in the previous section.

products) and adaptable clothes which create new service and business opportunities and allow for new ways of consumption. The design of adaptable garments reduces unsustainable consumption and encourages the consumption of better quality products. The design helps to enhance the way that consumers value clothes. Disposable fast fashion products used as status symbols can be replaced with more sustainable, durable options, to reflect cultural identities. In this way, feminist ethics of care traits such as the design ‘process’ are emphasised over masculine traits that focus on the final ‘product'.

Similarly, feminist ways of moral reasoning which emphasise ‘particularity' within individual designs are focal, rather than the ‘universality' of a similar range of designs. The Marxist ideology of capitalism lies on the premise that acquiring new commodities is a reflection of one's upward mobility in class. The framework uses these aspects of Marxism to provide the potential for an alternative engagement, towards sustainability. The ideological position is for society to aspire to be in the higher state, so they try to mimic the higher classes. The aim is to point to revaluing strategies that change the focus from the outer exterior to an inner mode of doing. The focus is moved away from the trappings of the higher class and aimed towards a value system where a class is not determined by money, but by ethical standing. The surplus-value concept is changed from a surplus-value to an ethical value. Analysing the aspects of subject formation and consumption through the Marxist notion of the fetish can in this way stimulate interventions and thereby reactivate positive consumer agency towards ethical standing and consequently towards sustainability.

5.4.1.2 Freudian lens: Consumption ↔ subject formation

On the other hand, when manipulating subject formation through the lens of the Freudian fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance the *Freudian* (nurturing) way towards consumption? A possible intervention could be designing incomplete half-way and anti-media products (Fuad-Luke 2009; Hirscher 2013a) in order to activate and enable users to embed personal meaning into the products and to finish products according to their

own needs. The design of the product changes the way that consumers interact with the production and branding process. Rather than relying on the imitative branding of commercial products, the manipulation of subject formation provides consumers with opportunities to participate and express themselves, thereby encouraging greater synergistic satisfaction and self-nurturing. In this way, feminist ethics of care ways such as the branding ‘process' are emphasised, over masculine traits that focus mainly on the final ‘product'.

Similarly, feminist ways of moral reasoning which emphasise ‘interdependence' are focal, rather than the ‘autonomy’ of the designer. Therefore, the Freudian psychoanalytic paradigm of society suggests that in the pursuit of individual growth, the need for nurturing is substituted by fetish objects that obscure real underlying emotional needs. These aspects of Freudian ideologies provide the potential for engagement in sustainability. The aim is to promote individual growth strategies and a move towards *self*-nurturing. Analysing the aspects of subject formation and consumption through the Freudian notion of the fetish could in this way stimulate interventions and thereby reactivate a positive consumer agency towards self-nurturing and consequently towards sustainability.

5.4.1.3 Baudrillardian lens: Consumption ↔ subject formation

Furthermore, when manipulating subject formation through the lens of the Baudrillardian fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance *Baudrillardian* (belonging/simulation to real) way towards consumption? A possible intervention could be retail spaces that potentially sell interactive services rather than trying to sell more wasteful products. The design of retail concepts encourages consumers to experience connection, and therefore better social need fulfilment as they connect and improve their awareness about sustainable consumption practices. In this way, feminist ethics of care traits such as ‘community’ are emphasised over masculine traits that focus on ‘autonomy'.

Similarly, feminist ways of moral reasoning which emphasise ‘relationships' and ‘interdependent' services are focal, rather than ‘autonomous’ and ‘independent’ product

retailers. Within the Baudrillardian notion of the fetish, societal paradigms move to the 'unreal' domain through the social conditioning based on a hierarchical system. These aspects of Baudrillardian ideologies provide the potential for engagement in sustainability. This symbolic society eludes real connection and relationship in the community in favour of a simulated class system. Developing symbolic actions that foster growth of belonging to a community could move the focus from this simulation to encourage a value system that celebrates the community and denies hierarchy. While advertising exploits the fetish for commercial gain, this new paradigm could exploit the fetish more ethically for sustainable gain. Analysing the aspects of subject formation and consumption through the Baudrillardian notion of the fetish in this way could stimulate interventions and thereby reactivate a positive consumer agency towards belonging and consequently towards sustainability. Table 5.2 provides illustrations of these examples.

The second example will be presented as per table 5.3 in the next subsection. (Addendum A provides the fuller exploration of the full framework).

Table 5.3 Subject Formation ↔ subject formation. Developed by the author.

Kaiser: style-fashion-dress circuit	**Fetish**	**Possible interventions**
Subject formation ↔ subject formation	I. How can subject formation be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance subject formation?	Open integrated retail store owned, second-hand (Craik 2009:242) stores that offer services such as cleaning, reconditioning as well as the sale of the clothes collected from the end of use take-back-schemes. This would incentivise the design of clothing for resale so that it keeps its value and can be re-sold several times, and thereby generating higher profit margin results through reuse without having to reduce the quality of the products. In this way, the fashion industries view of waste and the value of materials both virgin and used can be revalued (Braungart *et al.* 2007).
	II. How can subject formation be utilised in a **Freudian** (nurturing) way to enhance subject formation?	II. & III. Organise fashion art exhibitions where people can be involved in the production process and choose to be the maker, the consumer or the observer. Skilled students act as intermediaries to help guide and train volunteer makers. The consumer volunteer negotiates a product price with the maker, pays and receives a product. In this way, fashion design becomes a meaningful process of interactions and the processes behind garment production are transparent, demystified and more meaningful.
	III. How can subject formation demand be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance subject formation?	II. & lll. Develop a safe online space to upload personal memories. Create algorithms which interpret keywords from these memories into individual 3D wearable prints for a more personal connection with design. These creations could be printed in recyclable smart textiles that can change colour (using innovative biomimicry (Braungart *et al.* 2007; Fletcher & Grose 2012) technologies to change colour like chameleons) depending on the user's mood. This example will enable consumers to communicate and connect with communities through their clothes.

5.4.1.4 Marxist lens: Subject formation ↔ subject formation

Similarly, this subsection provides another example in which the second term in the framework is manipulated to enhance the first term, in this case, the concepts of subject formation and subject formation. So for example, when using the Marxist fetish lens, the question could be phrased as follows: How can subject formation be utilised in a Marxist (ethical standing/upward class mobility) way to enhance subject formation? A possible intervention could be opening integrated and retail-store owned, second-hand stores that offer services such as cleaning, reconditioning as well as the sale of the clothes collected from the end of use take-back-schemes. The design of the retail process influences the fashion industry's view of waste within design and retail, and the value of materials both virgin and used can be revalued towards less wasteful practices. In this way, feminist ethics of care traits such as 'community' are emphasised over masculine traits that focus on 'autonomy'.

Similarly, feminist ways of moral reasoning which emphasise 'responsibilities' (to design for better value) are focal, rather than profit-based 'rules'. Correspondingly, the Marxist ideology points to revaluing strategies towards a focus on value systems where a class is not determined by money and surplus-value products, but rather by ethical standing and value. Analysing the aspects of subject formation and consumption through the Marxist notion of the fetish in this way could stimulate interventions and thereby reactivate a positive retailer agency towards ethical standing and consequently towards sustainability.

5.4.1.5 Freudian lens: Subject formation - subject formation

On the other hand, when manipulating subject formation through the lens of the Freudian fetish to intervene with the subject formation, the question could be phrased as follows: How can subject formation be utilised in a *Freudian (*nurturing) way to enhance subject formation? A possible intervention could be to organise fashion art exhibitions where people can be involved in the production process and choose to be the maker, the consumer or the observer. In this way manipulating the design of the making and retailing

processes, enables more meaningful consumption interactions, and the processes behind retailing, making and consumption are demystified and become more meaningful. Feminist ethics of care traits such as production ‘process' and ‘sharing' are emphasised, over masculine traits that focus on the final ‘product' and ‘domination'.

Similarly, feminist ways of moral reasoning which emphasise individual ‘relationships' in the production process are focal, rather than ‘impartial rules'. The design of more transparent, interactive making and retail processes could lead to the uncovering of unsustainable practices and unethical ‘surplus-value adding’ practices (such as inflated product prices for profit motives). Consequently, the Freudian paradigm of society promotes the pursuit of individual growth and the move towards *self*-nurturing and engagement with sustainability, rather than the substitution of these needs with fetish objects that obscure real underlying emotional needs. Analysing the aspects of subject formation and consumption through the Freudian notion of the fetish could in this way stimulate interventions and thereby reactivate a positive consumer (as a designer, maker, buyer) agency towards self-nurturing, and consequently towards sustainability.

5.4.1.6 Baudrillardian lens: Subject formation - subject formation

Similarly, when manipulating subject formation through the lens of the Baudrillardian fetish to intervene with the subject formation, the question could be phrased as follows; how can subject formation demand be utilised in a *Baudrillardian* (belonging/simulation to real) way to enhance subject formation? A possible intervention could be to develop a safe online space to upload personal memories. Alternatively, one could create algorithms which interpret keywords from memories and ‘translate’ these into individual 3D wearable prints for a more personal connection with design. This aspect will enable consumers to communicate and connect through their clothes. In this way, the product design intervenes with the making, consumption and retail processes to enhance connection and more holistic need satisfaction. Design innovations such as Biomimicry, and designing for individuality, inner ways of being and connection improves the sustainability of the products, by reconnecting consumers with nature and society. In this

way, feminist ethics of caring ways such as ‘connection' and ‘immanence' are emphasised over masculine traits that focus on ‘autonomy' and ‘asceticism'.

Similarly, feminist ways of moral reasoning which emphasise ‘partiality' are focal, rather than aspects of ‘universality’. Consequently, by manipulating subject formation within the Baudrillardian notion of the fetish, societal paradigms are moved from symbolic, to real domains that provide the potential for real connection, relationships and therefore for engagement in sustainability. Analysing the aspects of subject formation and subject formation through the Baudrillardian notion of the fetish could in this way stimulate interventions and thereby reactivate a positive consumer agency towards belonging and consequently towards sustainability.

(Addendum A attempts to apply this type of argument – in table form – to all of the binaries suggested, and is exhaustive, at time mundane, and at times ‘fanciful.' Nevertheless, the framework, and the mechanisms of manipulating the framework open potential areas for engagement, exploration, research and creative endeavours.) The strategic framework to target sustainable positive agency provides a framework to insert the fetish intervention of Marx, Freud and Baudrillard between two dynamics. Contrasting the dynamics of Kaiser’s circuit of style-fashion-dress with each other within the concerns of ethics could potentially provide ways of reactivating positive agency. The framework could be a model to organise complex information regarding the fashion systems supply chain, as it functions and intersects with multiple domains. The following subsection provides current and realised examples of innovative approaches to sustainability in the fashion system, and which potentially illustrate the operation of the strategic framework.

5.5 INNOVATIVE APPROACHES TO SUSTAINABILITY IN THE FASHION SYSTEM

This subsection provides examples of innovative strategies that exist within the fashion system in order to potentially illustrate the functioning of the strategic framework. Several innovative concepts will be analysed through the contextual lenses that the framework

provides. Examples of products will be provided through images[29] as well as contextual descriptions. These descriptions explain how the product innovation could have occurred if the inventor had access to the strategic framework.

IMAGE 5.1
3D-printed eco-bikini.

IMAGE 5.2
Adidas x Parley trainers.

IMAGE 5.3
PETIT PLI adaptable clothes.

IMAGE 5.4
Biodegradable Allbirds sugar Zeffers.

IMAGE 5.5
‘Black spot the Unswoosher’.

IMAGE 5.6
Sally Fox’s biodynamic farm.

[29]. The sources for all of the images are contained in the list of figures, illustrations and diagrams at the beginning of this dissertation.

IMAGE 5.7
Puma and MIT collaboration.

IMAGE 5.8
'Piñatex – *piña'* leather products.

5.5.1 Reinventing relationships

The first example refers to image 5.1. The 3D printed eco-bikini designed by professor Mihri Ozkan cleans the ocean as the wearer swims (Starr 2015). Eco-effective products such as the eco-bikini not only aim to release less negative emissions but are also designed to filter out harmful particles instead of further polluting the environment (Braungart *et al*. 2007:1345). This product potentially provides an example of emotionally durable design, namely the aspect of delight, as it could delight users with their recently purchased undiscovered product (Chapman 2009:33). Additionally, the garment could be personalised to fit each consumer individually through body mapping technology. Innovative technologies such as 3D printing could reinvent how fibers are produced and can change the production process. Consumers could produce items at home using 3D printing technologies. The design of garments can influence consumer behaviour and how they express personal concerns (Gwilt & Rissanen 2011; Hirscher 2013:50). In addition to this, products such as these could facilitate the *reinvention* of the relationship between the consumer and the product; Braungart *et al.* (2007:1345) argue that this shift is required to address the interconnected nature of the social, economic and biological systems towards sustainability.

When contextualising this example within the strategic framework, the aspects of consumption and subject formation become relevant. Therefore, while manipulating

subject formation through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance the *positive fetish* ways towards consumption? From a Marxist perspective, the design could change consumer behaviour through emotional engagement, such as delight and therefore improved satisfaction with the product. The product could also be worn as a status symbol that improves the wearer's self-esteem (through the greater awareness and altruistic behaviour that it encourages, thereby emphasising feminist ethics of care traits such as joy, sharing and community, and moral reasoning that focuses on responsibility).

Additionally, from a Freudian perspective, the garment could better meet needs by being personalised to fit individual consumers, thereby emphasising feminist ethics of care traits such as immanence and moral reasoning that focuses on particularity. Furthermore, from a Baudrillardian perspective the product could make consumers feel more connected to their communities, as, by choosing to acquire and use the product, users do good for the environment and surrounding communities by cleaning the ocean. This example suggests an emphasising of feminist ethics of care traits of connection and moral reasoning that focuses on relationships. Similarly, the framework could be used as a lens and a brainstorming tool to determine if designs encourage positive agency; in this case through innovative designs that reinvent relationships and potentially influence consumption behaviour.

5.5.2 Consumer education through engagement

Another example of an innovative product design is the Adidas x Parley trainers (image 5.2). These trainers are designed by London-based Alexander Taylor, with uppers that are made using recycled[30] plastic recovered from the sea (Howarth 2016). The limited edition of 50 pairs can only be earned (rather than purchased) by users who must take

[30] Recycling which involves the reclaiming of fibers from existing fabrics through mechanical (all fiber types) or chemical methods (mainly synthetic fibers) (Fletcher & Grose 2012:73). Upcycling occurs when used, and discarded fibers can be reused into valuable products (Braungart *et al*. 2007:1346).

part in an Instagram competition, submitting a video that demonstrates their commitment to stop using single-use plastic items. The design of the media campaign helps to educate consumers and influence consumption. When contextualising this example within the strategic framework, the aspects of consumption and subject formation become relevant. Therefore, while manipulating subject formation through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance *positive fetish* ways towards consumption?

From a Marxist perspective, the media campaign design could change consumer behaviour by encouraging sustainable consumption behaviour such as reducing the waste of single-use plastics. By sharing sustainable practices on social media, consumers become educators for other consumers and improve their self-esteem and status, thereby emphasising feminist ethics of care such as sharing and connection, and moral reasoning that focuses on relationships. Not only are the products promoted for the brand, but consumer perceptions of waste and the perceptions of the inherent value within upcycled and virgin materials are influenced. In this way, recycling becomes a catalyst for more profound behavioural change (Fletcher & Grose 2012:73). Consumer education and awareness are essential drivers for sustainable consumption behaviour; consumers need to be informed and provided with comparable, reliable information in order to become active agents for change (Allwood, *et al.* 2006:5).

Additionally, from a Freudian perspective in order to earn the product, consumers would have to educate and empower themselves (or self-nurture) regarding sustainable practices. This aspect emphasises feminist care traits such as joy and life and moral reasoning that focuses on responsibilities. From a Baudrillardian perspective, eco-effective approaches such as upcycling encourage the redirection of material flows, as well as the reconnecting of designers, producers and textile recyclers. This aspect enables design for easier more profitable recycling downstream (Braungart *et al*. 2007:1346). Through this, the feminist ethics of care agenda, such as making connections is emphasised, as well as moral reasoning that focuses on relationships. Therefore, similarly to this example, the framework could be used as a lens and a brainstorming tool

to determine if such designs encourage positive agency; in this case through educational media campaigns that potentially influence consumption behaviour.

5.5.3 Adaptable clothing

In order for clothing to be more durable and have longer life-spans, it needs to adapt to consumers' desire for change (Chapman 2009). Modular, trans-seasonal and multifunctional clothing outlast seasonal trends (Fletcher & Grose 2012:80-84), thereby reducing waste and improving environmental sustainability. Modular and adaptable clothes create new service and business opportunities and allow for new ways of consumption (Hirscher 2013: 57). For example, Royal College of Art graduate Ryan Mario Yasin created "PETIT PLI" (image 5.3) clothes for children with pleat systems that allow garments to stretch and fit in up to six different sizes (Casanovas 2017). The pleating techniques are inspired by deployable aeronautical structures. The garments are waterproof, comfortable, functional and easy to clean. The design adapts to consumers' needs and influences consumption as fewer garments are required due to adaptable sizes. When contextualising this example within the strategic framework, the aspects of consumption and subject formation become relevant. Therefore, while manipulating subject formation through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance *positive fetish* ways (or positive agencies) towards consumption?

From a Marxist perspective, if consumers understand that clothing is durable and adaptable, they may be willing to pay more for products, and thereby afford designers the opportunity to use better quality and longer lasting materials as well as maintain profit margins. This aspect could revalue how consumers perceive clothes for status value: instead of needing a constant stream of new items, more value could be placed on adaptability, quality and durability. This aspect emphasises feminist ethics of care traits such as interdependence and moral reasoning that focuses on responsibility.

From a Freudian perspective, adaptable products better meet needs as they can adapt to consumer's changing needs, thereby emphasising feminist ethics traits such as

emotion and joy, and moral reasoning that focuses on particularity. From a Baudrillardian perspective, the collaboration between designers and cross-disciplinary specialists can result in more innovative designs that better meet the future needs of communities. This aspect emphasises strong feminist ethics of care traits such as connection and sharing, and moral reasoning that focuses on relationships. Therefore, similarly to the previous example, the framework could be used as a lens and a brainstorming tool to determine if designs encourage positive agency, in this case through collaborative and innovative design approaches that potentially influence consumption behaviour.

5.5.4 Biodegradable clothing

Another example of sustainability strategies in the fashion system is an innovative approach such as biodegradability. A biodegradable, adaptable example, is the Allbirds one (image 5.4). This San Francisco-based footwear start-up partnered with Brazilian petrochemical company Braskem to produce plant-based fibers in a factory run on renewable energy. The brand launched the “Sugar Zeffers” flip-flop with biodegradable, carbon neutral soles made from sugarcane. These soles alleviate the need to use polluting petroleum-based plastic foams. In addition to this, the shoes have detachable components to encourage consumers to mix and match styles rather than buying multiple pairs. Allbirds also launched a running shoe made from New Zealand merino wool and eucalyptus pulp, in March 2018. The start-up also plans to create open-sources for their developed material to competitors in order to help promote carbon efficiency in the shoe industry (Pownall 2018). The production process influences the design of the product. When contextualising this example within the strategic framework, the aspects of subject formation and production become relevant. Therefore, while manipulating the production process through the lens of the fetish to intervene with subject formation design, the question could be phrased as follows: How can production be changed to enhance positive fetish or agency towards enhanced subject formation?

From a Marxist perspective, the design of the product was influenced by the production process of the product; avoiding petrochemicals and utilising renewable energy reduced

the carbon footprint and waste. The redesign of the production process reactivated the agency of producers by offering economically viable sustainable alternatives. In this way, feminist ethics of care were emphasised to enhance traits of the process (instead of only product) and interdependence, and moral reasoning that focuses on responsibility. Thus subject formation was enhanced by being drawn into an interdependence with the production and the environment.

From a Freudian perspective, the production process and therefore the design is less harmful to the environment as well as to producing communities. Additionally, biodegradable production options with transparent supply chains could redirect material flows away from 'end-of-pipe' linear solutions, towards sustainable cyclical cradle-to-cradle dynamics, and thereby help reverse-engineer product designs for better recyclability and biodegradability (Braungart *et al.* 2007:1338, 1347). This aspect, in turn, could revalue designer and producer perceptions of materials and products, to contextualise product benefits and the higher value of more ethical options. The feminist ethics of care connected to traits such as process and community and moral reasoning that focuses on responsibility are emphasised and enhanced.

From a Baudrillardian perspective, providing open-sources of innovative material production processes can encourage the sharing of best practices as well as greater economies of scale in sustainable production processes and design endeavours, thereby improving the overall economic viability of sustainable endeavours and creating communities of best practice. Feminist ethics of care that focuses on sharing and community and moral reasoning that focuses on relationships is drawn upon. Similarly, the framework could be used as a lens and a brainstorming tool to determine if designs encourage positive agency; in this case through production processes that potentially influence design approaches.

5.5.5 Fashion Activism

When agents in the fashion system use their skills for improving the industry towards transparency and sustainable practices, they become fashion activists. Fashion activism encompasses various critical socially, politically and environmentally directed activities concerning the fashion system (Fuad-Luke 2009). Hirscher (2013a:52) argues that fashion activism envisions a balance between economic, social and environmental responsibilities. It could include fashion-hacking[31], slow fashion (Strauss & Fuad-Luke 2008), co-design, modular clothing, do-it-yourself clothes, participatory fashion workshops, open design and half-way products, for example. The "Adbusters Media Foundation" raises awareness of branding-driven consumer behaviour (Hirscher 2013:50). A disruptive technique to revalue fashion products is fashion-hacking. An example is 'Black spot the Unswoosher' (image 5.5) sneakers, founded in 2004 by 'Adbusters,' which offers open-source branding and invites consumers to contribute to the product marketing strategy by adding a logo, developed by each user, onto the product (Hendry 2012; Hirscher 2013:50; Fletcher & Grose 2012:151).

The design influences the consumption process. When contextualising this example within the strategic framework, the aspects of consumption and subject formation become relevant. Therefore, while manipulating subject formation through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance *positive fetish* ways towards consumption? From a Marxist perspective, the design of a logo as an incomplete or 'half-way product' influenced how the product was consumed. This type of participatory design empowers consumers to influence the environments they interact with, including the products and services (Hirscher 2013:55). Co-design and participatory design challenge the top-down hierarchies of the current fashion system. In this way, not only are the economic needs of the company met for branding towards the product marketing strategy, but as Chapman (2009:137) argues, through active interaction and participation with the production process, personal meaning can be created towards personal status. In this way, feminist

[31] A disruptive technique to revalue fashion products that involves the constructive modification of existing products, designs or strategies (Hirscher 2013:55; Fletcher & Grose 2012:151).

ethics of care traits such as participation, sharing and the absence of hierarchy, and moral reasoning that focuses on particularity, are cultivated.

From a Freudian perspective, half-way products are designed incomplete with the intention of the user designing or finishing the product in some way (Fuad-Luke 2011:148). According to Fuad-Luke (2009:98), half-way garments activate and enable users to embed personal meaning into products and to finish products according to their own needs. Half-way products can become synergistic satisfiers, as they address the user's need for individuality, creative expression, participation and self-expression (Max-Neef 1991). Such a process activates the feminist ethics of care traits such as joy, emotion and the process, and moral reasoning that focuses on particularity.

From a Baudrillardian perspective, co-design aims for a collaborative design process of products with users (Sanders & Strappers 2008:5-18). The process democratises design by allowing multiple agents to collaborate and learn together (Fletcher & Grose 2012:144; Fuad-Luke 2009:39). It empowers users and values them as experts of their own experiences (Sanders & Strappers 2008). As users designed their brands on the product and shared them on social media, participation, and connection was encouraged through the product design. The feminist ethics of care traits of sharing and connection and moral reasoning that focus on particularity were enhanced. Similarly, the framework could be used as a lens and a brainstorming tool to determine if designs encourage positive agency; in this case through half-way design and fashion-hacking approaches that potentially influence consumption processes.

5.5.6 Local textiles and slow fashion

Slow fashion focuses on slower cycles and reduced material throughput; it aims for longer garment lifetime through high quality, local, ethical and sustainably sourced materials (Fletcher & Grose 2008; Hirscher 2013:54). Naturally, existing fiber colours and regional colour variations reconnect agents with local economies and the land. For example, the award-winning entomologist Sally Fox has a biodynamic farm (image 5.6) in Northern California where she grows organic, non-Genetically Modified Organic (GMO), and

naturally coloured cotton for Levi and L.L Bean. By growing the more insect-resistant naturally coloured cotton, the need for pesticides, synthetic dyes and the resulting pollution are mitigated (Wilson 2018). The production processes influence consumption. When contextualising this example within the strategic framework, the aspects of consumption and production become relevant. Therefore, while manipulating production through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can production be changed to enhance *positive fetish* ways towards consumption?

From a Marxist perspective, the unique colours display of the naturally coloured cotton provides a unique regional character. Fletcher and Grose (2012:43) argue that in this way colour can promote 'green' benefits more actively to justify a product's price and value. Unique colours can better help consumers to express their individuality and status. Feminist ethics of care traits such as inner joy and immanence (instead of outer asceticism), and moral reasoning that focuses on particularity, are foregrounded. From a Freudian perspective, mitigating the need for pesticides and synthetic dyes can save farming and production costs, and reduce the harmful pollution that producer communities are exposed to – nature is indeed nurtured. This overview draws, therefore, on the feminist ethics of care traits such as nature, life and community, and moral reasoning that focuses on responsibility.

From a Baudrillardian perspective, local farming initiatives provide work for local communities. Additionally, future processing could occur locally and provide work for the surrounding community, and company-supported weaving apprenticeship programs could provide opportunities for the next generation to earn a living and continue local textile traditions. Such projects would draw on feminist ethics of care set of traits, such as interdependence, trust, sharing and community, and moral reasoning that focuses on relationships. Similarly, the framework could be used as a lens and a brainstorming tool to determine if production encourages positive agency; in this case through production processes that potentially influence consumption approaches.

5.5.7 Biomimicry and User-led design

Biomimicry technology draws inspiration from nature's strategies and patterns to inform product design, processes and policies (Fletcher & Grose 2012:114). For example, at the Milan design week, the 'Biodesign: Living and Breathing the Future of Performance', featured four cases of how bacteria could be used within sportswear to improve performance and sustainability. One of these cases was developed by the 'Biorealize' design studio (image 5.7) in collaboration with the Massachusetts Institute of Technology (MIT) Design Lab and the sportswear brand Puma (Winston 2018). They created a breathing shoe trainer that changes in response to the biology of the wearer and measures aspects of the user (such as fatigue). The design influences the consumption and production.

When contextualising this example within the strategic framework, the aspects of consumption and subject formation become relevant. Therefore, while manipulating subject formation through the lens of the fetish to intervene with consumption, the question could be phrased as follows: How can subject formation be changed to enhance *positive fetish* ways towards consumption? From a Marxist perspective, user-led customisation occurs during the product experience. These products create a stronger link between the user and the environment, and redefine manufacturing and consumption, as the products only become complete after interacting with the user. This approach draws on feminist ethics of care targeting nature and life, and moral reasoning that focuses on particularity. From a Freudian perspective, user-led products can better meet consumer needs, as each product is specially customised for individual users. This summary foregrounds feminist ethics of care of joy and immanence and moral reasoning that focuses on particularity. From a Baudrillardian perspective, collaborations between manufacturers, designers and scientists in aspects such as biomimicry, could potentially initiate innovations in production processes, systems and ways of consumption, thereby helping to create more sustainable links to the environment. In so doing they would target feminist ethics of care that foregrounds the traits of the process (instead of the end product), sharing and nature, and moral reasoning that focuses on relationships and responsibility. Similarly, the framework could be used as a lens and a brainstorming tool

to determine if designs encourage positive agency; in this case through nature-led design approaches that potentially influence consumption approaches.

5.5.8 Circular systems and innovative technologies

Innovative Technologies such as Piñatex – piña leather (image 5.8) was created from pineapple leaf fiber by Dr Carment Hijosa in 2013, a graduate of the Royal College of Art, and consultant for the leather goods industry in the Philippines (Hickey 2014). The product provides an ethical alternative to leather and oil-based textiles with a strong ecological and sociological background. It offers flexibility in application, such as the ‘Camper', and ‘Puma' brand shoes and other products are shown in image 5.8, as well as applications for interior and car finishes. The production of the product influences the distribution.

When contextualising this example within the strategic framework, the aspects of distribution routes and production design become relevant. Therefore, while manipulating production design through the lens of the fetish to intervene with distribution routes, the question could be phrased as follows: How can production processes be changed to enhance *positive fetish* ways towards distribution routes? From a Marxist perspective, Piña leather provides additional revenues to farmers as they now sell the compost as a higher value fiber (Hickey 2014). The production process reactivates the agency for farmers as they can earn additional income while wasting less. Locally produced fibers encourage better distribution routes and infrastructure, thereby supporting local farmers and communities and creating local networks (Fuad-Luke 2009). Such an approach emphasises feminist ethics of care attributes such as interdependence, connection and process, and moral reasoning that focuses on responsibility.

From a Freudian perspective, by utilising cradle-to-cradle production design principles, the product creates less waste and is made by utilising a by-product of the food industry that is usually just utilised as compost. Additionally, no animals need to be harmed to create the plant leather; in this way, the product reactivates the agency for producers and consumers by providing a more ethical alternative for traditional leather. Shortened supply

chains encouraged by the innovative production process, could potentially reactivate the agency for distributors. The greater collaboration among agents and improved transparency in production processes could encourage greater control in minimising environmentally unsustainable distribution inefficiencies. Thus feminist ethics of care characteristics such as process, life and nature, and moral reasoning that focuses on responsibility are celebrated.

From a Baudrillardian perspective, by investigating the viability of high-value cross-sector material flows in various industries, collaborative approaches in different industries and multiple applications can be encouraged (Ellen MacArthur foundation 2017). Traits such as connection, sharing and community, and moral reasoning that focuses on relationships draw on feminist ethics of care. Similarly, the framework could be used as a lens and a brainstorming tool to determine if production encourages positive agency; in this case through production approaches that potentially influence distribution routes. The previous subsections illustrated how the fetish could be utilised to target areas of lack and reactivate positive agency through the ethics of care. In addition to this, examples of innovative approaches to sustainability in the fashion system were explored in order to illustrate how the developed framework could be utilised as a brainstorming tool for interventions and innovations that reactivate positive agency.

5.6 CONCLUSION

This chapter explained how the dynamics of the quintuple helix model and the Kaiser model could be used to conceptualise a strategic model of intervention regarding sustainability issues in the fashion industry. The three paradigms; fashion, the fetish and the quintuple helix model and Kaiser model were used to develop a strategic model which could target the domains of the models. The objective was achieved by discussing the deficits identified in the previous chapters, within the framework of the helix model, the Kaiser model and the fashion system in order to strategise possible interventions. Innovative existing strategies towards fashion sustainability were explained and contextualised within the framework, to demonstrate how it could function. The strategic framework to target sustainable positive agency provided a framework to insert the fetish interventions drawn from Marx, Freud and Baudrillard in-between each set of paired dynamics. Contrasting the dynamics of Kaiser's circuit of style-fashion-dress with each other within the concerns of a feminist ethics of caring, provided potential ways of reactivating positive agency. The framework targets positive agency in the circular fashion system by utilising the notion of the fetish as a lens through which to revalue environmental sustainability issues in the five systems of the helix, and reactivate agents towards positive ethical change. The following chapter brings the study to a conclusion by summarising the study and presenting its findings. It will also articulate some of the shortfalls in this study and will point to possible future research projects.

SUMMARY, FINDINGS, SHORTFALLS AND RECOMMENDATIONS

CHAPTER 6

SUMMARY, FINDINGS, SHORTFALLS AND RECOMMENDATIONS

6.1 SUMMARY OF THE THEORETICAL ARGUMENT

This chapter includes a summary of the trajectory of this research. The findings are demonstrated, the shortfalls are documented, and the recommendations are discussed. The central concern is consumerism in the contemporary fashion system. Unsustainable consumption has severe impacts on virtually all domains of the environment, the economy and society. Many serious illnesses and health risks are caused due to industrial pollutants. Minorities, children and the poor are exposed to higher pollution and harm due to the proximity of poor neighbourhoods to environmental risks such as landfills and industry (APHA 2000). In all three domains, a committed agency towards sustainability has disappeared because of consumerism. Unsustainable consumption, as a driver for the global fashion industry, has led to dire environmental consequences. Walker (2017:53) argues that the lack of values, and the focus on technological growth and profit in the consumer society, restrict human's views on meaning and reality, and strips the planet of resources and biodiversity.

Despite the environmental and humanitarian costs of the clothing system in this industrial age, sustainability plays a minor role in design education, commercial practice and the industry. This situation has resulted in the fashion industry becoming the least sustainable industry, second only to oil. Part of the problem lies in the contemporary system of advertising and related cultural practices, which promise customer satisfaction by encouraging the consumption of “fast”, seemingly disposable, fashion. However, the products of the fashion industry are not designed to promote true customer satisfaction, but rather to meet company's sales goals in the capitalist society; therefore the customer has to procure again and again in an attempt to construct their cultural identities through fashion. These economic profit-based or growth-based motives promote at best and

exploit or target at worst, individuals' craving for novelty and commodities. Fletcher and Grose (2012:132) debate that this desire for cyclical variety is manipulated by commerce – growth-based cultural messages and an overflow of commercial clutter make distinguishing between real needs and fabricated wants challenging. In order to address these issues of consumption, the theories of social psychologists Maslow and Max-Neef are drawn upon to determine what drives humans to have unsustainable desires and to contextualise and explain the terms 'production-value' and 'added-value' for this research. It is suggested that utilitarian needs of human's transition into the desires (growth needs) for commodities, which leads to less sustainable consumption occurring. This move from needs to wants is driven by desire, and it runs parallel to the move from production-value for clothing, to surplus-value for fashion. However, how could this profit-based desire that leads to unsustainability be addressed?

Ehrenfeld (2008:3) argues that this "compulsive need" for more commodities is "producing [an] individual and societal sickness" in the social fabric of life. Human relationships are fading, while there are a record number of people seeking cures for apathy, depression, obesity and other aspects of physical and emotional distress. One central concern is the loss of positive agency resulting from consumerism and the lack of values in a fashion system. In contrast to Walker's contention, 'sustainable development' emphasises the interdependence of economic growth and environmental quality. In the Brundtland Report, *Our Common Future,* sustainability is defined as "development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED 1987; Welford 1994, in Barclay & Buckley 2002:1). In addition to the Brundtland report, the "United Nations Sustainable Development Goals" (UN SDGs) are also relevant. Each of the goals has a list of specific targets which address environmental and social sustainability. The SGDs cover social and economic development issues including poverty, hunger, health, education, gender equality, water, sanitation, energy, global warming and urbanisation, as well as environmental and social justice.

Ehrenfeld (2008:6) adds that sustainability could be argued to be where all the forms of life on this planet are flourishing forever. In this regard the Greek philosopher Aristotle

believed that man's highest good is *Eudaimonia,* generally translated as 'happiness' but closer in meaning to 'flourishing' – this more objective state comprises of success, fulfilment, self-realisation and an adequate level of material comfort (Cheng & HO 2013:385). However, this approach seems to suggest 'individual' or egocentric human flourishing, perhaps at the expense of another flourishing. When dealing with human rights issues, utilitarian rules, principles and guidelines do not always provide all the solutions to ethical conduct. Therefore, alternative and more inclusive approaches are required in order to address issues of holistic human flourishing. Feminist ethics of care is one such approach, as it focuses on female ways of moral reasoning with emphasis on aspects such as community, relationships and connection (Jaggar 1992:363). Feminist ethics aims to address the oppression of any groups in systems, such as the fashion system (Jaggar 1992:363-364).

Fletcher and Grose (2012:133) note that clothing can satisfy utilitarian needs such as protection from cold, but, when linked to fashion, it could satisfy social and personal desires for belonging and expression. However, the agents in the commercial fashion system exploit these desires for profit, which in turn could potentially drive self-doubt, insecurity, loss of agency by the consumer, and unsustainable practices. Consequently, profit-based fetishes are used as a substitute for the lack of more synergistic need satisfiers, such as belonging, nurturing and connection.

Kaiser (2012:20) offers a potential solution with the circuit of style-fashion-dress model, in which 'subject formation' is described as 'subjection' (being subjected to something structured by others) and 'subjectivity' (having agency to express one's way of being). Kaiser (2012:20) goes on to state that, "individuals generally have some degree of *agency*: the freedom or ability to exert one's voice and to resist power relations in some way". For example, fashion could enable the agency for self-expression, differentiation and similarity through the expression of technologies, mass media and popular culture through which fashion is advertised and represented (Craik 2009:245). Kaiser (2012:20) adds that 'subject formation' prioritises the process of "becoming" over merely "being". This aspect provides a potential gap, or "potentialities" to insert a positive agency agenda within the argument. Therefore, the term "agency" could also refer to the notion of role-

players in the fashion system, demonstrating agency through active engagement in the success of the enterprise. This overview led to the research question.

6.1.1 Research question and chapters

How can a model for strategic intervention be conceptualised in order to address the deficit between the production-value and the perceived added-value of commodities in the fashion industry, by using the notion of the fetish to engage with the quintuple helix innovation model and Kaiser's circuit of style-fashion-dress model? The hypothesis was that exploring the quintuple helix model and the Kaiser model through the notion of the fetish can provide access to, and address the dilemmas raised within the model as it pertains to the construction of intervention strategies. Therefore, a model for strategic intervention could be conceptualised to address the deficit between the production-value and the perceived added-value of commodities in the fashion industry, by using the notion of the fetish to engage with the model. In order to answer this question, the research followed a particular trajectory.

In chapter 1 the contextual background was provided, and the key terms that are significant to the research were defined. The environmental sustainability impacts of the fashion system were introduced, and consumerism and the lack of values in capitalist society were identified as focal problems. A grounded theory approach was undertaken, and critical analysis and synthesis were used as the method of investigation. The methodology was selected since critical theories aim to illuminate the interconnectedness of things and enable reflection to produce critical knowledge, towards the emancipation from domination. Triangulation, thick descriptions and argumentation were utilised, and the complexity and logic of the argument were considered. Deductive reasoning was applied and proposed a closed theoretical framework and examples to illustrate claims. The relevance of the research was explained, as well as the methodology and the research questions. This lead to the environmental sustainability challenges presented in the following chapter.

Chapter 2 pointed to the environmental sustainability and consumption concerns within the dynamics of the quintuple helix innovation model and utilised the model as well as the theories of needs developed by Chapman, by Maslow and by Max-Neef, to identify deficit areas. Relevant literature was interrogated in order to demonstrate the environmental sustainability challenges resulting from the exploitative approaches of consumerism in capitalist society. The three sectors of unsustainability were explained, which include the economy, the environment and society. The problem with the conventional model of sustainability was identified, namely that positive agency is precluded, and should potentially be central to the systems. An alternative model was presented in figure 2.2, 'The Agent model', in which agency is central. This model opened up potentialities to insert a positive agency agenda within the theoretical argument. The theories of social psychologists Maslow and Max-Neef were used to contextualise and explain consumption in terms of 'production-value' and 'added-value' in a fashion context, as it is argued that the gap between these aspects challenges sustainability. The example of 'utilitarian clothing needs' were contextualised as the 'production-value' in the fashion system, and 'fashion wants' were used as an example of 'added-value' in the fashion system (figure 2.3 B. 'Fashion wants and needs'). This aspect allowed for the ethical exploitation of the gap between needs and wants. Chapman's concept of 'emotionally durable design' and Maslow and Max-Neef's theories on needs suggested how positive agency could be regained through the satisfaction of more holistic, synergistic needs rather than surplus-needs of profit motives.

The chapter demonstrated the loss of positive agency due to consumerism, which potentially leads to unsatisfied societal needs and environmental destruction. The key aspects of the quintuple helix model were introduced, as the model provides domains in which the deficits (namely the unsatisfied societal needs) are located. The literature points to potential intervention strategies which could address value deficits caused by the loss of positive agency. It was theorised that society's sense of positive agency towards sustainability could be reactivated by focusing on needs (value) instead of purely focusing on wants and profit (surplus-value). Potential strategies such as Chapman's concept of "emotionally durable design", and Maslow and Max-Neef's theories on needs were

suggested, so that the regaining of positive agency (by focusing on sustainability as a driver rather than consumerism as a driver) can be developed in the following chapters.

Chapter 3 demonstrated how the sustainability and need deficits impact on the agents in the fashion system. The Kaiser circuit of style-fashion-dress model illustrates the interactive dynamics of the fashion industry as a cultural system and points to nodes for intervention. The environmental and social impacts of the fashion industry were considered, in order to identify sustainability deficits and potential intervention strategies. The literature points to potential intervention strategies to reactivate agency in the societal, economic and environmental sectors. Part A introduced relevant literature to demonstrate the sustainability challenges in the fashion industry, specifically in contrast between the current fashion system that is driven mainly by profit motives, versus a system that could satisfy human needs more sustainably. Essential terms are clarified regarding the fashion system, and an illustration of the interrelated nature of the fashion system was provided. The impacts of the fashion system were described in the societal, economic and environmental sectors in order to identify sustainability gaps and potential intervention strategies. Examples of the impacts were illustrated in table 2.2. ‘Domains of the Helix in which sustainability deficits are located'. These examples were used as a starting point to develop counter strategies for holistic need satisfaction and therefore positive agency reactivation. The agents in the supply chain were identified, in order to further interrogate sustainability deficits in the fashion supply chain in figure 3.2 ‘Agents in the fashion supply chain’, as well as in the quintuple helix model in figure 3.4. ‘Fashion system agents in the quintuple helix innovation model’.

Part B explored ways to reactivate the agents of the supply chain by identifying the agents and interrogating the sustainability deficits in the fashion supply chain. The subsection introduced the circuit of fashion, versus a linear production pipeline or value chain and argued that dynamics other than a linear, fixed and oppositional lens are required to examine the dynamics between culture and fashion. It was noted that fashion is a cultural system, not just an economic system, and therefore the circuit of style-fashion-dress was introduced. This circuit illustrates the dynamics of a circular, rather than linear, fixed and oppositional lens, as these aspects are required to examine the dynamics between

culture and fashion. Kaiser's circuit of style-fashion-dress and Craik's diagram of the fashion supply chain further delineate the sectors with the aim of identifying the agents in the fashion system and their loss of agency for environmental sustainability. The environmental impact of the processes of the supply chain was expanded upon, in order to determine how potential choices, as well as the agency of the agents involved in the system, contribute to environmental issues. The quintuple helix model was contextualised as it relates to these sustainability issues in the fashion industry. The last part of the section scrutinised how these dynamics, and the negotiation within cultural discourses, play a role in suppressing the agency of society.

To conclude the chapter, Part C expanded upon the processes of the supply chain in the fashion system, concerning the impact that these processes have on environmental sustainability. This section describes how the potential choices and the agency of the agents involved in the system, contribute to environmental issues. The situation 'on the ground' was explored to demonstrate the tensions in the fashion economy and how they manifest in the various domains. It was concluded that due to the bleak depiction of sustainability in the fashion system explicated, rather than aiming for a completely sustainable option, the study's aim could be for an optimal and ethical fashion system that moves away from exploitation. It is argued that the notion of making 'optimal' and potentially more 'ethical' decisions, could lead towards positive agency. The following chapter explained how this positive agency could be reactivated.

Chapter 4 argued that positive agency could be reactivated by exploiting the gap between wants and needs through the notion of the fetish, with sustainability as a driver. Intervention routes offered by the notions of the Marxist, Freudian and Baudrillardian of the fetish were identified, for exploitation towards positive agency. These intervention routes included the critical dynamics that motivate consumers to make choices offered by the fetish dynamics. Therefore, this chapter set out first to use Marxist thinking on the fetish, to determine how surplus-value leads to the pursuit of class mobility in consumers, thus aligning the thinking potentially to Maslow's pyramid of needs theorised as the move 'up' the class hierarchy. Secondly, the chapter engaged with Freud's notion of the fetish to suggest the pursuit of individual growth, based on the idea of self-nurturing the

individual. Finally, the chapter turned to Baudrillard's notion of the fetish which pursues the concept of developing symbolic actions that foster the growth of belonging to the community. The theories were contextualised in relation to the fashion industry, by building a case for how fetishism exploits the gap between needs (value), and wants (surplus-value), of agents in the fashion industry. These identified intervention routes were explored in Chapter 5 by contrasting the potential fetishes with the deficit areas and therefore strategising ethical intervention routes. Potentially strategies to reawaken ethical agency are uncovered towards a strategic model of intervention.

The central contribution to new knowledge from the dissertation can be found in chapter 5, where the fetish is integrated into the complex 'style-fashion-dress' circuit model of Kaiser's, in the pursuit of positive agency and sustainability in fashion. Chapter 5 explores counter strategies for the reawakening of ethical agency. The dynamics of the fetish were utilised as a lens through which to develop strategic interventions, for the reactivation of agency in the fashion system. It was demonstrated that Marxist, Freudian and Baudrillardian theories on the fetish could be used and reconfigured to ethically bridge the gap between needs and wants towards sustainability (instead of exploitation towards profitability). Table 5.1 expanded on table 2.2 (which provided the domains in which the sustainability deficits can be located in the helix), by adding the fetish as a way to engage with the located deficits, as well as by providing sustainable alternatives that the fetish lens illuminates.

The tool of ethics, specifically *feminist ethics* of caring was used as a moral foundation to assess whether the approach was consumption-based or ethically grounded. A strategic framework was developed which analyses the deficits in the processes of the supply chain, in relation to Max-Neef's social theories of needs, through the lens of the fetish. Innovative existing strategies towards fashion sustainability were explained and contextualised within the framework, to demonstrate how it could function. The developed strategic framework provides a model to insert the fetish intervention of Marx, Freud and Baudrillard between two dynamics, drawn from the Kaiser style-fashion-dress circuit.

Despite the helix model's effectiveness in illustrating the circulation of knowledge, it was argued that it is based on the generalised universal ethics characteristic of male-centred

ethical perspectives and approaches. Consequently, it was argued that the model is not in-depth enough to effectively consider aspects oriented with the feminist ethics of care. Therefore, a strategic framework was developed within Kaiser's circuit of style-fashion-dress that could potentially consider ethics of care. Therefore, ethics of care, Chapman's concept of 'emotionally durable design' as well as Maslow and Max-Neef's theories on needs, were used as a moral foundation to determine consumption versus ethical approaches. Contrasting the dynamics of Kaiser's circuit of style-fashion-dress with each other within the concerns of ethics provided potential ways of reactivating positive agency. Table 5.2 and 5.3 provided two examples of how this strategic framework could function, and proposed possible intervention strategies. Addendum A provides all of the examples. The framework targets positive, an ethical agency in the fashion system by utilising the notion of the fetish as a lens through which to revalue environmental sustainability issues. (The previous section explained what the chapter set out to do; however, many of the findings identified within the strategic framework of chapter 5 are outlined in the findings subsection, below).

Chapter 6 includes a summary of the trajectory of the study. The findings are demonstrated, shortfalls are documented, and the recommendations are discussed. The literature discussed points to the gap between the production-value and the perceived added-value of commodities in the current market**.** The research aims to try to address the problems of consumption in contemporary society. The premise of the study is that the notion of fetishism is used to develop a model for strategic intervention to extend and draw in the current market. The exploration of the quintuple helix of innovation model and Kaiser's circuit model through the notion of the fetish offers an approach to address dilemmas raised in the helix. The conceptualising of a strategy, formalised through a strategic framework to address these dilemmas provides potential recommendations for the exploration of more sustainable and ethical practices in the fashion industry and thereby aims to promote human flourishing. The findings are outlined in the next subsection.

6.2 FINDINGS

The findings uncovered during the process of the research are summarised in this subsection, such as, which aspects were useful and effective, and which aspects were less effective. The first significant finding is the effectiveness of the strategic framework to present nodes of interrogation and intervention to develop sustainability in fashion. The initial framework that the researcher developed mainly focused on the domains of sustainability, and how these aspects of the fashion industry manifested within the five domains of the quintuple helix innovation model. However, during the theoretical data collection and synthesis, the notion that the fashion system functions as a circular interrelated cultural system and not a linear, oppositional industry, was noted. Since Kaiser's circuit model deals more effectively with the interrelated cultural aspects of the fashion system, the helix model, as well as Kaiser's circuit model of style-fashion-dress, was incorporated into the framework. By contrasting the domains of Kaiser's circuit with each other, interrogation and intervention routes were illuminated towards fashion sustainability. This aspect was further enhanced by realising that the fetish approach allowed for both the 'positive' and the 'negative' application of the fetish to be engaged with, in the pursuit of fashion sustainability.

The second significant finding is the move to feminist ethics of care, to counter the negative impact of both consumerism and the fetish. Regarding this finding, during the theoretical data collection and synthesis, it was noted that much of the unsustainable consumerism in contemporary society is caused by the lack of real need satisfaction in the fashion system. Therefore, the theories of Maslow's and Max-Neef's on holistic and synergistic needs satisfaction, and Chapman's 'emotionally durable design' were drawn, upon. These aspects helped to define the notion of production-value (in the form of clothing to meet basic needs) and surplus-value (in the form of fashion to meet additional wants) in the context of fashion. This needs-based approach helped to identify and therefore inform potential intervention routes. However, during the theoretical data synthesis, it was noted that many of the sustainability deficits in the fashion system are caused because of the general lack of ethics throughout the industry. Therefore, data

were collected regarding ethics, sustainability ethics and feminist ethics of caring to inform strategies towards a more ethical approach. The researcher has several years of experience in the fashion industry as a designer for a factory, individual clients, as well as a merchandiser for several mainstream South African retailers. During this experience, it was noted that numerous ethical aspects were lacking in the industry. Independence, autonomy, hierarchy, wariness and individual, egocentric, profit-based prospering were central, and aspects such as interdependence, connection, community and trust were very underrated, for example.

Consequently, it was argued that many of the aspects that were experienced as lacking in the industry, could potentially be countered through the positive features that the philosophy of feminist ethics of care can offer. Therefore, the developed strategic framework considers feminist ways of caring in its approach, as well as the Maslow, Max-Neef and Chapman's theories of needs, the helix model, and Kaiser's circuit model. The research sub-questions will be referred to, in order to expand on these findings.

6.2.1 Research sub-questions

What are the central aspects that can provide a contextual understanding of sustainability issues in the fashion industry? The findings regarding this question include the following aspects. In order to identify sustainability issues in the fashion industry, the general sustainability issues had to be outlined. Though the collection and synthesis of data, it was found that the exploitative approaches of consumerism and the lack of values in the industry result in the loss of agency for the people in the system. Kaiser's circuit of style-fashion-dress and Craik's diagram of the fashion supply chain delineated the sectors with the aim of identifying the agents in the fashion system and their loss of agency for environmental sustainability. The aim was to develop intervention routes for the reactivation of positive agency, and therefore a model in which agency is central within the sustainability sectors was postulated. Maslow and Max-Neef's theories on needs were utilised to contextualise consumption regarding the 'production-value' (fashion needs) and 'added-value' (fashion wants) in the fashion context, and the gap

between these aspects was found to challenge sustainability. This aspect allowed for the ethical exploitation of this deficit between needs and wants. It was demonstrated that the loss of positive agency due to consumerism potentially leads to unsatisfied society needs and environmental destruction. Furthermore, Chapman's 'emotionally durable design', and Maslow and Max-Neef's theories on needs suggested how positive agency could be regained through the satisfaction of synergistic needs rather than profit motivated surplus-needs. Although the actual environmental issues resulting from the fashion systems design, production, distribution, retailing and consumption processes were outlined, the central focus was to determine the motivators that influenced the agent's decisions, and that enabled them to make sustainable or unsustainable choices.

What are the critical dynamics at work in the notion of the fetish? The findings regarding this question include the following aspects. The critical dynamics of the Marxist, Freudian and Baudrillardian notions of the fetish were analysed and synthesised. It was argued that Marxist notions on the fetish could be used to determine how surplus-value leads to the pursuit of upward class mobility for agents in the system and that Freud's notion of the fetish can be utilised to suggest the pursuit of individual growth towards self-nurturing the individual. Finally, it was argued that Baudrillard's notion of the fetish could be used to pursue the concept of developing symbolic actions that foster the growth of belonging to the community. The theories were contextualised in relation to the fashion industry, by building a case for how fetishism exploits the gap between needs (value), and wants (surplus-value), of agents in the fashion industry.

What are the key aspects of the quintuple helix model and Kaiser's circuit of the style-fashion-dress model in the context of the fashion industry? The findings regarding this question include the following aspects. It was found that the key aspects of the quintuple helix model (the education system, economic system, natural environment, media-based and culture-based public, and the political system) (Carayannis *et al.* 2012:5) could provide domains in which the deficits (namely unsatisfied societal needs) are located. Literature regarding the environmental and social impacts of the fashion industry was synthesised to identify the key sustainability deficits within the helix domains. In this regard, specifically, the contrast between the current fashion system that is driven

mainly by profit motives, versus a system that could satisfy human needs more sustainably. The aim was to identify reactivation strategies towards agency in the system. It was found that the helix model strategy was not in-depth enough to deal specifically with the fashion system deficits regarding concepts of agency. Therefore, the Kaiser (2012:14) circuit of style-fashion dress, which includes the domains of subject formation, consumption, regulation, distribution and production was utilised to delineate the domains further and to point to nodes for intervention. For example, Kaiser (2012:20) prioritises the process of "becoming" over merely "being", in the concept of ‘subject formation'. Therefore, agents in the system can move from ‘subjection' (being subjected to something structured by others) to ‘subjectivity' (having agency to express one's way of being). It was argued that the notion of making ‘optimal’ and potentially more ‘ethical’ decisions, could lead towards positive agency. This reasoning provided a potential gap, or “potentialities” to insert a positive agency agenda within the argument. Therefore, it was argued that the term “agency” now referred to the notion of role-players in the fashion system that could demonstrate agency through active engagement in the success of the enterprise. However, the aim was to reactivate agents for the potential to “do good”, therefore the tool of ethics was used as a foundation for the strategy.

How can the quintuple helix model and the Kaiser model be used to conceptualise an ethical, strategic model of intervention regarding sustainability issues in the fashion industry? The findings regarding this question include the following aspects. In order to answer this question, counter strategies for the reawakening of an ethical agency had to be uncovered. Feminist ethics of care was identified as one such approach, as it focuses on female ways of moral reasoning with emphasis on aspects such as community, relationships and connection (Jaggar 1992:363). Feminist ethics aims to address the oppression of any groups in systems, such as the fashion system (Jaggar 1992:363-364).

Despite the helix model's effectiveness in illustrating the circulation of knowledge, it was argued that it is based on the generalised universal ethics characteristic of male centred ethical perspectives. Consequently, it was argued that the model is not in-depth enough to effectively consider aspects oriented with the feminist ethics of care. Consequently, a

strategic framework was developed within Kaiser's circuit of style-fashion-dress that could potentially consider ethics of care. Chapman's concept of 'emotionally durable design' as well as Maslow and Max-Neef's theories on needs, were used as a moral foundation to determine consumption versus ethical approaches.

It was demonstrated that Marxist, Freudian and Baudrillardian theories on the fetish could be used to ethically bridge the gap between needs and wants towards sustainability (instead of exploitation towards profitability), as revaluing these fetishes could potentially lead to the drive for upward class mobility, self-nurturing and real connection. Contrasting the dynamics of Kaiser's circuit of style-fashion-dress with each other, through the notion of the fetish, within the concerns of ethics provided potential ways of reactivating positive agency. Examples were provided to show how this strategic framework could function, and propose possible intervention strategies. The dynamics of the fetish were utilised as a lens through which to develop strategic interventions that revalue environmental sustainability issues, for the reactivation of agency in the fashion system.

The development of a strategic framework is the central contribution of new knowledge in the research. The conceptualising of a strategy to address these dilemmas provides potential recommendations for more sustainable and ethical practices in the fashion industry. Therefore, ethics of care ways such as connection, community, immanence, process, joy and interdependence were emphasised through the revaluing of the fetishes towards altruistic upward class mobility, positive self-nurturing and real connection, thereby aiming to promote human flourishing. The shortfalls and limitations of the study will be outlined in the next section.

6.3 SHORTFALLS OR LIMITATIONS OF THE STUDY

The shortfalls or limitations of the study are outlined in this subsection. In order for the entire system to be justified, large scale and deep engagement with primary sources would be required. However, this research only focused on middle-range theories of specific social phenomena in specific subsystems of society, with the purpose of creating a strategic framework. Therefore, it can be seen that the engagement with the literature (on Marx, Freud, and Baudrillard, for example) can be seen as a 'gloss' or as a reasonably simplistic reading of the very complex arguments that they make, and the counters to their arguments by other scholars. Nevertheless, the purpose here was driven to develop the 'experimental' strategic framework and to attempt to create possible interventions from it.

Given this, virtually all of the suggestions contained in chapter 5 and the Addendum A are creative and therefore speculative, and thus have not been tested. Therefore, a number of the suggestions offered can be deemed to be impractical, fanciful, or simplistic. Nevertheless, it is felt that the framework does at least open many speculative doors to further engagement with sustainability in fashion. The research works predominantly from the critical analysis of literature, except for a few concrete examples, and this might challenge its practicality.

6.4 RECOMMENDATIONS

The recommendations for further research in this study will be explained in this subsection. Of necessity, most of the delimitations and shortfalls offered in the previous subsection require far more detailed, in-depth and critical engagement. Thus merely using each one of the significant theorists on the fetish would offer many opportunities to engage with the problems of sustainability in fashion. The very detailed needs and wants theory of Max Neef also needs much better exploitation within the suggested framework that is offered here.

However, the fundamental contribution of this study may be the opportunities offered in the strategic framework and the way it operates to open up avenues for research, testing and positive interventions so direly needed in the fashion industry, as it grappled with its fundamental concerns of sustainability. Each of the shortfalls offered here opens themselves to further research; the framework could initially be utilised as a brainstorming tool for agents in the market place to develop interventions and innovations that activate positive agency. Therefore, each one of the suggested interventions lends themselves to be utilised for further testing in the market place.

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ADDENDUM A

STRATEGIC FRAMEWORK TO TARGET SUSTAINABLE POSITIVE AGENCY

ADDENDUM A: Strategic framework to target sustainable positive agency. Developed by the author.

1. Subject formation

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Subject formation ↔ consumption Subject formation as 'subjection' (being subjected to something structured by others) and 'subjectivity' (having the agency to express one's way of being). The mediums for this expression are the technologies, mass media and popular culture through which fashion is advertised	I. How can consumption demand be utilised in a **Marxist**[33] (ethical standing/upward class mobility) way to enhance subject formation?	• Develop NGO's to target and encourage consumption based on unethical practices such as attacking campaigns or rewarding campaigns within all three sustainability domains, or the five domains of the Helix (for example, L'Oréal's campaign; "Because you are worth it!"). • Develop advertising campaigns that connect ethical consumption practices to the status and identities of agents as ethical individuals (for example, Adidas x Parley trainers sustainable campaign; Howarth 2016).
	II. How can consumption demand be utilised in a **Freudian**[34] (nurturing) way to enhance subject formation?	• Building self-esteem through enabling consumer skills by developing free online pattern and construction courses to foster garment construction and home cottage industries. • Develop sustainable marketing strategies that encourage consumer input and sharing, such as social media competitions that reward consumers for sustainable practices for recycling and eco-purchases. Create "eco-warrior" store cards, with benefits as consumers earn more points and discounts; or opportunities to win a space at a creative holiday where a consumer can learn to make. These benefits could be marketed as 'textile therapy' or 'fashion therapy' (similar to the concept of art therapy).

[33] The Marxist ideology of capitalism lies on the premise that acquiring extra commodities is a reflection of one's upward mobility in class. These aspects of Marxism provide the potential for an alternative engagement, towards sustainability. The ideological position is for society to aspire to be in the higher state, so they try to mimic the higher classes. The aim is to point to revaluing strategies that change the focus from the outer exterior to an inner mode of doing. The focus is moved away from the trappings of the higher class, and aimed to a value system where a class is not determined by money, but by ethical standing. The surplus-value concept is changed from a surplus-value to an ethical value.

[34] In contrast the Freudian psychoanalytic paradigm of society, suggests that in the pursuit of individual growth, the need for nurturing is substituted by fetish objects that obscure real underlying emotional needs. These aspects of Freudian ideologies provide the potential for engagement in sustainability. The aim is to promote individual growth strategies and a move towards *self*-nurturing.

and represented (Kaiser 2012).		• II. & III. Supporting and purchasing high quality, durable, local, ethical and sustainably sourced materials and products that encourage slower fashion cycles, could improve individual and collective wellbeing by better meeting individual and community needs (Fletcher & Grose 2008; Hirscher 2013).
	III. How can consumption demand be utilised in a **Baudrillardian**[35] (belonging/simulation to real) way to enhance subject formation?	• Foster clubs (NGO's based on voluntarism) around social issues that connect garments to social cohesion. For example, designing cultural uniforms or items for specific groups to encourage group coherence and visually express belonging. • Rather than just developing branding for profit, use social media competitions and crowd-funding initiatives to get consumer-input regarding needs for specific sustainable product innovations. Through interaction on these channels, a shared sense of community and a common purpose could create a more ethnically based sense of belonging.
Subject formation ↔ regulation	I. How can the regulatory framework be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance subject formation?	• Government policy, implementation and funding towards the development and support of local textile production (Fletcher & Grose 2008; Hirscher 2013); switch around the practice of exporting low-value fibers and importing high-value products towards more sustainable economies. • Policy implementation for environmentally sustainable practice being key in all disciplines of study. Drive towards the funding of problem solving and innovation regarding sustainable product design and practice. • Extend retailer accountability (actively and legally) (Fletcher & Grose 2012) by regulating policy to increase end-of-life take-back schemes so that life-cycle thinking and chains of accountability include steps for the disposal of products. • Legislation could be extended (Braungart *et al.* 2007) to create tax breaks and reduce the cost of labour for the reuse and repair of reconditioned garments.
	II. How can the regulatory framework be utilised in a **Freudian** (nurturing) way to enhance subject formation?	• Protect local production with higher import taxes, create local tax havens and initiatives that fund development and sustainability (environmentally and economically) of local textile factories — funding towards research, innovation training and the auditing of all brands and manufacturers for eco rating. • Implement legislation to create tax breaks for reconditioned garments (Fletcher & Grose 2012) could promote alternative business models for profitable activities that create a point of difference with hand-crafted, unique collections.
	III. How can the regulatory framework be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance subject formation?	• Support fashion industry with collaborative initiatives (Hirscher 2013; Sanders & Strappers 2008; Braungart *et al.* 2007) including key stakeholders (agents) or businesses in the industry to support environmentally sustainable policies and develop creative cultural industries. • The policy and regulation place more emphasis on sustainable, people friendly (Fletcher & Grose 2012) product and process design. Social and environmental considerations become central to the design process and focus on the entire lifecycle of the product from the fiber production to the end of the product lifecycle.
	I. How can the distribution channel be utilised in a **Marxist** (ethical standing/upward class	• Research and innovation on better distribution routes and practices in specific companies. Sustainable transport options (for example, more ergo-dynamic trucks that use less fuel (Fletcher & Grose 2012), or more local production and therefore lower carbon footprints) become part of the marketing campaign to sell products.

[35] On the other hand, in the Baudrillardian notion of the fetish, societal paradigms move to the 'unreal' domain through the social conditioning based on a hierarchical system. These aspects of Baudrillardian ideologies provide the potential for engagement in sustainability. This symbolic society eludes real connection and relationship in the community in favour of a simulated class system. Developing symbolic actions that foster growth of belonging to a community could move the focus from this simulacrum to encourage a value system that celebrates the community and denies hierarchy. While advertising exploits the fetish for commercial gain, this new paradigm could exploit the fetish more ethically for sustainable gain.

Subject formation↔ distribution	mobility) way to enhance subject formation?	• Reconnecting designers with producers (Fletcher & Grose 2012), textile recyclers and distributors could enable design for easier more profitable recycling downstream.
	II. How can the distribution channel be utilised in a **Freudian** (nurturing) way to enhance subject formation?	• Developing externally managed online databases and automated systems that can provide supportive information regarding finance and flow networks (Braungart *et al.* 2007; Fuad-Luke 2009: 7). For example, information on how to dispose of used garments for consumers, information on dismantling and fiber composition for recyclers.
	III. How can the distribution channel be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance subject formation?	• Redirecting material flows (Braungart *et al.* 2007; Fletcher & Grose; Mistra future fashion n.d) (through initiatives such as upcycling) could be a catalyst for more profound behavioural change towards sustainability. Creating communities of practice by reconnecting designers with producers, textile recyclers and distributors could enable design for altruistic motives (rather than just profit motives) which meets the needs of various role players in the value chain and promotes sustainability. • Agents in the distribution chain can create a framework of 'materials pooling' to manage innovative and eco-efficient materials in the fashion system. The framework would allow for a community of mutually beneficial collaboration between economic agents, for the pooling of material resources, knowledge and financial investment towards the transformation of product lines (Braungart *et al.* 2007). • Create a 'materials bank' managed by the 'post-use product distribution chain' agents at the center of the materials pooling community (Braungart *et al.* 2007). The materials bank leases substances to participating communities who transform them into products for consumers in the form of service schemes. This system could redirect the flow of materials, as they are returned to the materials bank and reused after the use period.
Subject formation ↔ production	I. How can the production line be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance subject formation?	• Acquire consumer input through, allowing fashion-hacking (Hirscher 2013), open-source pattern (Van Abel, Klaassen, Evers and Troxler 2011) and co-design. This intern could encourage less wasteful production processes, as only products with customer buy-in will be produced. Unsustainable practices such as the burning of surplus products to preserve brand value will not be an issue anymore. • Designers develop innovative reconditioning strategies for the most frequently discarded clothing such as t-shirt and jackets (Fletcher & Grose 2012). Strategies create opportunities for unique flexible production lines and local job creation.
	II. How can the production line be utilised in a **Freudian** (nurturing) way to enhance subject formation?	• Market more personalised, adaptable products (Hirscher 2013; Fletcher & Grose; Ellen MacArthur Foundation 2017) so that consumers can be co-creators in the design and production process. In this way, consumers can express themselves by creating culturally specific and individualised products, for example, technologies such as body scanning for personalised garment measurements (Craik 2009:229), and customising your sneakers.
	III. How can the production line be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance subject formation?	• Create communities of creative practice by developing shared spaces to support small local (Fletcher & Grose 2008; Hirscher 2013) manufacturing lines of specialised products. Allow for a belonging sharing of best practices and cross-pollination of innovative ideas. • Community organisations to facilitate the sorting, redistribution and resale of used fashion and textile products. Thereby saving resources generating employment and stimulating community connections and belonging. • I & III Using cradle-to-cradle design principles to developing innovative uses and production processes for by-products of other industries (such as pineapple fiber (Hickey 2014) from the food industry) to create higher value fibers that would typically generate little additional revenue for producer communities like farmers.

Subject formation ↔ subject formation	I. How can subject formation be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance subject formation?	• Fashion designers, forecasters and trendsetters could reinvent and redefine the social norms of how people should dress. For example, maybe hair and body modifications could become more important than clothes. Through innovative technologies, such as biomimicry (Braungart *et al.* 2007; Fletcher & Grose 2012) clothes become a functional, breathable covering that can change function, shape and colour depending on need. Clothes are marketed and rated on a scale of status, based on their sustainability, not their brand. • Create marketing campaigns that promote positive self-esteem for minority and disadvantaged groups. Consumers can contribute towards a cause or charity of their choice that addresses issues in the community. The products linked to the campaign become a visual representation of the users' altruistic contributions to the community and thereby encourage synergistic satisfaction. • Open integrated retail store owned, second-hand stores that offer services such as cleaning, reconditioning as well as the sale of the clothes collected from the end of use take-back-schemes. These services could incentivise the design of clothing for resale so that it keeps its value and can be re-sold several times. It is thereby generating higher profit margin results through reuse without having to reduce the quality of the products. In this way, the fashion industries view of waste, and the value of materials both virgin and used (Fletcher & Grose 2012:73) can be revalued.
	II. How can subject formation be utilised in a **Freudian** (nurturing) way to enhance subject formation?	• Fibers could be impregnated with inflorescence to have multiple purposes, such as a reading light or visibility in sportswear. Biomaterials that dissolve in liquid and could be reused or repurposed as compostable components. Fibers could be grown from organic materials such as fungus in customised moulds for specific requirements. • Co-design and half-way products (Fuad-Luke 2009; Hirscher 2013a) reactivate the agency of designers and users, developing skills sets, creative expression, and individuality. User need is taken into account, and the power is shifted from designers as dispensable commodities, to designers as facilitators of change. • Reactivate agency of fashion trend forecasters by transitioning from inflexible, restrictive fashion forecasts that rely only on trends and statistics to reactive, durable and adaptable modular products (composed of interchangeable components) that can change with the desires of the user.
	III. How can subject formation demand be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance subject formation?	• II. & III. Organise fashion art exhibitions where people can be involved in the production process and choose to be the maker, the consumer or the observer. Skilled students act as intermediaries to help guide and train volunteer makers. The consumer volunteer negotiates a product price with the maker, pays and receives a product. In this way, fashion design becomes a meaningful process of interactions and the processes behind garment production are transparent, demystified and more meaningful. • II. & III. Develop a safe online space to upload personal memories. Create algorithms which interpret keywords from memories into individual 3D wearable prints for a more personal connection with design. These creations could be printed in recyclable smart textiles that can change colour (using innovative biomimicry (Braungart *et al.* 2007; Fletcher & Grose 2012) technologies to change colour like chameleons) depending on the user's mood. These innovations could enable consumers to communicate and connect with communities through their clothes. • Products are crowd-funded for consumer buy-in based on need, anti-branding campaigns could allow consumers to create their branding and identities (Hirscher 2013; Fletcher & Grose 2012). No longer will users have to rely on the fashion industry to create homogenous brands for them to try and identify with, community buy-in supports the development of products.

2. Consumption

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Consumption ↔ consumption 'consumption' as the use and wear of clothes. The use (consumer care) and disposal (incineration and landfilling) of the fashion industry impact on the environment. C**onsumer attributes,** shape fashion behaviour and consumer trends. The **motivational drives** that persuade or discourage people from consuming fashion products are essential to distinguish between target markets (Kaiser 2012).	I. How can consumption demand be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance consumption?	• Disposable fashion results in a loss of agency for consumers, as their consumption choices result in sustainability issues throughout the fashion system. Second-hand clothes (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) could reactivate agency by providing a creative way to express authenticity and reduce environmental impact. • The reuse of second-hand clothes (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) could help create new business models for designers in which they could tailor and personalise existing garments, or new business opportunities for recycling and upcycling of second-hand fabric and components.
	II. How can consumption demand be utilised in a **Freudian** (nurturing) way to enhance consumption?	• Second-hand clothes (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) consumption could reactivate agency by offering an accessible (affordable) form of visual presentation of modernity and progress in third world countries.
	III. How can consumption demand be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance consumption?	• Consuming locally produced fibers and clothes that are produced by local manufacturers will increase transparency (Fletcher & Grose 2012) in the supply chain and help create communities of belonging and increased agency towards sustainability.
Consumption ↔ regulation	I. How can the regulatory framework be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards consumption?	• Regulation concerning consumption may involve restrictions on what not to wear or what to wear (for example uniforms). Develop consumption regulations, such as regulations on credit card use so that multiple purchases of unsustainable clothes escalate VAT on purchases (school clothes excluded) as a punishment option. • Issue regulations that reduce VAT on clothes bought from stores that demonstrate sustainability practices (garments must have clear sustainability identification labels) as a reward option. • Regulate unethical pricing policies that result in a loss of agency for manufacturers (when product prices are forced down) by enforcing policy on transparent supply chains. In this way, consumers will have a better understanding of the real value of products. Consumers will not just rely on the perceived added-value created by media hype, and unethical practices will be revealed. • Regulate marketing strategies, to ban the mainly profit driven unethical product marketing of unsustainable products. Use less ethical comparative marketing strategies such as, 'bundled products", "buy-one-get-one-free", coupons and in-store discounts to promote sustainable products. Thereby consumers will not only feel as though they are getting a bargain (when they are actually exploited, as the product prices are artificially inflated) but they will be getting better value as the products will less harmful, and meet their long term needs better.

	II. How can the regulatory framework be changed to enhance **Freudian** (nurturing) towards consumption?	• Develop a regulatory framework that provides tax breaks and incentives to those companies that offer working holidays for employees who wish to learn about and take part in the process of garment manufacturing, from cradle-to-grave (for example, forming communities of practice on farms where agents can be part of the harvesting process and learn to weave natural fibers). • Regulate the consumption of single-use plastic products such as garment packaging, by fining for unsustainable consumption. Regulate unsustainable product consumption through taxes, for example, a tax on washing machines with non-eco-friendly wash cycles and harmful washing detergents, or products with harmful manufacturing processes. • Governments subsidise durable, and eco accredited fashion to make it viable for low-income families, as well as stores that offer sustainable services (Braungart *et al.* 2007; Hirscher 2013) instead of products. An additional tax for fast fashion and inferior quality products. • Implement regulations and import tariffs on finished goods which create a barrier of protection for local (Fletcher & Grose 2008; Hirscher 2013) fashion industries. The preserving of national culture, job creation and better quality, durable and adaptable products make up for higher product prices and fewer product options.
	III. How can the regulatory framework be changed to enhance **Baudrillardian** (belonging/simulation to real) towards consumption?	• Develop a regulatory framework that offers tax breaks to companies that connect brand loyalty to articles that foster sustainability for positive social causes (for example, the Woolworths 'my school card'). • Regulate the use of harmful chemicals (SASTAC 2014; NRC 1993:61; The World Health Organization; Shrader-Frechette 2012:324-326) used during the dye process and offer incentives towards the production, use and consumption of natural coloured garments and garments coloured with less harmful dyes. This regulation could, in turn, stimulate new connections, and potentially promote the real social benefits of the products (such as the connection in the community), rather than the illusion of added-value. • Implement regulatory product value pricing systems that provide consumers with more realistic actual product cost, fiber composition and quality information so that they can make more informed decisions and not just base their decisions on simulated value.
Consumption ↔ distribution	I. How can the distribution channel be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards consumption?	• Develop better business models for the distribution of used clothes and second-hand materials (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) and components for reuse/upcycling/recycling. These more efficient, shorter and potentially local (Fletcher & Grose 2008; Hirscher 2013) distribution routes could create business opportunities and contribute to the sustainable economy by providing consumers with more cost-effective products with lower carbon footprints.
	II. How can the distribution channel be changed to enhance **Freudian** (nurturing) towards consumption?	• The development of better infrastructure and distribution routes for the recycling and upcycling of factory waste could be individualised for specific businesses to nurture further growth and development. These individualised solutions could provide better more ethical alternatives for consumption that involve fewer inefficiencies and environmental waste.
	III. How can the distribution channel be changed to enhance **Baudrillardian** (belonging/simulation to real) towards consumption?	• Better distribution routes for the recycling and upcycling of factory waste could result in less waste and less pollution in landfills. These routes, in turn, could potentially reactivate the agency of local communities who can live in less harmful (polluted) environments and support local business opportunities. • Better distribution routes and infrastructure for locally produced fibers could support local farmers and communities and create local networks (Fuad-Luke 2009).

Consumption ↔ production	I. How can production lines be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards consumption?	• Develop local production lines that process smaller more individualised local materials to revitalise local communities economically (Fletcher & Grose 2008; Hirscher 2013). Consumers can experience the benefits of better quality products with more transparent supply chains. • Creating a generic energy profile for fabrics (Fletcher & Grose 2012) and fibers can encourage suppliers in a transparent supply chain to document energy consumption from the type of fiber, the colour of the fabric and the consumer care. If aspects such as the environmental impacts of products are taken into account and calculated into the overall cost of the garment, the actual high cost of fast fashion garments will become apparent.
	II. How can production lines be changed to enhance **Freudian** (nurturing) towards consumption?	• Produce naturally coloured, undyed fibers that provide a less homogenous range of colours (Fletcher & Grose 2012) for consumers and provide more possibilities for individual expression. • Add tracking labels into garments so that consumers can track the origin of the fibers to assist consumers in identifying value in fashion products. Improved transparency in production processes can reconnect consumers with farming and manufacturing initiatives in local communities, demystify the added-value of products, help for easier comparison regarding best products and meet consumer needs better. • Reinvent the relationship between consumer and product by reconnecting the gaps between biological systems and the social and economic domains. Transform linear supply chains to circular-cycles (Ellen MacArthur Foundation 2017) in which natural components are biodegradable and non-biodegradable components are upcycled and reused. Product sales transform to product services and can provide for a broader context of social and natural needs.
	III. How could production lines be changed to enhance **Baudrillardian** (belonging/simulation to real) towards consumption?	• Producing naturally coloured locally sourced fibers (Fletcher & Grose 2008; Hirscher 2013) could provide a more transparent production footprint. Adding information regarding the farmer, the producer, and the unique benefits of the products could provide a visual connection for consumers and real social benefits such as connection within the community and with their local economies of land (rather than just the illusion of added-value through commercial branding for instance). • Improving transparency in the production line through the participation of several production agents to create a database of high-quality and improvable components of production and the supply chain. In this way, consumers can be educated regarding the value of products through access to the database via sew-in garment labels.
Consumption ↔ subject formation	I. How can subject formation be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards consumption?	• Co-creative design and production as well as modular and adaptable products (Hirscher 2013:57), better meet customer's needs for recognition and individuality. Rather than being driven by the restrictive and continuous cycle of fashion trends, designers create less homogenous clothes that are designed to adapt and last over several seasons. • Modular and adaptable clothes create new service and business opportunities and allow for new ways of consumption. For example, if garments can grow and adapt to the wearer, the consumer will potentially be willing to spend more on the individual garment as it would replace several items of clothing. Therefore, higher profit margins could make up for reduced consumption, and additional funds can be used to design better quality products, and engage in more research for further sustainable design innovation and profitability. • Encourage the growth of awareness and the ecological consciousness of consumers and designers, by providing relative-value product education through transparency so that the benefits of a product can be contextualised through more ethical choice options. • Design garments that encourage sustainable consumer behaviour but still allow them to express their status and individuality and meet their needs for change — for example, adaptable, durable, self-cleaning clothes. • Consolidating existing economic and scientific evidence of a more sustainable fashion system could help highlight knowledge gaps and prompt research. • Shift the focus from exclusivity and short term profitability by marketing branded value-added products that are more durable, with greater transparency regarding the production process and carbon footprint of the products. This shift could provide consumers with better value and redefine the status-value of the products based on more sustainable norms.

		• Relative value product education, through transparency, so that the benefits of the product can be contextualised for more ethical choice options.
	II. How can subject formation be changed to enhance **Freudian** (nurturing) towards consumption?	• Designing incomplete half-way and anti-media products (Fuad-Luke 2009; Hirscher 2013a), activate and enable users to embed personal meaning into the products and to finish products according to their own needs. Consumers can interact and participate in the production and branding process in order to create personal meaning. Consumers have greater potential to experience synergistic satisfaction such as creative expression, participation and self-expression (rather than relying on imitative branding of commercial products). • Research seed and fiber alternatives (such as coloured heritage cotton) that could provide more varying natural colours to encourage individual identity expression in consumers. • Combine education, and design services that create sew-in labels which inform sustainable practices such as consumer care, as well as ways to reuse, recycle, repair garments and dispose of used textiles. • Instead of using media to encourage consumption, it could be used to encourage more sustainable practices. For example, developing open-source (Van Abel, *et al.* 2011), downloadable files that can instruct users how to recycle, redesign and adapt products. This intern could encourage disruptive techniques such as fashion-hacking, for the revaluing of fashion products. • Similarly, designing products that enable open-source branding invites consumers to contribute to the products marketing strategy by adding an individualised logo developed by each user to the product.
	III. How subject formation be changed to enhance **Baudrillardian** (belonging/simulation to real) towards consumption?	• Initiating laundry parties (like Tupperware parties) for best practice sharing on how to care for clothes sustainably. Services could include the sale of eco-friendly washing detergent and eco-friendly (low temperature and ozone technology) washing machines. • Retail spaces could potentially sell services rather than trying to sell more wasteful products. Services such as customer matching with customised designers or manufacturers, eco-friendly cleaning, networking and best practice sharing hubs for open-source (Van Abel, *et al.* 2011) training and product hacking options. Consumers experience connection and better social need fulfilment. • Reactivate consumers as agents of change by creating online marketing campaigns, social media platforms and collaborative initiatives (Hirscher 2013; Sanders & Strappers 2008; Braungart *et al.* 2007) that help inform consumers and provide comparable, reliable information regarding products. • Create initiatives and organisations to combine education, lobbying and design services that make sustainable care practices more acceptable (Fletcher & Grose 2012). Campaigns could redefine the notions of value regarding the resources inherent in garments, and create a new way of perceiving second-hand clothing (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) and upcycling. For example, trend forecasters could use media to make reused garments the lasting classic trend. • Open-source design initiatives such as downloadable patterns and data sharing for greater transparency, less hierarchy, enabling of consumers as makers and democratisation of design (Fuad-Luke 2012).

3. Production

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Production ↔ consumption The production (raw materials, manufacturing and transportation) of the fashion industry (Kaiser 2012).	I. How can consumption demand be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards production?	• I & III. Initiatives such as the organic cotton movement, educate potential customers regarding the benefits of low chemical use crops so that the higher prices for organic products are contextualised. These initiatives, in turn, create a demand for organic fibres and reactivate farmers' agency by making low chemical use crops more economically viable.
	II. How can the consumption demand be changed to enhance **Freudian** (nurturing) towards production?	• Co-design, in which consumers interact with the creative process, and 3D printers at home with DIY kits on how to print personalised products made from biomaterial for single use and home composting. For example, underwear that requires frequent washing usually (Fletcher & Grose 2012). • Develop biodegradable products that are returned to the natural environment after use to become nutrients for living systems. For example, clothing packaging that biodegrades and is embedded with seeds to support plant-life growth (Braungart *et al.* 2007). • Design innovative closed-loop systems of manufacturing for synthetic materials that include reuse and recovery through upcycling. For example, products of service such as a washing machine service contract that is returned and upcycled after the user contract expires (Braungart *et al.* 2007).
	III. How can the consumption demand be changed to enhance **Baudrillardian** (belonging/simulation to real) towards production?	• Create small local production "co-ops" (similar to the principle of community vegetable gardens) where individuals in the community can do skill sharing, interactive training, and learn to repair and make clothes. • I & III. Establishing and sustaining relationships with product users, by increasing the emotional resilience of relationships between consumer and product, and the lived-experience of sustainability. For example, collaborative and participatory design (Hirscher 2013; Sanders & Strappers 2008; Braungart *et al.* 2007) could empower consumers to influence the environments they interact with, including the products and services. The experience of production enhances the consumers' emotional connection with the garment, which is worn as a personal achievement.
Production ↔ regulation	I. How can the regulatory framework be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards production?	• Implement a policy to regulate the manufacture of harmful substances (Ellen MacArthur foundation 2017) such as the toxic chemicals used in washing and dyeing production processes. An additional tax could be charged for harmful substances, and these funds could be used for the government subsidy of research and innovation towards less harmful alternatives; this intern could create new economic opportunities. • Implement and develop policies that require carbon foot-printing (Fletcher & Grose 2012) for products, and provide tax benefits for producers that utilise fewer fossil fuels in production. • Provide incentives for producers that have a more transparent supply chain, and who publish online footprints of production, including water footprints (Fletcher & Grose 2012) and raw material processing from design to delivery. These could include incentivising recycled materials and dis-incentivising the use of virgin materials (Ellen MacArthur Foundation 2017), as well as extended producer responsibility schemes for textiles which force recycling and waste management of fashion products. • Extend producer responsibility legislation that enforces third-party schemes (Fletcher & Grose 2012) of recovery and recycling in the fashion industry that could actively focus manufacturers to include downstream actions, resource flows and consumer behaviour.

	II. How can the regulatory framework be changed to enhance **Freudian** (nurturing) towards production?	• All products could potentially go through an eco-panel of approval to meet critical requirements such as (function, durability, sustainable and ergonomic product design). • Regulate production to enforce higher import taxes for unsustainable products and tax breaks if recyclable and closed-loop processes are in place in the product production process.
	III. How can the regulatory framework be changed to enhance **Baudrillardian** (belonging/simulation to real) towards production?	• Develop government policy and investment in the development of natural and regionally available dye process and circular recycling systems (Ellen MacArthur Foundation 2017) to reactive the agency of local producer countries. • Politicians move from purely profit-driven approaches to empathetic approaches that relate to the needs of the people living in developing countries. For example, support the economic viability of farmers in producer countries, so that these communities do not lose food security when they move towards cultivating fiber crops instead of food crops. • Develop a policy to democratise product design so that it better meets community needs, for example, encouraging product hacking, the critique of product design and vetting processes on online platforms towards sustainability. • Implementing world-wide standards for environmental, and health and safety issues in the textile manufacturing chain. Include aspects such as resource productivity, consumer safety, air and water use and occupational health and safety (Fletcher & Grose 2012; Küng 2012). • Encourage the collaboration of several brands to adopt the same sustainable policies so that their combined purchasing power leverages factory owners to comply with requests (Fletcher & Grose 2012). • Expand Fairtrade programmes for entire garments and not just for fibers (Fletcher & Grose 2012).
Production ↔ distribution	I. How can the distribution channel be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards production?	The globalisation of the fashion industry has resulted in a system where connections within supply chains are lost, where the designer and the company no longer know the conditions in which the product is produced by the manufacturer. Long decentralised supply chains lead to logistical inefficiencies and result in a possible loss of agency for distributors. • Cut out distribution intermediaries by creating potential retail spaces that sell services rather than products. For example, 3D body mapping and skin colour scanning services that feed into an online database. The system allows service providers to match user directly with local designers and manufacturers (for customised natural colour pallets that contextualise the locality of product, redefine homogenous aspects of commercial colour (Fletcher & Grose 2012), and suit individual needs for more authentic individual expression). These databases could enable new economic opportunities for innovative production processes. • Initiating greater transparency in the supply chain regarding water use and carbon footprints, as well as improving recycling, as well as the effective use of resources and a transition to renewable inputs. Encouraging efficient practices could result in more ethical, economic gain.
	II. How can the distribution channel be changed to enhance **Freudian** (nurturing) towards production?	• The lack of transparency in supply chains results in possible poor manufacturing conditions, as well as issues for farmers, labourers and people in the community. By improving the sustainability of fibres through co-operative solutions like – the organic movement, the people friendly fibers approach, and the reinvigoration of global certification systems like Fairtrade (Fletcher & Grose 2012) – there is potential to reconnect the link between fibres, manufacturers and end users. This reconnection could in turn progress the drive to reactivate the agency of agents in the distribution chain. • Create nation-wide online rental stores for clothing swapping and renting. Online sign-in databases and body mapping to find potential body shape and style matches. Save on the waste of single-use products like formal dresses, and consumers afford and enjoy a greater variety of products without much additional cost.

	III. How can the distribution channel be changed to enhance **Baudrillardian** (belonging/simulation to real) towards production?	• The improvement of distribution routes for recycled garments and products, for example, public vending machines where garment components can be deposited for a refund or discount when buying sustainable products. Online product database for each product and manuals for how to take garments apart and sort components. • Shortened supply chains could potentially reactivate agency for distributors, greater collaboration among agents and transparency could allow for greater control in minimising environmentally unsustainable inefficiencies. • Regulate the use of chemicals (SASTAC 2014; NRC 1993:61; The World Health Organization; Shrader-Frechette 2012:324-326) in farming by making use of biological farming systems such as beneficial insects to control pest populations. Implementing this regulation could result in less harmful work environments for farm workers and less (harmful) chemical affluent in water sources for surrounding communities. • Broaden network of suppliers that use sources of renewable energies to reduce carbon emissions, the cost, and create a community of shared best practices.
Production ↔ production	I. How can the production line be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards production?	• Compile an open-source (Van Abel, *et al.* 2011) database of manufacturers with eco-rating for easier selection, support and funding of sustainable practices in production. • Minimise waste by considering fabric-cutting efficiencies in pattern and garment design, and create secondary business spinoffs that utilise waste rather than discarding it. • Creating a generic energy profile for fabrics and fibers (Fletcher & Grose 2012) could encourage suppliers in a transparent supply chain to document energy consumption regarding the type of fiber, place of manufacture, the energy efficiency of the factory and the dye process used.
	II. How can the production line be changed to enhance **Freudian** (nurturing) towards production?	• Guidance and training funding by brands for supplying manufacturers to develop and provide initiatives for more sustainable practices • Reconditioning and upcycling old garments could add value to used garments and optimise the resources that go into fiber and fabric. Hand-crafted, unique collections create a point of difference for producers for better market niche need satisfaction. • Transition to circular production (Ellen MacArthur Foundation 2017) and dye processes to reduce water pollution and wasteful, as well as inefficient practices. These transitions could result in less harm to the producer communities.
	III. How can the production line be changed to enhance **Baudrillardian** (belonging/simulation to real) towards production?	• Develop multidisciplinary collaborative platforms (Hirscher 2013; Sanders & Strappers 2008; Braungart *et al.* 2007) for sharing of best production practices and identification of complementary agents (for example, the reuse of production waste by other manufacturers for less wasteful practices). • Move toward circular production systems (Ellen MacArthur Foundation 2017) where waste and affluent are recycled or flow to other complementary producers for reuse. • Create company supported apprenticeship programmes to provide opportunities for the next generation to earn a living and continue local textile traditions (Fletcher & Grose 2012). • Develop innovative skills, techniques and practices to recondition used garments (for example, laser-cutting detail or upcycling manufacturing from fabric waste). Collaborate with retailers who could open their clothing shops (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012), and integrate reconditioning manufacturers into business models. In this way sustainability innovation, values and priorities influence upstream agents.
Production ↔ subject formation	I. How can subject formation be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards production?	• Market products based on ethical practices of production; from the growing of the fiber which uses predator friendly; low water use, and local chemical aspects; to the carbon footprinting (Fletcher & Grose 2012), processing and manufacture of the garments using fair and save labour policies. In this way, consumers can see the real value of the product and producers will be encouraged to adopt more sustainable practices toward more significant market share and profitability. • Provide design teams with materials rating systems (Fletcher & Grose 2012) for the selection of less energy-intensive materials.

		• Develop innovative biomaterials that make better use of pre- and post-factory waste (Braungart *et al.* 2007), in this way production processes are transformed for less waste, there is a better utilisation of resources, and the value perceptions of virgin natural resources are changed. • Investigate the socio-economic impact of microfibers in the ocean. Engage in fiber analyses for textile innovation and reengineering to mitigate plastic microfiber release during washing processes (Ellen MacArthur Foundation 2017).
	II. How can the subject formation be changed to enhance **Freudian** (nurturing) towards production?	• Transparent production processes on product labels could allow consumers to invest in products that nurture individuals and communities by taking into account occupational health and safety, resource productivity and consumer safety. • Developing awareness of codes of conduct (Fletcher & Grose 2012), such as corporate social responsibility, and sustainability issues by designers and buyers can help inform design and price-points, and eliminate styling and set price-points that press producers to accept tighter margins. This development could also improve the conditions for production labourers. • Focusing on sustainable design innovations such as; developing innovative ideas to add value to garments with little cost; designing with sustainable fibers; steering away from products with low price elasticity and choosing fair trade suppliers. • Redefining production lines by creating interactive half-way products inspired by biomimicry (Braungart *et al.* 2007; Fletcher & Grose 2012) that are only complete after they interact with the user. In this way, products become more individualised and have a higher value for the consumer without adding additional pressure on producers.
	III. How can the subject formation be changed to enhance **Baudrillardian** (belonging/simulation to real) towards production?	• Develop awareness campaigns directed not just at consumers, but also at producers and retailers in the supply chain. Promote relationships between producers, suppliers and retailers that encourages transparency and altruistic decisions that benefit the entire community. • Collaborative initiates (Hirscher 2013; Sanders & Strappers 2008; Braungart *et al.* 2007) in which designers collaborate with producers to develop innovative layouts and prototypes for less waste rather than just sticking to outdated ways of designing and producing. By creating communities of practice, a sense of connection and altruistic actions can be encouraged. • Multi-stakeholder (Fletcher & Grose 2008) initiatives including retailers, brands and producers, that improve labour conditions by providing factory support through training, monitoring and grievance channels for the producer community. • Designers and buyers choosing vertically integrated or local (Fletcher & Grose 2008; Hirscher 2013) companies that have fair labour conditions. This choice could encourage more transparent, sustainable and collaborative approaches. • Trading with small-scale producers and artisans (Fletcher & Grose 2012) to support direct and personal engagement. Develop local economic communities of production with quicker response times and better quality products. • I. & III. Co-design and participatory design (Hirscher 2013) approaches could challenge the top-down hierarchies of how designed products usually flow through the fashion chain. A more circular (Ellen MacArthur Foundation 2017) and integrated design process that includes the participation of the consumer as a producer, could enhance the emotional connection with the product, create collaborative opportunities and improve connection (belonging) and self-esteem.

5. Distribution

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Distribution ↔ consumption Distribution could refer to the physical distribution of products to retailers, as well as the advertising that fosters desire through fashion branding. The distribution of fashion commodities connects the process of production and consumption. Retail buyers, designers, photographers and journalists and all the fashion intermediaries act as agents in this process of the fashion system that connect and distribute products and cultural messages (Kaiser 2012).	I. How can consumption demand be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance distribution?	• Consumers show support of sustainable distribution chains by buying products of designers and retailers that utilise local textiles and manufacturers. • Establish online open-sources (Van Abel, *et al.* 2011) of information, that provides consumers with information regarding how to dispose of garments, or recondition garments after use. Access to these sources could redirect the flow of materials to create more cyclical material flow systems that result in more ethical profits and greater environmental gains.
	II. How can consumption demand be utilised in a **Freudian** (nurturing) way to enhance distribution?	• Develop small retail stores that are stocked only with sample garments so that consumers can see styling options and assess fit. Products are ordered online for home shipment. Provide individual service and transport products according to specific needs with less waste and lower carbon footprints.
	III. How can consumption demand be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance distribution?	• Crowdfunded initiatives that allow consumer communities to invest in sustainable initiatives that redirect material flows. Funds could be used to develop new distribution channels and disseminate supportive information on online open-source databases. These initiatives could allow for the development of eco-effective approaches for the distribution of textile waste and used garments.
Distribution ↔ regulation	I. How can the regulatory framework be utilised in a **Marxist** (ethical standing/upward class mobility) way to distribution?	• Developing policies that encourage more transparent supply chains, which mean that aspects can be monitored and regulated more efficiently; therefore, retailers can more easily be held to account for unsustainable practices. • Initiating policy and investment for infrastructure such as integrated after-use collection systems and sorting and reprocessing facilities. These investments (Ellen MacArthur Foundation 2017) could create new ethical, economic opportunities for upward class mobility.
	II. How can the regulatory framework be utilised in a **Freudian** (nurturing) way to enhance distribution?	• Policy and investment for sustainable distribution systems could encourage more ethical practices that could better meet the needs of distribution agents as well as reduced natural resource use — for example, shifting the supply chain to a loop or cycle of material and innovation.

	III. How can the regulatory framework be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance distribution?	• Encourage collaboration mechanisms for handling the flow of materials throughout the product life cycle. Connect textile recyclers and public bodies (like second-hand stores) (Craik 2009; Braungart *et al.* 2007; Fletcher & Grose 2012) as well as waste disposal and draw them into production decisions and balance sheets of fashion companies. • Extending producer responsibility schemes for textiles and forcing retailers to contribute to recycling and waste management distribution infrastructure. This extension could encourage greater collaboration in the supply chain with more altruistic motivations.
Distribution ↔ distribution	I. How can the distribution channel be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance distribution?	• Develop and integrate diverse energy strategies for distribution systems, inventory management, transport and energy use as a whole (Fletcher & Grose 2012).
	II. How can the distribution channel be utilised in a **Freudian** (nurturing) way to enhance distribution?	• Transform the linear supply chain to that of a loop or cycle of material and innovation in order to challenge and redefine the flow of goods and the industrial environment. It would shift the supply chain to a value chain that better meets the needs of the agents in the chain.
	III. How can the distribution channel be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance distribution?	• Innovative distribution approaches could include the move towards more transparent supply chains that reconnect people and place to the supply chain. For example, software tools that enable companies to organise and centralise information at each point in the garments manufacture.
Distribution ↔ production	I. How can the production line be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance distribution?	• Creating a generic energy profile (Fletcher & Grose 2012) for fabrics and fibers can encourage suppliers in a transparent supply chain to document energy consumption from the place of manufacture and the distance the fiber and garment were transported.
	II. How can the production line be utilised in a **Freudian** (nurturing) way to enhance distribution?	• Elements such as local production or solar panel installation could add to comprehensive energy policies and could be tailored for the specific needs of distribution agents in different circumstances.
	III. How can the production line be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance distribution?	• Moving away from fast fashion to slower product lines with less elastic supply chains could encourage long-standing relationships with established suppliers. For example, by reconnecting the designer and the distributor, garment packaging can be designed for minimum waste and maximum efficiency (Fletcher & Grose 2012).

Distribution ↔ subject formation	I. How can subject formation be utilised in a **Marxist** (ethical standing/upward class mobility) way to enhance distribution?	• Provide design teams with a materials rating system (Fletcher & Grose 2012) for the selection of less energy-intensive materials. If only distributors with lower carbon footprints are selected, it will provide an incentive for all distributors to redesign their delivery systems for less energy consumption. • Measuring the environmental and social sustainability impact of distribution facilities and channels so that inefficiencies can be minimised for economic and environmental gain.
	II. How can subject formation be utilised in a **Freudian** (nurturing) way to enhance distribution?	• Drawing inspiration from natural strategies to inform product design, processes and policies (for example, through biomimicry) (Braungart *et al.* 2007; Fletcher & Grose 2012) could enhance distribution channels. By redesigning packaging to self-degrade, it could become a biological nutrient (such as compost) which could be used to cultivate vegetable gardens for nourishment. In addition to this, instead of wasting resources by transporting plastic packaging waste, distribution routes can be more efficiently utilised, and savings can contribute to vegetable seed purchases or training.
	III. How can subject formation demand be utilised in a **Baudrillardian** (belonging/simulation to real) way to enhance distribution?	• Consumers can form voluntary community organisations in local neighbourhoods that utilise biodegradable, compostable packaging to create communal vegetable gardens. Shared altruistic motives could create a shared sense of purpose and belonging in the community. • Implement internal policy strategies for the training of employees in the distribution chains on sustainability strategies, and provide incentives for aligned business decisions (Ellen MacArthur Foundation 2017).

6. Regulation

Kaiser: style-fashion-dress circuit	Fetish	Possible interventions
Regulation ↔ consumption 'Regulation' of subject formation can be formal such as labour laws, dress codes and uniforms; or informal such as social pressures and cultural discourses. Regulation controls the production, distribution, and consumption of clothing. Concerning production it includes regulating garment workers' rights, world trade legal agreements, environmental and consumer safety policies and labelling issues (Kaiser 2012).	I. How can the consumption be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards regulation?	• Consumers can buy into and support sustainable products with ethical value chains and refuse to support harmful products. In this way, retailers will be forced to change their policies regarding which products they sell.
	II. How can the consumption be changed to enhance **Freudian** (nurturing) towards regulation?	• Consumers can support products that are synergistic satisfiers (Fuad-Luke 2009) through crowd-funding initiatives. In this way, the standard regulatory processes of top-down product development are democratised. This support could encourage commercial retailers to change their policy to opt for customer buy-in, and enable consumers to choose products that better meet their needs.
	III. How can the consumption be changed to enhance **Baudrillardian** (belonging/simulation to real) towards regulation?	• NGO's, community organisations and consumer interest groups can create awareness about harmful practices and processes required to create unsustainable products through name-and-shame techniques (Fletcher & Grose 2012; Braungart *et al.* 2007). This, in turn, can encourage retailers to change policies regarding how they structure their production and distribution chains and which products they retail.
Regulation ↔ regulation	I. How can the regulatory framework be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards regulation?	• Regulations and import tariffs on finished goods created a barrier of protection for local fashion industries (Craik 2009). • All industrialised countries to institute regulations that improve working conditions through trade union demands (Craik 2009). • Extend policy and redirect resources for dedicated policing and implementation of legislation and regulation. For example, to discontinue the practice of illegal product imports. • Extend global certification systems such as Fairtrade (Fletcher & Grose 2012) to create more ethical values in the systems of trade and business.

	II. How can the regulatory framework be changed to enhance **Freudian** (nurturing) towards regulation?	• The recognition of the fashion industry as a unique cultural industry by governments and a drive towards education, local design, cultural tourism (Craik 2009) and industry-specific research could result in better-aligned strategies and more sustainable policies throughout the industry and the subsequent reactivation of agency. • Extend policies for health and safety enforcement regarding the exposure to harmful chemicals during dyeing and finishing processes, the inhalation of small particulates during knitting and weaving, ambient temperature regulation, and pest control (SASTAC 2014).
	III. How can the regulatory framework be changed to enhance **Baudrillardian** (belonging/simulation to real) towards regulation?	• Implement better corporate social responsibility codes of conduct (Fletcher & Grose 2012), so that financial gains can be distributed to workers as well. • The continuous analysis and improvement of existing policies can ensure that they remain relevant as new needs and innovations occur. • Initiate collaboration between leaders in the industry. Incorporate local fashion design into government creative industry policies to initiate local design, education, manufacture, research and the promotion of fashion in their domains. The benefits of these approaches contribute to visible national culture (Craik 2009), create export opportunities and stimulate the growth of cultural subsectors such as cultural tourism, and the design of a global image for the country.
Regulation ↔ distribution	I. How can the distribution chain be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards regulation?	• Local organisations (Fletcher & Grose 2008; Hirscher 2013) in the distribution chain can help develop a framework for the most efficient distribution practices that encourage transparency, low carbon footprints, less harmful emissions and the best practices. The framework could inform policy in companies and save costs as well as improving the profit margins for distributors more ethically.
	II. How can the distribution chain be changed to enhance **Freudian** (nurturing) towards regulation?	• Create a carbon footprint of distribution chains, use this data to analyse how the use of petrochemicals (such as the air emissions of transport trucks) (Fletcher & Grose 2012) affects the wellbeing of communities near distribution routes. This intern can encourage policies on more sustainable transport options, that would cause less harm to communities.
	III. How can the distribution chain be changed to enhance **Baudrillardian** (belonging/simulation to real) towards regulation?	• Develop networks (Fuad-Luke 2009:7) in the distribution chain to share best sustainable practices and create innovative examples of how policies need to change.
Regulation ↔ production	I. How can the production line be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards regulation?	• I. & II. Producer and government collaboration to address critical issues and create awareness where growth based funding is needed, for example, submitting business plans for training exam centers, and initiatives that upskill communities for small scale textile farming and production, as well as growing and developing local textile traditions such as weaving (Fletcher & Grose 2012). Individuals in local communities are empowered, and they can earn a living through applying their skills. • Encourage legislative demands by labour unions for more sustainable policies (Chapman 2009).

	II. How can the production line be changed to enhance **Freudian** (nurturing) towards regulation?	• Low productively and high absenteeism of workforce due to the poor health and poor living conditions of workers (SASTAC 2014). Perhaps producers can provide financial support and education (using finances saved by reducing distribution routes that would have been used to transport plastic waste) regarding how to cultivate community vegetable gardens, by utilising compostable packaging waste. This, in turn, could assist with worker's health and well-being and reduce low productivity and high absenteeism. This approach could inform policies that encourage manufacturers to invest in the producer communities wellbeing.
	III. How can the production line be changed to enhance **Baudrillardian** (belonging/simulation to real) towards regulation?	• Producer communities form NGOs (Fletcher & Grose 2012) and organisations that address the sustainability and worker issues in production. Share best practices, innovate new approaches and initiate new policy regulation. For example, name and shame techniques regarding the lack of implementation of sustainable policies, and the creation of awareness about the effects of waste discharge on communities. • Implementing more circular systems (Ellen MacArthur Foundation 2017) such as waste recycling and the reduction of waste could inform improved policies regarding how waste should be discharged.
Regulation ↔ subject formation	I. How can subject formation be changed to enhance the **Marxist** (ethical standing/upward class mobility) towards regulation?	• Research and innovation regarding toxicity issues (Braungart *et al.* 2007) in producer communities, to address long-term economic growth and innovation concerns. For example, examining eco-effective approaches towards circular, closed-loop systems through the redesign of material flows.
	II. How can subject formation be changed to enhance **Freudian** (nurturing) towards regulation?	• Develop open-source (Van Abel, *et al.* 2011) educational tools and networking platforms for leadership in the fashion chain. These platforms can provide information about the social and economic reality of the workforce (such as issues of poverty, crime and poor health, for example). By acknowledging these realities, managers can move towards engaging with workers as people, rather than just human assets. These shared social values will assist leadership to implement more caring policies accordingly.
	III. How can subject formation be changed to enhance **Baudrillardian** (belonging/simulation to real) towards regulation?	• Encouraging education centers to engage in service learning in local communities in order to develop essential skills that address issues of poor numeracy and literacy. This, in turn, could address the shortage of critical skills due to low levels of education. These initiatives could also help create awareness for trainers (students) about important issues in the community, and thereby enhance the connection between the educators and their communities.

“Wherever your treasure is, there the desires of your heart will also be.” Mathew (1996:6v19 NLT)
