

# FASHION EDUCATION FOR THE FUTURE

sustainable development in social, economic, environmental, cultural and geographic dimensions

**Org.: Francisca Dantas Mendes** 



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Francisca Dantas Mendes (Org.)

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## PRESENTATION

by Francisca Dantas Mendes, João Gabriel Farias Barbosa de Araújo, Mariana Costa Laktim and Renata Mayumi Lopes Fujita translated by João Gabriel Farias Barbosa de Araújo and Renata Mayumi Lopes Fujita

An event of great magnitude took place at the School of Arts, Sciences and Humanities of the University of São Paulo - EACH / USP - from April 11 to 15, 2016 and could not fail to result in an important legacy. A book whose 33 chapters, subdivided in five thematic sessions, are destined to the researches - rigorously selected by the scientific committee - that were described in a booklet of abstracts and presented briefly, in 7 minutes, during Fashion Colloquia - São Paulo 2016.

Fashion Colloquia was established by four educational institutions, led by the London College of Fashion of the University of the Arts London; The Institute Français de la Mode in Paris; Parsons The New School for Design in New York; And the Domus Academy in Milan. These institutions have joined efforts to connect academic research, professional practice and industry. The first series of colloquia, which took place between 2011 and 2013, explored the effervescence and the spotlight of the fashion weeks to enhance the debate that happened concomitantly with the celebration of the work of designers and brands from around the world. Since then,

the aim of Fashion Colloquia has been to attract a rich variety of contributions from a wide selection of professionals - not only academics, but also industry, the market and the media - and use this support to upload the international repository for fashion housed at the London College of Fashion, University of the Arts London.

As the event gains more and more partners and collaborators from all continents, an increasingly rich and complex network is formed. Through these connections the Fashion Colloquia launches itself into new territories, no longer linked to the fashion weeks, but maintaining its commitment to the creation of new spaces for the discussion of knowledge produced by different actors in different arenas around the world.

Latin America's largest city is hosting the event with the theme "Fashion education for the future: sustainable development in social, economic, environmental, cultural and geographic dimensions". The task is to expose what has been researched at fashion colleges, report the challenges of industry and confirm the diversity of fashion as a cultural

manifestation in a country of continental dimensions. The first Brazilian edition of Fashion Colloquia was supported by important partner schools that opened their doors to host a day of the event: FMU - FIAM / FAAM educational complex and Faculdade Santa Marcelina, both committed to the training of their students and to the development of highlevel scientific and cultural production.

During five days, 58 authors - including researchers, professors, doctors, masters, undergraduate and graduate students from more than twenty universities and representing 10 nationalities presented their researches to about 200 participants who interacted with questions and comments, resulting in an important exchange of knowledge and experience. Fashion Colloquia São Paulo also had discussion tables with authorities and important personalities of Brazil's fashion scene and with the exhibition of the students' works of the three local schools involved in the organization. The event contributed to the creation of new knowledge networks, for the dissemination of national and international research and for the establishment of new sources and references.

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## INTRODUCTION: fashion's challenges and perspectives

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Renata Mayumi Lopes Fujita Escola de Artes, Ciências e Humanidades da Universidade de São Paulo mayumi\_lf@hotmail.com Fashion, as a field of research, is characterized by its amplitude. There are several perspectives to be investigated on this socio-cultural phenomenon, whose reverberations involve and affect individuals around the world in different ways.

Fashion education began in Europe in the late nineteenth century when population growth and new technologies increased the demands on the textile industry that, until then was supplied by the traditional craft of textile workers, trained through the system "master and apprentice". Paris – which had registered women's schools since the seventeenth century teaching the trade – is the headquarters of the first school dedicated to the teaching of fashion, Esmod, in the year 1841¹ and, from then on, new courses appeared in London, Milan and other European cities.

The teaching of fashion in Brazil began in the late 1980s and early 1990s, with the opening of several courses at the main educational institutions in the city of São Paulo. Since then, the country counts with technical, undergraduate and postgraduate courses in fashion in all regions, which have been designated in the following titles: fashion design; fashion; Industrial design/fashion design; Fashion, design and styling; Textile and fashion; Fashion and design; Fashion business; Fashion marketing; Fashion retail management; Fashion and creation, among others.

<sup>1</sup> PIRES, Dorotéia Baduy. A história dos cursos de design de moda no Brasil. Revista Nexos: Estudos em Comunicação e Educação, São Paulo, v. 9, jan. 2002.

This expansion in fashion education is due to the market demand for professionals able to work in the various sectors of the textile chain, noting that Brazil is the main Western country that possesses all sectors of this chain, from agriculture to retail. For the continuous progress in the training of such professionals it is necessary to explore methods of learning and to expand the technical and theoretical skills through teaching in order to improve processes within the sector and strengthen the market.

Given the context of fashion education, it is understood that academic and empirical research are fundamental to the expansion of knowledge within this area. In this way, an invitation was made to the authors present in this book to report experiences and research within the demand of the fashion market.

This work presents the reader with different perspectives on fashion through researches developed in Brazil and abroad that seek to theorize the practice and construct concepts, reflections and actions in order to improve this field of study. The presented works were divided in five relational axes of fashion. They are: education, society, culture, environment and economy. Altogether, there are 33 texts presenting the researches of 58 authors. All of them have in common the concern for the future - of education, industry, market and professional practice - with a special focus on the sustainability paradigm.

#### Fashion and education

Five texts expose the challenges for fashion education in Brazil and in the world. These are themes that discuss the alignment of the training of new professionals with the demands of the textile industry, consolidating communication between academia and industry and strategies that use fashion as a learning tool. Authors Namkyu Chun and Julia Valle-Noronha (Aalto University) give an overview of Brazilian post graduation academic research in fashion design by cataloging main themes and methodological strategies to evaluate the situation of practical research. Giselle da Costa Araújo and Nádia Nascimento reflect on the changes that the professional training of the fashion designers must take to meet the needs of the textile industry. Professor Lavínnia Seabra (Federal University of Goiás) places fashion as a learning tool in open teaching networks. Mor Schwartz believes that fashion designers can establish themselves as important resources for the state-of-the-art technology industry and Maria de Jesus Farias Medeiros analyzes the situation of fashion's professional training in the Brazilian northeast to report on the challenges of fashion's sustainable development in Ceará concentrating in vocational training.

#### **Fashion and society**

Adornment is present in all societies, from the great urban agglomerations to the Amazonian tribes. Clothes and accessories are part of contemporary man. It's a second skin. In "Fashion and Society" the authors of the eight texts explore connections in the fields of sociology, philosophy and anthropology, investigating the interferences of fashion as an industry and material culture in contemporary society, definitely mediatic and interactive. Ian W. King (London College of Fashion) discusses the concept of aesthetics in the context of clothing and the body, proposing a new understanding of the term when applied to the study of fashion. Marco Antonio Andreoni, Maria Cecilia da Costa and Bruno da Costa Andreoni present the experience of the project "Alinhavando o Futuro", which explored teaching methods focused on fashion and confection's practices and theories implemented in the community of Tumbira - AM. Deniz Köksal, Jochen Strähle, Matthias Freise, Holger Schallehn and Marcus Adam (Reutlingen University) conduct a literature review and content analysis on the sustainable management of the textile and clothing supply chain in the social sphere. Fashion designers Eloisa Ferraro Artuso and Fernanda Simon explain the environmental and social consequences of the fashion industry as members of the Fashion Revolution movement. In "Struggling to buy

fashion to wear," Renata Beman investigates the involvement of the blind and visually impaired with fashion clothing. Gabriela Alves Ávila and Marina Seibert Cezar explore the relationship between violence against women and fashion in Brazil. Sandra Bravo Durán examines the concept of "Liquid Modernity" applied to the current fashion system and Flávia Amadeu closes the session with "Social Innovation in the Amazon Rain Forest through the materiality of the colored rubber", in which she relates the dimensions of rubber work in an Amazonian community.

#### **Fashion and Culture**

The four texts of fashion and culture deal with the reverberations of fashion in contemporary culture, through the dialogue between crafts and fashion. Catherine Geib (Fashion Institute of Technology) explores the relationship between millennials, social media, consumption and sustainability. Vanessa Peixoto Cavalcante and Antonio Takao Kanamaru (University of São Paulo) examines Brazilian textile handicraft as a cultural manifestation, its relationship with fashion, the global market and design. María Eugenia Iosa Martínez and María Villanueva Fernández (University of Navarra) demonstrate the relationship between tradition and modernization whith the case study of the brand Loewe and Gina Rocha Reis Vieira presents her observations on the relationship between local cultures and fashion design In Bahia.

#### **Fashion and Environment**

The theme Fashion and Environment has eight texts that have as their central theme sustainability. The authors express their concern with the preservation of the planet and its natural resources, with the guarantee of the needs of future generations, the appropriate destination or reuse of residues and with the establishment of strategies for a sustainable future. Marcus Adam, Holger Schallehn, Deniz Köksal, Jochen Strähle and Matthias Freise investigate the implementation of product-service systems in companies of the fashion industry. Yasmin Araújo, Caroline Coutinho, Daniela Ester Ferreira, Maria Silvia Barros de Held, Paula Hubner, Regina Sanches and Jonas Toshio (University of São Paulo) discuss sustainability and social responsibility and propose a project for the sustainable development of companies of the fashion sector. Francisca Dantas Mendes and Maria Cecília Loschiavo dos Santos propose design as a tool for generation and disposal management of textile waste. Paula Linke and Silvia Helena Zanirato point out the problems and possible solutions in the management of textile waste in the apparel industry in Maringá - PR. Manon Randin and Mor Schwartz (ArtEZ Academy for art and design) suggest a business plan for the fashion industry encompassing strategies for a sustainable future. Welton Fernando Zonatti and Júlia Baruque Ramos discuss the reuse and recycling of textiles in Brazil. Adriana Teresa de Carvalho and Francisca

Dantas Mendes offer an analysis on the management of solid industrial waste and cleaner production. Finally, Holger Schallehn, Jochen Strähle, Matthias Freise, Marcus Adam and Deniz Köksal describe the need, challenges and possibilities for the successful implementation of product-service systems.

#### **Fashion and Economy**

There is no doubt about the expressive impact of the fashion industry on the Brazilian and world economy. The eight chapters of the last session bring micro and macro strategies for economical development through fashion and the textile industry, even addressing urgent issues such as slave labor. Sofie Jacobs and Annick Schramme (Antwerp University) present a case study on the perception of business success in Belgium in "Multiple Pathways to Successful Small Business Businesses". Juliana Bortholuzzi analyzes the reorganization of the fashion system from the relation of the media and consumer dynamics. Flávio da Silveira Bruno and Fernando Pimentel (Brazilian Textile and Clothing Industry Association) present perspectives on the development of the Brazilian textile and clothing industry, supported by the use of science and technology in their text entitled "Apparel manufacturing 4.0". Voon Chin Phua, author of "To buy or not to buy", exposes multiple perspectives on sales of counterfeit clothing brands in Turkey. Marcela Bortotti Favero, Elvio Saito and Germano Souza present Sebrae's actions focused on

#### Introduction

companies active in the fashion sector in the northeast of the state of Paraná. Rafael de Oliveira and Heloísa Nazaré dos Santos describe the process of forecasting trends and design methods adapted for the development of fashion products. Rosangela Rubbo Rodrigues and Vivian Berto de Castro reflect on ways of contributing to individuals and communities who produce textile handicrafts in the context of Creative Economy. Anaclara Toscano by Britto Machado and Marina Seibert Cezar end the book with a work that establishes links between the consumption of fashion and the issue of contemporary slave labor.

The chapters brought together ideas, questions and desires of researchers and fashion actors of different origins, enabling a broader understanding of local and global fashion and its challenges from a variety of perspectives, contributing to the advancement of the reflections on fashion and its dimensions in Brazil and in the world. The various exploited segments open doors for further study in this ever-expanding area. The proposed ideas signal the need for practical and intellectual investments aimed at sustainable development in the contexts proposed in this book.

# FASHOW AND EDUCATION

## TOWARDS PRACTICE BEYOND FASHION DESIGN: studying fashion design research in Brazilian higher education

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#### INTRODUCTION

Historically, the abilities of introducing new aesthetics of an era and dressing the public have framed fashion designers as creative geniuses (Kawamura 2005). However, in last two decades, their reputations have been challenged due to rapidly changing and globally interwoven socio-cultural conditions. Yet creativity in fashion has been mainly understood within the context of industry (Sinha 2002, Karpova et al. 2013). However, these industry views on creativity limit the wide potentials of fashion design.

#### Design Practice Research

Meanwhile, accumulated academic endeavors have made efforts to unfold various aspects of design practice. Christopher Frayling's seminal text (1993) attempts at better framing this type of research towards a broader recognition within the academia. He proposed a categorization of investigations in art and design as research into, through and for design. Despite the unclear definitions, his framework clearly opened up new possibilities to investigate design practice as academic research (Friedman 2008). The first approach, research into design, includes researches that look into design from other academic lenses. like history, technology or sociology. The second approach focuses on diverse design processes that might lead or not to a creation of artifact. The third approach, though, has

as its main goal the production of an artifact. Yet, this categorization might sometimes prove itself difficult to embrace contemporary engagements in the fields of art and design, which have become more complex as the academic production gains body and room for experimentation (Nimkulrat 2009, Koskinen et al. 2011).

Similarly to Frayling's research *into* design approach (1993), the ways in which designers work and think have gained attention and been explored by many scholars. In particular, the notion of design thinking played a central role to both establish design as a discipline and expand its boundaries. Since Rowe introduced the concept in 1987, design thinking research has accumulated deeper knowledge to provide theories of design, such as 'landmark' studies that have investigated the ways in which designers think and work in reality (e.g. Lawson 2004, Cross 2006).

Moreover, research through the lens of design practice has contributed to experimenting new ways of understanding design (Frayling 1993). With a strong tradition in art and craft, different approaches in that direction have been actively developed in the United Kingdom, Nordic countries as well as Australia (Mäkelä 2007). They refer to an exploratory method that has been developed in the field of arts and design and highlight researchers' artistic or design practices and active engagement with artifacts and participants in their design process.

It can be argued, though, that while no agreement on categorizations about research

on design practice was made, there is certainly a clear path being traced in parallel towards the recognition of this type of research. These diverse academic endeavors to explore design practice have contributed to carving a unique position for designers as well as understanding roles of design. Thus, it is also important to study fashion design practice to expand its possibilities. However, this discussion has not yet been fully incorporated in the fashion community.

Design Practice Research in Fashion

Meanwhile, in fashion, among a broadly plural production on the topic, the study on its practice has also started to add to the core of academic studies. In other words, instead of focusing exclusively on the clothes and wearers, the investigative gaze has also paid attention to the work of practitioners, such as creative attributes, fashion thinking and design ideation process (Sinha 2002, Nixon and Blakley 2012, Laamanen et al. 2014).

Moreover, interestingly, pattern cutting appears as a pioneering field with valuable contributions from individuals whose work resides in the intersection between researchers and practitioners. Some of these designer-researchers' productions are the creative practice works of Rissanen (2013), Lindqvist (2015) and López-Araquistain (2015). Concomitantly, it has also received consistent inputs from researchers, as the case of seminal Efrat (1982) and, more recently,

also the works of Almond (2013) who plays a key role in the sharing and encouraging studies in the field.

Despite all of these valuable contributions, the research on the practice of fashion designers is still at its early stages and calls for a fuller body of contributions in order to be taken as a field of research. Some of the research into the practice of pattern cutting provides clear information regarding the practice of a clothes/fashion designer. However, these works are not focused on an integrated vision on fashion design as practice. but rather they investigate a small portion of the process. Accordingly, in order to expand the understanding of its practice, fashion design needs to face a double problematic in academia (Thornquist 2014). While situated as part of design field, fashion design still stumbles upon the building of a theory from design research. On the other hand, it also struggles against similar issues from other practice-oriented fields of knowledge such as the lack of academic consensus on quality and validity of practice research.

#### **OBJECTIVES**

To address these issues, the aim of this paper is to examine possibilities of applying this discussion on design practice from design studies to fashion. In order to broaden the discussion and consolidate fashion design research, it is more relevant to explore a rapidly growing yet less explored case, such as Brazil, instead of looking into contexts where

design research is already well-established and more stabilized.

The work of Pires (2002) provided overview of the bachelor courses in Fashion Design offered in the country as well as the pairing industry. In the same year of Pires' publication, the first doctoral program in design was launched, inviting thus further investigations in higher education in the country. From that first initiative in holding a Doctoral program in Design by Pontificia Universidade Católica do Rio de Janeiro (Pontifical University of Rio de Janeiro, PUC-RJ), a trend has arisen and currently 8 programs are available within Brazil. This result is clearly based on the accumulation

of master's studies emerging in last decades. Therefore, it is timely to examine the current status and tendency of Brazilian design education. Research questions that we seek to answer throughout this study are as follow:

- » How the study on fashion design practice has been disseminated throughout higher educational institutions in Brazil?
- » What kinds of contemporary fashion research have been conducted in Brazil?

While answering these questions, we consider the contribution of this study is twofold. Academically, it introduces lesser-known cases from Brazil to a broader

academic context. Moreover, for the educational point of view, it also encourages the future fashion designers to be aware of alternative ways of utilizing acquired fashion design knowledge.

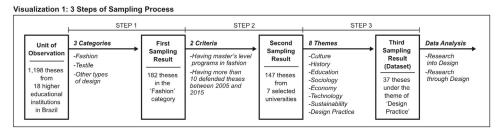
The structure of this paper is as follows. Firstly, the research methods will be explained, including 3 steps of sampling process as well as analysis approach. In following, the findings from the analysis will be presented. Lastly, future directions for further studies will be proposed.

#### RESEARCH METHODS

In order to understand the ways in which fashion design is studied in higher-level Brazilian universities, basic principles of qualitative contents analysis approach were employed (Flick 2009). Master's degree level theses, produced during the period between 2005 and 2015 from 18 universities that have programs of 'fashion' or/and 'design' in Brazil, are chosen as observation unit for this study. While reviewing the theses, only the titles and abstracts of were considered. The two authors of this paper, who hold different cultural and educational backgrounds, analyzed those texts.

#### Sampling Process

As this study considers observing researches of fashion design practice in the context of Brazil, which has a vast amount



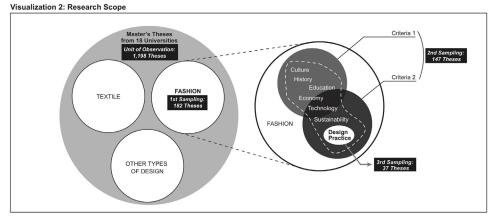


Figure 1.
Visualizations of
the research
methods.

#### **Towards Practice Beyond Fashion Design**

of academic institutions in many fields, it is important to create a systematic process to identify the most relevant data. Accordingly, 3 steps of sampling process were developed. Visualizations from Figure 1 illustrate the research methods of this study. The first model summarizes the 3 steps of sampling process for identifying the final dataset while the second model presents the scope of this study. According to the categorization from the third sampling, we identified the total amount of theses that were produced under each theme of fashion research (147 theses). Table 1 shows the result of the sampling process.

Data Analysis: Types of Design Practice Research

Instead of exploring all the categories, this study remains focused on the category of fashion design practice from the sampled data set. The intention was to draw the state of the art of design practice research in fashion design practice in Brazil, as detailed as possible, up to this date. Thus, qualitative content analysis approach was employed to investigate types of design practice research. An analytic framework used for this further analysis derives from Frayling's text earlier mentioned (1993). Instead of directly adopting his categorization of research approaches (research into, through and for design), we developed a framework which includes research into design practice and research through design practice.

CATEGORY	ANHEMBI MORUMBI	PUC (RJ)	SENAC (SP)	UFJF	UFRGS	UNESP	USP	TOTAL
Culture	4	4	15	2	0	1	3	29
History	4	0	10	0	1	0	1	16
Education	2	0	1	0	0	5	4	12
Sociology	6	0	6	0	1	1	1	15
Economy	1	3	2	0	2	2	5	15
Technology	2	1	2	0	4	3	4	16
Sustainability	2	0	0	0	1	2	2	7
Design Practice	18	2	7	0	3	4	3	37
Total	39	10	43	2	12	18	23	147

Table 1. Defended master's theses on fashion research from 7 selected universities.

YEAR	'06	<b>'07</b>	<b>'08</b>	<b>'09</b>	<b>'10</b>	<b>'11</b>	<b>'12</b>	<b>'13</b>	<b>'14</b>	<b>'15</b>	TOTAL
Anhembi Morumbi	0	0	3	1	4	4	3	2	1	0	18
PUC-RJ	1	0	0	0	0	0	0	0	1	0	2
SENAC-SP	0	2	4	0	0	1	0	0	0	0	7
UFJF	0	0	0	0	0	0	0	0	0	0	0
UFRGS	0	0	0	0	1	1	0	0	1	0	3
UNESP	1	0	0	0	1	0	0	0	0	2	4
USP	0	0	0	0	0	0	0	1	0	2	3
Total	2	2	7	1	6	6	3	3	3	4	37

Table 2. Number of publications from 7 universities by year.

ТҮРЕ	ANHEMBI	PUC-RJ	SENAC	UFJF	UFRGS	UNESP	USP	TOTAL
Research Into Design	15	2	5	0	2	4	2	30
Research Through Design	3	0	2	0	1	0	1	7
Total	18	2	7	0	3	4	3	37

Table 3. Overview of fashion design practice research in Brazil.

#### RESULTS

As a result, a thematic categorization, stemmed from the data, provided information regarding the current stage of fashion design practice research in Brazil. The analysis was made in two steps. First, the annual production of each school was identified. From that identification, in a second step, it was possible to categorize research *into* design practice and research *through* design practice approaches.

#### **Number of Publications**

Table 2 presents numbers of defended master's theses from selected 7 universities. According to our analysis from dataset a total 37 theses were identified as researches on fashion design practice between 2006 and 2015.

#### Types of Research

A total of 37 selected master's theses abstracts were further scrutinized in regards to their topics. They presented a plural and rich production in which some themes proved to be more favored than others. Here, they were classified as researches *into* design and *through* design (see Table 3).

Research into design includes both designers' profiles and investigations into the work of the professional designer and also explorations into the techniques used

by them. In this type of research the author does not identify him/herself as a designer, but instead uses the design activity of others as an object of study. The topic of this type of research includes a myriad of interests, but with pattern-cutting investigations largely prevailing (11). It also includes designer's profiles, that is, researches that look into the work of one specific designer and his/her work (5) and fashion designer's profession in a more generalized form (3). Other kinds of investigations can also be found under the research into design category, such as print and/or surface design (2), ergonomics for disabled (1), fashion and art intersection (1), design methodology (1), styling profession (1), artisanal fashion (1), trend forecasting (1), fashion shows exploration (1), pigmentation (1) and children wear (1).

Research through design, on the other hand, brings the author as both the practitioner and researcher. In this category, the designer analyses the design practice from the designer's point of view. It includes researches on artistic expressions (4), gender studies (1), fashion and art intersection (1) and pattern cutting (1).

#### **DISCUSSION / CONCLUSIONS**

The objective of this study was to shed light on the current status of fashion design practice studies in Brazilian higher education. In order to do so, we have investigated contemporary fashion research conducted in the country in master's degree level. In a next step, the unit of observation was narrowed to theses focusing on fashion design practice. This provided a clear overview of the production in the country and facilitated positioning this specific stream of research in a broader context.

The overall results indicate the growth of design practice research in fashion and two types of research. Since 2006, Brazilian educational institutions produced 37 theses that are relevant for fashion design practice. It is 25.1% of total productions in fashion research (37 out of 147).

From the broadened stream of research on fashion design practice two types were identified: research into design and research through design. 37 theses look into diverse aspects of design practice while 7 theses were developed and conducted through practitioner's own design work. The study also allowed a better understanding on the schools' reputations regarding topics. What cannot be argued from this study, though, is the applicability of these findings in other contexts outside Brazil. Fashion design education provides very different approaches and demands a much broader and deeper investigation in order to extend the conclusions towards the stage of the academic research in other geographical areas. Additionally, it is sound to continue further studies on fashion design practice that can nurture fashion research. Collective academic endeavors to explore alternative ways of making garments can initiate constructive academic conversations. In doing so, fashion design can overcomes Thornquist's concerns (2014) on the difficulties faced by the field.

#### **Towards Practice Beyond Fashion Design**

#### **REFERENCES**

Almond, K. Guest editorial special edition: Creative cut. **The International Journal of Fashion Design, Technology and Education**. 6(2), 2013, pp.71-71.

Cross, N. **Designerly ways of knowing**. London: Springer, 2006.

Efrat, S. The development of a method for generating patterns for garments that conform to the shape of the human body. Ph.D. thesis. Leicester: Leicester Polytechnic, 1982.

Frayling, C. Research in art and design. **Royal College of Art Research Papers**, 1(1), 1993, pp.1-5.

Friedman, K. Research into, by and for design. **Journal of Visual Arts Practice**, 7(2), 153–160.

Flick, U. An introduction to qualitative research (4th ed.). London: Sage Publications, 2009.

Kawamura, Y. **Fashion-ology**: An introduction to fashion studies. Oxford: Berg, 2005.

Karpova, E., Marcketti, S. and Barker, J. Putting the puzzle together: Apparel professionals' perspectives on creativity. **International Journal of Fashion Design, Technology and Education**, 4(2), 2011, pp.103-113.

Koskinen, I., Zimmerman, J., Binder, T., Redström, J. and Wensveen, S. **Design research through practice**: From the lab, field and showroom. Elsevier: Morgan Kaufmann. 2012.

Laamanen, T. and Seitamaa-Hakkarainen, P. Interview study of professional designers' ideation approaches. **The Design Journal**, 17(2), 2014, pp.194-217.

Lawson, B. **How designers think**. Oxford: Architectural Press, 2004.

Lindqvist, R. **Kinetic garment construction**: Remarks on the foundations of pattern cutting. Borås, 2015.

López-Araquistain, B. A. **Piel artificial**: Metamorfosis arquitectonica del cuerpo atraves de la superficie. Universidad Politecnica de Madrid, 2015.

Mäkelä, M. Knowing through making: The role of the artefact in practice-led research. **Knowledge, Technology & Policy** 20(3), 2007, pp.157-163.

Nimkulrat, N. Paperness, expressive material in textile art from an artist's viewpoint. Aalto University, 2009.

Nixon, N. and Blakley, J. (2012). Fashion thinking: Towards an actionable methodology. Fashion Practice: **The Journal of Design, Creative Process & the Fashion**, 4(2), 2012, pp.153-176.

Pires, D. B. A história dos cursos de design de moda no Brasil. The history of the courses of fashion design in Brazil. **Revista Nexos**: Estudos em Comunicação e Educação. Especial Moda/Universidade Anhembi Morumbi – Ano VI, nº 9 – São Paulo: Editora Anhembi Morumbi, 2002, 112 p.

Rissanen, T. **Zero-waste fashion design**: A study at the intersection of cloth, fashion design and pattern cutting. University of Technology. 2013. Retrieved from http://hdl. handle.net/10453/23384

Rowe, P. **Design thinking**. Cambridge, Mass.: MIT Press, 1987.

Sinha, P. Creativity in fashion. **Journal of Textile and Apparel, Technology and Management**, 2(IV), 2002.

Thornquist, C. Basic research in art: Foundational problems in fashion design explored through the art itself. Fashion Practice: **The Journal of Design, Creative Process & the Fashion**, 6(1), 2014, pp.37–58.

#### 23

## THE NEW FASHION DESIGNER PROFILE THE INDUSTRY IS SEEKING FOR

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### INTRODUCTION: CONSUMPTION WIDESPREAD ACCELERATION IN OUR ERA

"The mobilization of fashion in mass markets, as opposed to elite markets provided means to accelerate the pace of consumption not only in terms of clothing, ornaments and decoration but also in a wide range of lifestyles and recreational activities", writes David Harvey. This acceleration directly influences the "post-modern ways of thinking, feeling and acting. The first important consequence was to emphasize the fashion transience and volatility, products, production techniques. The feeling that everything that is solid breaks up into air was rarely more pervasive."

In a retail chain as Inditex, one of the biggest in the world, owner of eight brands, including Zara, designers adapt the product offering everyday by making changes to existing pattern-makes. In 24 hours they decide to produce a modified pattern-make which will be delivered three weeks later. Just last year Inditex sold 900 million skirts, pants, blouses worldwide in its 1,830 stores. According to Jesus Echevarria, the company' spokesman, "it is the consumer himself, thanks to his buying decisions who guides the work of the designers teams."

Following the successful model of Zara, there were other retail chains such as H&M, Uniqlo, Forever 21 and Primark. In Brazil, Riachuelo, Marisa, C&A and Renner also emulate this business model.

#### THE NEW LUXURY

According to Zygmunt Bauman, a
Polish sociologist, what made fashion so
spectacularly present in our daily lives
is the combination of real time digital
communication impact and mass production
with the association between couture
boutiques and big chain stores. "The cultural
and artistic events are swept away by the
fashion engine."

Digital media has provided access to abundant and instant information to everyone. Information about fashion has become accessible and the big luxury brands could influence even more people.

At the same time, if we analyze the sales channels, we can see that shopping malls, for example, have mostly the same stores and many of them are vertical retails belonging to a multinational group which has the same goal: make profit and expand.

Realizing that the luxury trends can be adapted to the mass market was a great finding for large retailers. However, this means that the products are the same everywhere. If this uniformity of product on one hand is bad, on the other hand it is to ensure the success of a collection, to the extent that the trend is not to bet more on a look that has no other references which have sold well in latest collection. This criterion is always safer. Therefore, is it possible to leave innovation aside in an extremely competitive environment?

An alternative is the partnership between

fashion designers and large retail chains, as Bauman mentions. They are creating a "new luxury". A movement that can be widely illustrated with examples such as the recent partnership between Karl Lagerfeld, designer of the sophisticated brand Chanel and the giant retail H&M. The outcome of these associations is the tangibility of the "cheap and wonderful" concepts and that good fashion has nothing to do with high price however with good taste.

#### THE FAST FASHION PHENOMENON

Li Edelkoort, a Dutch researcher of trends in consumption and design, writes about the process of fashion industrialization mentioning that the search for "downsizing" processes in supply chains have led to "a quick and nasty process of restructuring, seeing production leave great centers to profit by exploiting low-wage countries". Instead of boycotting brands that employ cheap labor, consumers are seduced by disposable and affordable clothing. "At a time when many clothes are offered for less than a sandwich. the general feeling is that something is deeply wrong. Prices already prophesy that clothes are made to be thrown away, discarded as a condom and even forgotten before being enjoyed and loved, teaching young consumers that fashion has no value. The culture of fashion has been destroyed".

Li Edelkoort argues that "students of Fashion Design are being trained to become catwalk designers, individualist stars to be discovered by luxury brands. Consequently, the fashion world is working in the twentieth century mode, celebrating the individual, outstanding IT people, developing the exception. In a society hungry for consensus and altruism", she adds, "this takes fashion away from society and makes it somehow obsolete".

According to this thought, what should be the fashion designer profile, and especially how he must be trained to work in a market that is aligned with the demands this new reality imposes?

## THE CONCEPTS HAVE BEEN CHANGING AND TOGETHER WITH THEM THE FASHION EDUCATION

According to Jackson Araujo, in a lecture at the Rosenbaum Fair in 2015, the economy of the twenty-first century celebrates human relations. Trying to avoid the risk of becoming obsolete, fashion should, however, internalize values such as: fashion with activism, sustainability and lightness; new luxury and less waste; conscious consumption; turn emotions into product; aesthetics with ethics; generate income with life stories; preserve intangible capital; enhance individual and collective knowledge.

"The design education consolidation in universities has generated pressure in adapting the academic structures to the reality of the organizations demands," according to Bill Bonsieppe. Fashion education needs to be rethought. In the Designers chapter, Edelkoort says that the big names from the past were able to change society by introducing new silhouettes, new attitudes and new ways of movement. Nowadays designers, however, are continuously recycling past trends.

#### THE ISSUE AMONG DESIGNERS, PATERN-MAKERS AND ENGINEERS

It is important to highlight the difficult relationship among Fashion Designer, Pattern-Makers and Product Engineers. The first one proposes a concept for the industries' collections and for the fashion retail by intuitive means. The last two ones treat the product as a project, using the project methodology.

Bonsiepe raises the question of the existing tension between activities related to cognition (research) and activities related to non-cognition (design). This is achieved by the fact that the designer observes the world with the look of his designability using his intuition to draw. Bonsiepe writes that the "designer provides new experiences in the daily life of a society through products, symbols and services (subject to sociocultural dynamics)." The pattern-maker is the one who has to make the designer project happen. Before carrying out a project it is necessary to plan the product through a methodology and a study applying techniques that support the designer. Today, with the use of computers, projects are benefited from the virtual world.

While a pattern-maker is a technician who sees a drawing with a cognitive look of

its technique to design a product, considering that clothes have to dress well and the project has to be industrially feasible, product engineers and scientists mentioned by Bonsiepe also see the world from the cognitive perspective. They need to design processes, flows and define the project according to the pre-established operating costs.

Bonsiepe reinforces the need to find a middle ground between these two areas, the creative and the cognitive, whilst instigating the subjective and intuitive skills of designers. He writes that there is something in common between them: trial. In his text on the iconic turn around of the design, he refers to changes in the design speech: "technological innovation (digital) enabled new imaging processes" (p.36). These changes imply a speech break: designers can not design as before (if guided only by texts). "This is related to a cognitive turn around in the design disciplines." (p.37)

#### TECHNOLOGY X DESIGN

This "cognitive turn around" would be forwarding an old question that arises technology as something to hinder the designer's creative ability necessary for fashion to hold the ability of being disruptive and proposing new experiences. In a way, this view holds fashion in a stage closer to art than to the industry, polarizing these two categories, instead of fostering the sense of complementarity they should have. According to the Brazilian designer based in Paris

majored in architecture, Gustavo Lins, "today pattern-making is developed by software. Therefore, the need of having a strong background in volume built directly in models is not eliminated. What I have seen from the professionals is the lack of spatial vision, the simple fact that they do not know the patternmaking techniques in sewing or the threedimensional construction. Knowing how to run a program without knowing the basics of the three-dimensional thinking or reasoning can lead the professional to make crucial mistakes having disastrous consequences in the industrial production chain. The secret is to use both hands and the brain at the same. time".

He adds, "technology streamlines make work easier because it provides manufacturing steps as grid, which is already done with the prototype. Every change made in the prototype has to come with grids in different sizes, for example, without eliminating the importance of the three-dimensional pattern-maker knowledge and the ability of building silhouettes that stimulate market interest. The professional who has a three dimensional view has a great ease in working with technology solutions, as required in the market today, being able to picture in his mind which effects could be done by the software.

#### FOR A MULTIDISCIPLINARY EDUCATION AND A COLLABORATIVE DESIGN

As stated by Victor Papanek, the solution

to integrate design with current trends comes from interfaces. Mentioning our innate ability to design, he explains that the "integrated, comprehensive and anticipatory Design is the action of planning and formatting accomplished through various disciplines, an action being developed by interfaces. It is on the border between different techniques or disciplines that most of the new findings are made and most actions are opened". (1972, p.320)

In other words, what the author suggests is that the subject is dealt in collaboration with others and not by itself, facilitating the understanding of the future professional about different points of view and making him able to design pieces that represent a collective intelligence.

#### WHAT COMPANIES VALUE IN THE NEW FASHION PROFESSIONAL

Summarizing what has been discussed here in recent years, several factors have created an environment that is heavily impacting the fashion industry, how clothes are being produced and, as a result, professionals who work in this industry. Among the main factors generating this new scenario, we list five:

» Information: a few decades ago the consumer started having access to a lot of information either from Internet or traveling and getting in touch with different cultures. Today it is very easy for everyone to have knowledge about the main trends in fashion worldwide.

As reported by Gino Giacomini Filho, in addition, advertising (or publicity), characterized as persuasive communication activity and massive service of an advertiser, is the marketing key element to trigger consumption making it part of the consumerist movement.

» Access to quality: at the same time, globalization favored consumer access to different products and with a quality that he did not know when he was limited to a world with many borders. Having main products and luxury brands as references, the consumer has become more demanding and his expectations grew substantially.

According to PALADINE (2010, p 30 and 31), quality is important because: "focus all productive activity on customer service, considering the items he considers relevant (...) the evolutionary element is well visible, as it is invested in a monitoring process that aims to see how customers behave and how to change their needs and preferences in order to serve them better and better."

» Competition: to stand out in a globalized and increasingly competitive market, brands need to be very innovative and creative in their design proposals. Even the basic stuff needs to have now "something else".

According to Eliza Coral et. al. (2004), "Companies must know the strengths on their competitiveness to be able to tackle them and 'develop' strategies taking a better position in the market distinguishing them from their competitors."

» New businesses models: these changes promoted the emergence of new businesses models wherein the development cycle is no longer linear / sequential being replaced by concurrent steps in an integrated manner.

Associated with this fact that the increasing availability of media has allowed companies to deploy other possibilities of negotiation, generating a new concept of customer value (ZOTT; AMIT; MASS, 2010a).

» Digital Technology: Technology has become the main tool for business efficiency. They now have a very wide range of features at their disposal to enhance their ability to produce with more quality, speed, flexibility and saving while preserving the value of creativity and innovation. Technology also appears as an integration tool among teams supporting collaborative work. Castells (1999) states that new technologies are not simply tools to be applied, but processes to be developed.

From this scenario on, how is the professional who will be increasingly valued by the fashion market? The main characteristics of this new professional will be the ones that meet the demands generated in this environment. We can list at least four important skills that are desirable in the qualification and future performance of this professional:

- » Multi-disciplinarity: the new professional is the one who is interested in learning about the world he is inserted, the spirit of the age in which he lives and who can develop a repertoire of information to help him identify and explore behavioral tendencies.
- » Collaboration and proactivity: in this new scenario, the professional who has a collaborative spirit will certainly have advantages over the others because he will work aligned with the demands of a globalized world and businesses models which the product development steps are carried out simultaneously, from the integration of several teams working on the same project at the same time. He will be aware of his needs to have an overview of the process, foreseeing what kind of impact his design will have in the production process, thus developing a cognitive perspective, as well as intuitive.
- » Mastery of new technologies: being technology the new tool for business efficiency and a facilitator for the designer to work in a more cognitive

- perspective, it will be more appreciated the one who has full control to master his use giving support to new products design and production.
- » Continuous training: in a changing world, another important point is the professional commitment to improve his knowledge continuously. The search for improvement should be a priority for professionals who wish to succeed in this new environment.

no contexto dos indicadores de sustentabilidade corporativa. Disponível em: http://www.abepro.org.br/biblioteca/ENEGEP2004\_Enegep1002\_0574.pdf. Acesso em 23 de Mar. de 2016.

CORAL, Eliza et. al. A competitividade empresarial

ZOTT, C.; AMIT, R.; MASSA, L. **The business model**: theoretical roots, recent developments and future research. Business. Navarra, 2010.

CASTELLS, M. 1999. **La Era de la información**: economia, sociedad y cultura. México: Siglo Veintiuno Editores, 1999.

#### REFERENCES

GIRON, L.A. apud BAUMAN, Z. Vivemos o Fim do Mundo. **Revista Época**, 19/02/2014.

BONSIEPPE, G. The Uneasy Relationship between Design and Design Research.In:

EDELKOORT, L. **O manifesto antifashion**. http://www.dezeen.com/2015/03/02/li-edelkoort-manifesto-antifashion-obsolete/

HARVEY, D. **A Condição Pós-Moderna**: Uma Pesquisa sobre as origens da Mudança Cultural. São Paulo: Ed. Loyola, 2001

PAPANEK, V. **Design for the Real World**: Human Ecology and Social Change. Londres: Thames and Hudson,1984.

LEWIS, Robin. **The rules of retail**. Palgrave McMillan, 2014.

HIGGINS, Bob. Highland Capital Partners, **Harvard Business Review**: Rebuilding your business model, Boston, 2011

GIACOMINI, Gino Filho. **Consumidor versus propaganda**, São Paulo, Ed. Summus, 1997.

PALADINI, Edson Pacheco. **Gestão de qualidade**: teoria e prática. São Paulo: Atlas, 2000.

## FASHION FOR ALL FORMS OF LEARNING

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#### INTRODUCION

In recent months, Brazil has witnessed a political and economic crisis with significant losses to social, educational and financial development for the Brazilian family. Technically, we are facing a situation of stagnation. According to, internal and external market evaluators, the governance process of our country has not realized close the basic accounts for the effective maintenance of public health systems, education and security. And before that, as always happened in our country, the lack of macro planning - with solutions for long-term thinking of an effective infrastructure and meets internal and external investment to generate jobs and income, with further strengthening of the regions, we enter a path to possible recession; situation compared to our Venezuelan and Argentine neighbors. Was this the only way?

Considering the family income and expenditures on basic expenses of other countries, Brazil has one of the worst social development levels in the world. The country occupies the 60th place of worst performance in education, according to a study that evaluated 76 countries. Article published on May 13, 2015, in the State / São Paulo. And as data and study by the IBGE - Brazilian Institute of Geography and Statistics, on the Brazilian Family Budget, the total expenditure family monthly average in Brazil, 2008-2009<sup>1</sup> -

<sup>1</sup> Family Budget Survey (HBS) conducted by IBGE in the Brazilian territory in urban and rural areas, from May 2008 to May 2009, six years after the completion of the 2002/2003 HBS

presented a value of R \$ 2,626.31. Information regarding the spending of families earning up to 8 times the minimum wage - R \$ 415.00 for 2008 and R \$ 465.00 for 2009. Since the Southeast presented the highest value to the total average monthly income, R \$ 3,135.80 ; unlike the Northeast with an estimate of R \$ 1,700.26, remaining below the average total expenditure of Brazil at 35.3%. Already, the Central West Region, where our project takes place, this value was R \$ 2,591.14  $^{2}$ .

With this data you can see that good job opportunities were in the Southeast, while the cost of living was and is still very high. Unfortunately, this same survey for the years 2014 and 2015 has not yet been published. But, IBGE expects to happen before the census to take place in 2020.

also nationwide. In partnership with the World Bank under the Assistance Project Human Development Technique - HDTAL - (Human Development Technical Assistance Loan) which is part of wider loan agreement with the Brazilian government; resources were destivnados the viability of collection and targeting studies and tests to improve the survey and the future implementation of continuous POFs with a view to the systematic monitoring of the living conditions of the population from the perspective of family budgets. And yet, within the extension of this study, the Ministry of Health also effected funding for investigations into the quality of life of Brazilian citizens. IN: Consumer Expenditure Survey 2008-2009. Expenses, Income and Living Conditions. Rio de Janeiro, 2010. http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/pof/2008\_2009/POFpublicacao.pdf. Acesso em 24/01/2016,

2 TABLE 2 Data - monetary expenses and nonmonetary average monthly family; total and by total income class and family monthly asset change by Major Regions - 2008-2009. IN: Budgets Research Familaires 2008-2009. Expenses, Income and Living Conditions. Rio de Janeiro, 2010, p. 49.

Available at:<a href="http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/pof/2008\_2009/POFpublicacao.pdf">http://www.ibge.gov.br/home/estatistica/populacao/condicaodevida/pof/2008\_2009/POFpublicacao.pdf</a>>. Acesso em 24/01/2016.

This contextualization is located in, even if briefly, as the Brazilian population has a tight financial situation for their basic maintenance. In this atmosphere, the creative economy was becoming a structure of significant development, sustainable<sup>3</sup> and growing social development policy in Brazil. And the role of the university has been increasingly to intensify discussions on the subject and promote effective building a collaborative and interdisciplinary network of work on the topic. It is in this context that we present the proposal of our project Fashion School.

#### CREATIVE ECONOMY: AN OUTLET FOR BRAZIL

Against a recession in progress, projects, business and social and creative entrepreneurs have provided intelligent job opportunities with significant positive results to the reality of the Brazilian economy. Thus, many events have taken place in the country to expand discussions on the subject, generating reflections that may contribute to the formation of a solid creative work structure in our country. In this context, the project Fashion School was created to promote and articulate other creative learning possibilities, new ways of generating income and producing

cultural and educational partner through a network of integrated knowledge exchange between parents, university, public school students, local community and the clothing industry for the formation of a network work and research.

With this dynamic of knowledge production, the project Fashion School promotes in different everyday spaces a dynamic creative and collaborative learning where a simple activity to measure materials<sup>4</sup> such as satin ribbons, lace and buttons can be a pleasurable tool for understanding mathematics or even mathematical logic applied to day to day many simple procedures used. Besides, of course, the very understanding of the composition of these materials, showing how they can be reused in other functions; for example, in the case of a single button that, on its main function is to close; in our proposal to work the same object can be used as pendant to a neck adornment with marketability.

The economic, social and cultural development is an essential condition for the promotion of improvements for the population, both with regard to their well-

<sup>3</sup> Ultramari, Clovis. Regarding the concept of sustainability. Development has a condition of progress, industrialization, consumer and scientific and technical dominion over nature; sustainable means remain in balance. [...] Accept the paradox of considering viable long path of development, just looking to it that may never be obtained. IN: Monograph Competition Rewarded, 4. Curitiba: Ipardes / IEL-PR, 2003, p. 2-22.

<sup>4</sup> ASHBY & JOHNSON. Materials and Design: the art and science of material selection in product design. We live in a world of material. Are the materials that give substance to everything we see and touch. Our species - Homo sapiens - is different from other, perhaps more significantly the ability to project - to produce "things" from materials - and the ability to see more in an object than just your appearance. Objects can have meaning, awakening associations or be signs of more abstract ideas. designed objects, both symbolic as utilities, precede any registered language - and give us the earliest evidence of a cultural society and symbolic reasoning. 2 ed. Rio de Janeiro: Elsevier, 2011, p. 03.

being and in their training. And this aspect can occur through the expansion and exploitation of local potential.

In this atmosphere, you can see that the use of this type of work proposed in municipalities in the interior of Brazil, in our case, the state of Goias, only contributes to the generation of new employment opportunities, knowledge and greater critical capacity of community involved. In this context, people and cities gain when there is concern about building a space for dialogue and production of other cultural possibilities and learning involving society, university and industry as is the case of this project.

And in recent years the Creative Economy is gaining ground in the field of public policy in many countries and therefore has influenced social, economic, urban and cultural processes. Therefore, according to Rubim (2006, p. 8), "In contemporary times, the culture appears as a single social field and, simultaneously, across permeates all other societal spheres, as nearly ubiquitous figure." Thus, the complexity is expressed by the diversity and diverse aspects with regard to their representation, dissemination, distribution, consumption, among other forms of expansion and materialization.

Increasingly tangential to the economic dimension, is that culture has become a privileged object of attention, that, because we are facing a scenario where there is a great importance in so-called cultural industries, cultural marketing, the converging interrelationship of culture with digital means,

among many other forms of production and proliferation. With this scenario, the creative economy stands and promotes an opening to productions which the greatest aspect is enhanced by the creativity worked in talent or individual ability, whose objects or products from specific practices such as: workshops creative process of this project incorporate this individuality. Something that covers exchange of knowledge and a rich repertoire for the development of even better resolved and potentially interesting ideas, restructured the design, fashion, economy, culture and art itself.

#### THE WORKSHOPS CREATIVE: DEVELOPING ACCESSORIES WITH RIBBONS

Within a phenomenological character methodology with a view to production of objects inserted into an interdisciplinary<sup>5</sup> perspective, it means that they ended up generating protests that proliferate in the community involved, understanding how the knowledge produced in this workshop

Available in: http://revista.ibict.br/liinc/index.php/liinc/article/viewFile/186/103 Acesso em 30/01/2016,





Figures 1 and 2. Preparation and development of accessories with satin ribbons.

Source: the author. Available on the project. blog. https://modanaescolaufg.wordpress.com/2015/11/23/oficinacriacao-de-acessorios-com-tecnicas-de-macrame/

<sup>5</sup> POMBO, Olga. Interdisciplinarity and Integration of Knowledge. The interdisciplinarity is even able to not be anything to be done. It lies somewhere between a voluntarist project, something we want to do, we want to do and at the same time, anything that regardless of our will, we are inexorably to do, like it or not. It is the tension between these two dimensions we, private individuals, precariousness and fragility of our lives, we seek ways to do something that, in our sole discretion and perhaps independently of it, if you are doing. In these circumstances, understand well that I can not answer the question of how to make interdisciplinarity.

#### **Fashion For All Forms of Learning**

promoted innovation and generation of other possible business opportunities, among other favorable conditions for socio-cultural growt.

With a qualitative approach, considering that the students of the schools involved were invited to experience a particular reality with the creation of specific objects to the context; the accessory development workshop provided projective methodology trials in tangentiate observations problems and propose viable practical solutions for the closing parts, or even coordination ways to better visual composition of the developed object. Examples which may be observed in the figures 1.

Faced with satin ribbons already premolded, the question loomed over the little head of the participants: what to do with it? At first glance, everything seemed very confusing and complicated. How to solve problems

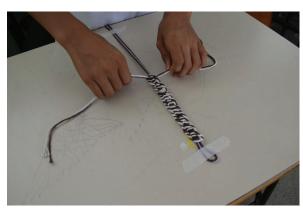


Figure 3. Macrame Cord
Source: Own author. Available in the project blog:
https://modanaescolaufg.wordpress.com/2015/11/23/
oficina-criacao-de-acessorios-com-tecnicas-de-macrame/

closing or molding on the body? How many pieces together in different ways? And the colors? How to mount objects harmonious and pleasant to look at? Questions that, to the extent that students go familiarizing with the materials and talking to the steering group of the workshop - the students of Fashion Design, project fellows; ideas and proposals for the creation of accessories were taking place in a very playful way.

Dynamics applied in the classroom, the group of participating students in the school was divided into two teams, where each group of children was invited to develop specific actions: a group develops currents macrame (handmade technique with cotton cord) to serve as a basis to paste the base of the mooring which was developed by the other room group, as shown in the figure 3.

To complete assembly of the final object, a group helped each other. Students who developed the activity had from 06 to 10 years old. Many developed very easily work because home some parents already work with craft activities. Such prior knowledge indisputably potentiated the results of many objects created in the room. This aspect just encouraging, healthily, achieve better visual results between themselves participants of the workshop students.

After this workshop, adjustments were made and it has been requested in other schools. For the year 2016, we intend to expand this workshop for the development of other parts with even more diverse materials. All within a working methodology

that considers fundamental to solving problems through observation and proposing sustainable and economical alternative for all involved.

#### FINAL CONSIDERATIONS

In this atmosphere, you can see that the workshop has achieved satisfactory results, and promote effective collaboration among the involved students graduations of UFG, school's children, teachers, researchers, community in general and manufacturing industries. Working within a socialization chain of diverse experiences and knowledge that structured a multifaceted knowledge.

Thus, the creative economy is highlighted and promoted an openness to innovative productions whose main aspect is potentiated with creativity crafted by the community. In this project, we are developing a sustainable working structure that prioritizes the collective and all its potential possibilities for cultural and economic production.

The theoretical and methodological basis for regional and institutional organization of this type of activity sets this set of work structure and training as an academic practice. Action joining the University in its teaching, extension and research, with the demands of the majority of the population. This enables the formation of professional and citizen accredits, increasingly, to society as a privileged space for the production of significant knowledge for overcoming social inequalities.

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#### **REFERENCES**

ASHBY M.; JOHNSON; K. **Materials and Design**: art and science of material selection in product design. 2 ed. Rio de Janeiro: Elsevier, 2011.

PALHARES, Isabela. Brazil is the 60th place in world ranking education. Available in: http://educacao.estadao.com.br/noticias/geral,brasile-o-60-colocado-em-ranking-mundial-de-educacao,1686720, 13/05/2015.

SEARCH BUDGETS FAMILY. 2008-2009. Expenses, Income and Living Conditions. Ministry of Planning, Budget and Management. Brazilian Institute of Geography and Statistics - **IBGE** (org). IBGE: Rio de Janeiro, 2010.

POMBO, Olga. Interdisciplinary and exchange of knowledge. Available in: http://revista.ibict.br/liinc/index.php/liinc/article/viewFile/186/103.

RUBIM, Antônio Albino Canelas. Cultural Policies and New Challenges. In: **Matrizes**, 2009. Ano 2,  $n^2$  2.

ULTRAMARI, Clovis. Regarding the concept of sustainability. In: **Monograph Competition Awarded, 4. Curitiba: Ipardes/IEL-PR, 2003**, p. 2-22.

#### MADE IN APPLE: a non-futuristic future of fashion and the Apple Watch case-study

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#### A NON- FUTURISTIC FUTURE OF FASHION AND THE APPLE WATCH CASE- STUDY

"We need to develop a clearer picture of where the new creative society seems to be taking us – so we can decide if we want to go there."

Today, the three protagonists who influence Human Resources issues in the fashion industry are the big corporate fashion brands, large Tech-driven companies, and the new generation of young graduates of fashion design entering the job market. Until recently the failure of big corporate fashion brands to address crucial HR issues has been one of the main factors of the gradual extinction of Fashion as Craft. The present changes in the industry result from this failure which enabled the other two influential factors – although motivated by different agendas – to step in and make changes in order to improve the problematic situation.

Fashion students know that their schools operate more as incubators, detached from the outside world, and less, as a base of knowledge, preparing them for real life. Concerned with their future, they think of the work they can expect after graduating, how their studio will look like, and what are the chances of having a long and meaningful career as fashion designer nowadays. While their future is so uncertain, these fashion

<sup>1</sup> FLORIDA, R.F. (2002) The Rise of the Creative Class and how it's transforming work, leisure, community and everyday life. New York: Basic Books.

students – aiming for a better quality of life and a higher income – are less willing to function as the "new slaves". Nowadays fashion houses such as, *The Row* and *Alexander Wang*, are sued by their interns for bad illegal treatment<sup>2</sup>. As fashion consultant Jean-Jacques Picart stated:

"What I miss is a certain lightness.
The world was different, more regional.
Today, lightness is rare because we live in a world of anxiety. Back then, we worked hard, but the need to make money didn't stop us from having fun... The new generation of designers wants to do its work well and be happy at home. That's very new. And it's completely normal, because we live in a difficult world, business is hard, and if you're unhappy, or you're totally dispersed, your work suffers. Deciding not to have a personal life is a choice.

But it's no fun."<sup>3</sup>

Fresh fashion graduates grew up on 'bigger than life' stories like the one about fashion designer Alber Elbaz. The former Lanvin designer started his career by moving

from a small country (Israel) to New York with 800 dollars in his pocket, willing to do anything for a job. Today the so-called Generation Y (also known as the Millennial Generation)<sup>4</sup> is faced with radical changes in terms of Maslow's hierarchy of needs<sup>5</sup>. The economic safety and job security that their parents enjoyed belong to the past. Driven by an inner "safety level" anxiety the fashion industry is characterized by a constant urge to create new visions and manufacture futuristic products. Fashion designers are in the business of "solving problems", yet time after time, they choose to ignore human needs and are instead, obsessed with designing what the customer "never knew he wanted"6. Branded by image makers with the support of fashion institutes, the work is done through a 'Back to the Future' filter.

> "The fashion industry does not really take technology and its possibilities seriously. Hardly any thought is given to the way in which technology could give fashion a different significance... Both fashion designers and technicians must

radically change their way of thinking if real change is to be initiated. It is important to realize how the fashion system currently works, in order to build, step by step, a bridge to new initiatives."

The narcissist environment of the fashion world encourages sound groundbreaking, but there is a price to be paid. The fashion world enjoys of presenting an image of novelty whereas the truth is entirely different. In fact all what is presented as embodying the quintessence of fashion design is not relevant because of two main reasons: the lack of real value in garment manufacture since the main income of the fashion companies comes from perfumes; and, the "sterility" of fashion weeks and trade fairs which do not generate really any further creative activity. Besides the frequent crossover of big names from one fashion house to another indicates personal agendas and not real and substantial changes.

In an interview that Roland Barthes, author of "The Fashion System" (1967), gave at the time to "Le Monde" he said: "For me fashion is a system. Contrary to the myth of improvisation, of caprice, of fantasy, of free creativity, we can see that fashion is strongly coded." When Barthes's book was published, the fashion 'system' was built around two seasons (summer and winter); during the

<sup>2</sup> ZERBO, J.Z. (2015) "Are Unpaid Internships Acceptable?". The Business of Fashion. [Online] Available from:http://www.businessoffashion.com/articles/opinion/op-ed-are-unpaid-internships-acceptable [Accessed 3/10/2015].

<sup>3</sup> ISAAC-GOIZÉ, T.I.G. (2015) "As He Steps Away From Fashion, Consultant Jean-Jacques Picart Dispenses His Best Career Advice". Vogue. [Online] Available from: http://www.vogue.com/13371195/jean-jacques-picart-fashion-advice/ [Accessed: 5/12/2015].

<sup>4</sup> Twenge, G.M. (2014) Generation Me - Revised and Updated: Why Today's Young Americans Are More Confident, Assertive, Entitled--and More Miserable Than Ever Before. New York: Atria Books.

<sup>5</sup> Maslow, A.H. (1943) "A Theory of Human Motivation". Psychological Review. 50, P. 370-396

<sup>6</sup> Diana Vreeland: The Eye Has To Travel (2012) Documentary, Biography . Directed by Lisa Immordino Vreeland. U.S.A: Distribution company.

<sup>7</sup> Teunissen, J.T and others (2013) "MODE@MOTI, Design for Debate, Future Thinking". Breda: MOTI, Museum of the Image.

<sup>8</sup> Cited in: LANE, B. (2006) "Signifying the Language and Lies of Fashion." The Australian May 24: 40.

decade of the 1980s this evolved into a fourseason system (spring/summer and fall/ winter), and lastly we've been witnessing a fast evolution that has modified fashion into a thirteen-season system! This change derived from the 'Fast Fashion' phenomenon, according to which companies looked for ways to make the customer consume more of their products, and came up with the 'Quick Response' solution. Retailers analyzed the sales data, replicated best sellers in different ways, and pushed them as new inventory in their shops under the label 'new season'. This forced other brands to change their ways of work and speed up each season. Fashion's seasons have nothing to do with the seasons of the year and the changes of the climate anymore and therefore, they have nothing to do with our daily needs.

The fashion industry<sup>9</sup> was caught by surprise earlier this year when the great designer Raf Simons announced he was leaving Dior. Shortly after, in a disturbing coincidence, Alber Elbaz was fired from Lanvin and fourteen years of inspiring work came to an end. In an interview<sup>10</sup> that Simons gave just

a few days before his resignation he referred to the "unmanageable" design process held in fashion houses nowadays and expressed his wish to change it into a working process that can meet both the schedule and design needs. One of the fashion industry's biggest changes has been the transformation of the initially winter-summer two-season system, into a thirteen-season-year system within a few years. Elbaz and Simons both share this impossible timeline and its repercussions, leaving the Millennial Generation to deal with its broad implications.

Céline Toledano and Mathias Ohrel from the talent recruitment agency M-O which opened the latest *Fashion Talks* in Antwerp referred to the designer job as "Teamwork 2.0". Toledano and Ohrel mentioned the conflict between the old generation of designers from the 1980's, upon which this industry was built, and the new generation with its ambition to succeed as Art Directors, and not as Designers.

A comparison with other industries points out the causes of failure in Fashion's working methodology. For instance, High Technology has proven to possess a successful approach towards the creative process by treating it as its biggest asset, it manages to translate it into working flux. In the past years fashion corporations have adopted Hi-Tech management principles and by using them to the maximum they manipulate their working environments to meet the needs of their shareholders.

The Swedish retail clothing company,

*H&M*, is a positive workspace, resembling a Hi-Tech company headquarters. *H&M* utopian picture subtext is, radically enough, a "future". For a little bit of couture glam the company offers collaborations with other luxury brands, sustainability projects (to calm one's conscious about "fast fashion"), and some sophisticated pseudo-intellectual design (under their latest brand Cos). For the young graduate who is concerned with his future needs, this is an offer he cannot refuse. The human resources department of *H&M* targets young students and at the beginning of the graduation year, before any other company even considers contacting new interns. A team of the appealing *H&M* company makes its appearance gives an impressive presentation, distributes sharp business cards, and organizes a seductive talent contest<sup>11</sup>. For the new recruit *H&M* is not just a new "job", but an entirely new "universe". Interns at the company are being paid solely to design!

The expectation of fashion companies for absolute loyalty by its employees is borrowed from the Hi-Tech world. The start-up employee is willing to work underpaid with tight deadlines because he aspires the company's big Exit. The idea behind such a future plan goes back to the "safety level" the fashion graduates look for. Big corporate companies in the fashion world have adopted Hi-Tech management philosophies. The sad truth is that these companies are unable to offer the same "future coupon" to their devoted

<sup>9</sup> FRIEDMAN, V.F. (2015) "Alber Elbaz Leaving Lanvin as Fashion's Slippery Slope Claims Another Designer." The New York Times. [Online] Available from: http://www.nytimes.com/2015/10/29/fashion/fashion-creates-a-slippery-slope-of-designer-departures.html?mwrsm=Facebook&\_r=0 [Accessed: 9/11/2015].

<sup>10</sup> HORYN, C.H (2015) "Raf Simons Speaks to Cathy Horyn on the Speed of Fashion". The Business of Fashion. [Online] Available from: http://www.businessoffashion.com/articles/bof-exclusive/ bof-exclusive-raf-simons-i-dont-want-to-do-collections-where-imnot-thinking [Accessed: 9/11/2015].

<sup>11</sup> H&M Design Awards competition for students at selected design schools around the world.

workers. When it comes to fashion, paid or unpaid internships will never be an investment in one's future.

The gap between the consumer's needs and the final product, between the profession's practice and the workers' rights opened the gate to the strongest player of all – the Tech companies. These last have succeeded to bridge this gap by fulfilling the needs both of their consumers and their employees. It is legitimate to learn from other disciplines, but it seems that the fashion industry has not been adopting essential elements, but only external attributes that cannot bring a substantial change. Eventually, the students graduating from fashion schools will go looking for a job at Apple instead of Lanvin, where they can find a suitable environment for their creative skills, a financial safety and the ability to grow with a company that is loyal to their needs as they are to their product. Smart Wearables are the Hi Tech companies' first step into the fashion industry - a market that shows no signs of slowing down and which allows companies to bring the competencies of 21st century technology into fashion.

If we take the *Apple Watch* as a case-study of different types of collaboration between the two disciplines one may note: *Apple Watch*'s first round was a failure indeed. Yet, the watch's second round together with *Hermès*, is a success story. Moreover, the willingness of a house such as *Hermès*, which has built the brand's name on classic luxury craftsmanship and the ability to survive, would most probably be studied in fashion schools for years to come.

In my paper I chose to approach this subject from different angles, while consciously merging other sectors into it. I believe that one of the reasons fashion has failed in defending itself lies in its shallow image. Fashion's ability to broaden its horizon by acquiring valuable knowledge and working tools might be the key to its renaissance. Indeed, I am convinced that the fashion industry can gain tremendously from fields such as Hi-Tech, Behavioral Economics, Urban and Social Studies, or Industrial Design.

Our culture worships technological innovation and the immediate value attributed to new products results from the self-conviction that they are Necessities. Likewise, my paper would like to remind what fashion is about: we still cannot go outside naked; in winter, it is simply a matter of survival.

The fashion industry selfdestructiveness; futuristic fashion

"Let me tell u something that I did.
I've had my head digitized and they put
this laser that was around u... and they
digitized my face and i made a lot of
faces... so they have got it all on digital
and actors are not going to be real they
are going to be inside of a computer...
you watch it is going to happen. So
maybe this is the swan song for all of
us." 12

Currently the most burning issues in fashion forums are labor rights in third-world countries, the relevance of fashion weeks, and Alber Elbaz Affair. Although numbers cannot lie, fashion coverage in media usually does not cite numbers from up-to-date data, thus confirming the industry's escapist tendency. From global statistics, the number of people employed in the clothing sector in 1990 was 14.5 million. By 1995 the numbers declined to 13.1 million, and later in 2000 to 13.0 million. The textiles sector shows an even gloomier picture: 19.7 million people employed in 1990, 16.8 million in 1995, and 13.5 million in 2000<sup>13</sup>. A closer look gives a depressing picture of failure to maintain and improve this industry's professions, as reported in the last U.S. Bureau of Labor statistics:

"Over the 2010–2020 period. occupations such as sewing machine operators, fabric and apparel patternmakers, textile and garment pressers, and textile knitting and weaving machine setters, operators, and tenders are all projected to decrease in employment... U.S. manufacturing output was nearly 50 percent higher in 2010 than in 1987 after adjusting for inflation, but real output in U.S. textile, apparel, and footwear manufacturing, declined

<sup>12</sup> Listen to me Marlon (2015) documentary film. Directed by-Stevan Riley [DVD] U.S.A: Showtime Documentary Films

<sup>13 (2011) &</sup>quot;Global fashion industry statistics". Fashion United [Online] Available from: https://www.fashionunited.com/global-fashion-industry-statistics-international-apparel [Accessed: 9/11/2015].

substantially over the 1987–2010 period." 14

The difference between the mean annual salary earned by fashion designers in the United States (44,100-80,650 dollars) and by Hi-Tech employees (70,000-120,000 dollars), shows who will enjoy a higher quality of life<sup>15</sup>.

> "In 2010, earnings in many occupations associated with apparel manufacturing were typically lower than the average for all occupations (\$45,230)...Occupations such as textile and garment pressers, sewing machine operators, hand sewers, shoe and leather workers and repairers, textile bleaching and dyeing machine operators and tenders earned a mean annual wage that was more than 15,000 dollars below the average for all occupations."16

Another reason why diving into these numbers should be our top priority, is the fact that women are the great majority in the industry's manpower (in contrast to Hi-Tech professions). The latest reports of the statistical office of the European Union state:

16 Ibid

"The textiles and clothing manufacturing subsector and the leather manufacturing subsector were the only industrial subsections that employed more women than men across the EU-27 in 2007... Given this statistics, it is perhaps surprising that the proportion of workers engaged on a part-time basis was as low as 8.2 %... as it is often a characteristic that activities with a high proportion of women in the workforce are associated with high parttime employment rates. Another key feature of the workforce was that the proportion of those aged under 30... was much lower than the average across the non-financial business economy..."17 Such interesting data on employment characteristics in EU-member countries indicate the need to protect and strengthen these sectors.

In his insightful book about the essence of human capital and the creative ethos, Richard Florida writes about the fabric of life in which this manpower operates in the western world:

> "With 38 million members, more than 30 percent of the nation's workforce, the Creative Class, has shaped and will continue to shape deep and profound shifts in the ways we work, in our values and desires, and in the very fabric of our everyday lives". He continues and describes our

economic machine: "Creativity... is now the decisive source of competitive advantage. In virtually every industry, from automobiles to Fashion... and information technology itself the winners in the long run are those who can create and keep creating. This has always been true, from the days of the Agricultural Revolution to the Industrial Revolution." 18

Scrutinizing Florida's theory and the fashion system as experienced by talented designers such as Raf Simons, one may wonder what will happen if we keep working in terms that do not allow us to "create and keep creating". Florida explains in his book, "The Rise of the Creative Class":

> "Entirely new forms of economic infrastructure, such as systematic spending on research and development, the Hi-Tech start-up company, and extensive system of venture finance, have evolved to support creativity and mobilize creative people around promising ideas and products." 19

# Fashion brands adopting working methods from Tech companies: The Apple Watch by Hermès (A case study)

The report on fashion brands' race for

<sup>14 (2013) &</sup>quot;B.L.S Spotlight On Statistics Fashion" U.S Bureau Of Labor Statistics [Online] Available from: http://www.bls.gov/ spotlight/2012/fashion/pdf/fashion\_bls\_spotlight.pdf [Accessed: 9/11/20151.

<sup>15</sup> See endnote 14 above, U.S Bureau Of Labor Statistics (2013).

<sup>17 (2009)</sup> Archive: "Textile, clothing, leather and shoe production statistics - NACE Rev. 1". Eurostat statistics explained [Online] Available from: http://ec.europa.eu/eurostat/statisticsexplained/index.php/Archive:Textile,\_clothing,\_leather\_and\_shoe\_ production statistics - NACE Rev. 1.1 [Accessed: 9/10/2015].

<sup>18</sup> See endnote 1 above, Florida (2002).

<sup>19</sup> Ibid

talent, published in 2014, by The Boston Consulting Group (BCG), and The Business of Fashion, pointed out the lack of succession planning and training in fashion companies. One of this report's authors, Sarah Willersdorf from BCG, tried to enumerate the problems in the manner the Human Resources of fashion companies function: "It's about focusing resources. Sometimes when I speak to chief human resources officers or chief talent officers, they know these things, but they just don't get the same attention as some of the other areas from the rest of the leadership."20 The report also indicates that: "the revenue growth among firms that excel at recruitment is three and a half times faster, and profit margins twice as robust."

Fashion brand *Rag & Bone* hired Traci Wilk to be the new company's vice president of Human Resources. Hired from outside the company, Wilk drew her inspiration "from technology companies that are more about simplification... When I look to fashion companies, a lot of what they're doing is sort of the old, antiquated, very administrative types of HR activities". <sup>21</sup>

In her company's report, Sarah Willersdorf argues that the HR work became more complicated "because there's a millennial generation – and even a younger generation from that – who just wants to work

<sup>20 (2015) &</sup>quot;Fashion Companies Need to Rethink Their HR Function". The Business of Fashion [Online] Available from: http://www.businessoffashion.com/articles/intelligence/the-strategic-importance-of-hr [Accessed: 9/10/2015].



Figure 1: The I watch by Apple and Hermès campaign



differently, and who want to engage with their employer in a different way... People have to start thinking more aggressively, because attracting, training and retaining great talent has become more difficult."<sup>22</sup>

The fashion industry, which strives to promote smart wearables and technology, has failed so far in implementing new practices. This is not a case of enriching the knowledge of the craftsmen, but more like the creation of a new profession based on new skills.

The designer's work is being reinvented and therefore the job's characteristics are changing as well. The parameters for being a "good" designer, valid so far are not relevant anymore. The working method of a computer hardware employee in Tech companies is entirely different than the one in a fashion studio.

The expansion of technologies into the fashion world will also change retail as we know it. As can already be seen at the *Burberry* flagship store in London, this sector may be replaced by computer software and hardware

Ibid

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workers. Known as Burberry World Live, the store was designed as a physical manifestation of its website, with multiple screens showing off the collections and imitating the online consumer's experience. Why consult with a salesman when you can touch the screen and reach the store's inventory and see a simulation of the clothes on your body. In 2011 design expert, Bradley Quinn, published a book about the new direction taken by various design fields involving new technologies. In his book, "Design Futures", Ouinn interviews the international branding consultant and futurist David Shah who predicted a dramatic change in the way we will shop in the future:

"In the years to come, retailing will become almost fully automated...
Customers will be given a small scanning device, and instead of asking for help from a shop assistant, they will flash the device at the desired item, and information will appear on the device's screen, displaying the colors and sizes available together with images of models wearing the same garment."<sup>23</sup>

The Apple Watch (ex.: Figure 1) was launched in September 2014, and went on sale again in April 2015. In September of that year, Apple announced its collaboration with the French luxury house Hermès to release an Apple Watch with the customary Hermès

interface. Jonathan Ive, the designer of iMAC, iPOD and iPAD, worked for more than three years on the design of the *Apple Watch*. The *Apple* smart watch is a computerized wristwatch, one that offers consumers aesthetic values and high functionality that enhance beyond timekeeping through the ability to personalize the product.

After its first launch, the Apple Watch was considered a flop. Before its re-launching in collaboration with Hermès, the watch was reviewed in a somewhat negative light: "What if the Apple Watch, for all its milled and woven metals, all its appearances on the catwalk, isn't actually all that well-designed? So far, the Apple Watch doesn't seem very useful, and it hasn't proven that fashionable... The Apple Watch is flopping because it's very well executed, but not very well designed. In terms of utility, it's hard to use, and not solving meaningful problems. In terms of fashion, it's a piece of technology that inherently falls short of timelessness, and yet doesn't keep up with fast fashion, either."24

Soon after its second launching, in April 2015, market researcher Carl D. Howe and principal of "Think Big Analytics" company, estimated that the Watch would be Apple's most profitable product line in the company's history, with gross margins exceeding sixty percent. Howe explained his prediction by measuring the cost of the core electronics modules, which are the same in both the

expensive and the sport models and cost little to produce.<sup>25</sup>

The discussion about the relevance of a watch-market in a "smartphone world" might have been important when the first iphone was released in 2007. It has been eighteen years since the first iphone came out. It took another two years to shape it into what we know today as the "smartphone", and cannot imagine our life without. The *Apple Watch* is part of the big booming field of smart wearable technology. Estimations are that this market of wearable technology will reach 170 billion dollars by 2020.<sup>26</sup>

When referring to the *Apple Watch*, I would like to analyze this collaboration from a different perspective. For instance, the iphone revolutionized the cellular communication in such a short time. Is that so? The minds behind the iphone worked long and hard on this product before the final version came out to the market. Therefore, considering the *Apple Watch* just as the luxury watches business threat is a misinterpretation. The fashion industry will suffer from its consequences. As stated by Claudia D'Arpizio, head consultant in the luxury business: "[The Apple watch] is not really competing with the luxury watch industry and also the reasons to

<sup>23</sup> QUINN, B.Q. (2011) Design Futures. London: Merrell Publishers.

<sup>24 (2015) &</sup>quot;Why The Apple Watch is Flopping". Fast Code Design [Online] Available from: http://www.fastcodesign.com/3048375/why-the-apple-watch-is-flopping [Accessed: 9/10/2015].

<sup>25 (2015) &</sup>quot;Analyst: Apple Watch will become Apple's 'most profitable product ever". Business Insider [Online] Available from: http://uk.businessinsider.com/analyst-apple-watch-is-profitable-2015-4?r=US&IR=T [Accessed: 9/10/2015].

<sup>26 (2015) &</sup>quot;6 Core Beliefs Behind the New 'Apple Watch'". The Business of Fashion [Online] Available from: http://www.businessoffashion.com/articles/bof-exclusive/6-core-beliefs-behind-new-apple-watch [Accessed: 9/10/2015].

buy this product are completely different."27

# The future fashion designer job search will begin at Google

"Disasters are usually a good time to re-examine what we've done so far, what mistakes we've made, and what improvements should come next."<sup>28</sup>

Around the same time that the second Apple Watch was released at the Paris Fashion Week, Opening Ceremony unveiled a luxury smart bracelet named "My Intelligent Communication Accessory" (MICA) developed in collaboration with Intel; Tory Burch launched a collaboration with FitBit (a company in the field of consumers electronics), Intel has announced a brand partnership with Fossil and Samsung's Gear S Smartwatch made an appearance on the Diesel Black Gold catwalk.

Alongside the *Apple* surprising collaboration with *Hermès*, or the *Google* and *Intel* collaboration with *Tag Heuer*, a few role shifts from fashion to Hi-Tech occurred; Angela Ahrendts, former CEO of British luxury retailer *Burberry*, is now head of retail and

online stores at *Apple*. Paul Deneve, former CEO of the iconic Yves Saint Laurent luxury brand, joined *Apple* as vice president of "special projects" (Deneve even appeared at Paris Fashion Week in a cocktail party for the introduction of the *Hermès Apple Watch*...).<sup>29</sup>

In 2014 Angela Ahrendts was ranked 16 in Fortune magazine's annual ranking of America's leading businesswomen<sup>30</sup>. Known for her communication skills and her accessible approach, in the few interviews she has given since entering her new position in *Apple*, Ahrendts has been talking about the important role the company's employees' well-being play in the company's success<sup>31</sup>. (In her inspiring period at *Burberry*, Ahrendts was shot for the cover of Fortune magazine, holding an iPad...).

Alongside Ahrendts and Deneve, Apple hired some other former fashion and luxury executives in companies such as, Hermès, Louis Vuitton, Azzedine Alaïa, Céline, Gap and Nike: Patrick Pruniaux, Chester Chipperfield, and Catherine Monier (Special Projects), Marc Newson (SVP of Design), Marcela Aguilar (Global Director of Marketing

Communications), and Musa Tariq (Digital Marketing Director). We should try to understand what made these highly qualified individuals make such choice: is it because they recognized a new need for their skills in a different sector, or is it because of the fashion system's new working methods that did not allow them a freedom of action?

Based on a new working method held in fashion houses in order to handle today's pace, a new profession has been born – the Art/Creative director:

"Creative director is the highest creative position in a fashion house. The creative director does not design clothes, but instead formulates and impresses upon the designers an overarching concept or concepts for a certain collection and the label as a whole. A fashion creative director's main role is to establish what designs should be created, what will appeal to the target market and how the concepts will be applied and distributed in collaboration with fashion designers who are responsible for creating the clothing and fabrics."32

In a world where branding is as important if not more so than designing a collection, the new tag of 'creative director' is largely due

<sup>27 (2015) &</sup>quot;Middle-market brands unnerved by the Apple Watch". Financial Times [Online] Available from: http://www.ft.com/intl/cms/s/0/068aa778-2ed0-11e5-91ac-a5e17d9b4cff.html#axzz3uDOQe7oP [Accessed: 27/11/2015].

<sup>28 (2015) &</sup>quot;Business education – more or less?" Dan Ariely blog. [Online] Available from: http://www.ft.com/cms/s/0/068aa778-2ed0-11e5-91ac-a5e17d9b4cff.html#ixzz3sh2mWkQ2 [Accessed: 27/10/2015].

<sup>29 (2015) &</sup>quot;The Mysterious Case of Apple and the Elusive Angela Ahrendts". The New York Times [Online] Available from: http://www.nytimes.com/2015/10/27/fashion/apple-and-the-elusive-angela-ahrendts.html?\_r=0 [Accessed: 29/11/2015].

<sup>30 (2015) &</sup>quot;Most Powerful Women". Fortune [Online] Available from: http://fortune.com/most-powerful-women/angela-ahrendts-16/ [Accessed: 29/11/2015].

<sup>31 (2015) &</sup>quot;What the heck is Angela Ahrendts doing at Apple?". Fortune [Online] Available from: http://fortune.com/2015/09/10/angela-ahrendts-apple/ [Accessed: 29/11/2015].

<sup>32 (2011) &</sup>quot;Fashion Director: Inside Jobs. Discover new career opportunities and paths that can take you there". Inside Jobs. [Online] Available from: http://www.insidejobs.com/jobs/fashion-director [Accessed: 5/12/2015].

to the fashion industry's escapist tendency together with the corporations' efficient mechanisms, but in my opinion this is more a semantic, rather than a significant, change in the designer's profession. When asked about the design process at *Dior*, *Raf Simons* complained about the lack of brainstorming and reflection time with his team. The Creative Class theory refers to the crucial need of "long periods of intense concentration punctuated by the need to relax, incubate ideas, and recharge."<sup>33</sup>

Industry predicted statistics drew a dark future for the 2012/22 decade. The employment of fashion designers in the United States was projected to decrease by three percent, whereas the employment of fashion designers worldwide was projected to decrease by fifty one percent. Reports show that as new clothing technology is developed, fashion designers will have to create smart wearables:

"The system as we know it has worked for twenty years and now it needs to change. If I were 30, I would be terribly excited about it. It would inspire me. It's a period of rupture, challenge, daring, courage, work—all the things I love."34

In an effort to understand the bear hug that technology gives nowadays to fashion and

the blind faith with which the fashion industry responds, I do find hope in some cases. Last September the European multinational luxury goods conglomerate LVMH Moët Hennessy Louis Vuitton SE hired Ian Rogers, former CEO of Beats (an online music streaming service that was bought by *Apple* in 2014). Being a success story in the Silicon Valley, Rogers' decline of various "dream job offers" in the Tech industry, raised quite a few eyebrows. Later that year the *Hermès* collaboration with the *Apple Watch* was announced. Coming from one of the strongest players in the luxury sector, investors wonder about this move and about the benefits *LVMH* might see by being associated to someone like Rogers<sup>35</sup>. There is a slight chance that this corporation future strategy will just keep LVMH brands alive and maintain them as the strong players they are now. I wish not to wake up one day and find that this has been fashion's sword of Damocles.

Maybe that is just the thing to do; Hi-Tech companies such as Apple flourish exactly where the fashion industry failed – in treating HR as an asset and as a crucial factor for the company success. The Apple strategy is founded upon the importance of the human need (either of the customer or the employee).

The Genius *Apple Bar* opened in 2001 Steve Jobs, who wished to help his employees and customers, revolutionized retail as we knew it. In an interview earlier this year Angela Ahrendts commented: "If you're going to employ people anyway, why not make them the differentiator? They're not a commodity." <sup>36</sup>

My point of view may sound extreme for those who are busy with the day by day survival in this business, but one should not forget that radical changes take time and leave little crumbs across the road of change. If all fashion professions, as we know them, are holding their final swan song, we should exploit this opportunity and give the consumer the ability to believe in Craft again.

Earlier this year, *The Business of Fashion* – an online daily platform for fashion business – launched a new section on fashion education. As a kick start this new section published a special report based on a wide survey of students and graduates from fashion schools around the globe. They are young, motivated and well familiar with the numbers. Their motivation, however, does not come from the need to change the world, or design the perfect dress, but from the wish to make money and fast. Can anyone imagine that the next Vivienne Westwood will emerge from one of these fashion schools?

In this regard, Vivienne Westwood – one of Britain's biggest fashion designers – opens her autobiography with a clear statement:

<sup>33</sup> See endnote 1 above, Florida (2002).

<sup>34</sup> See endnote 3 above, Vogue (2015).

<sup>35 (2015) &</sup>quot;Talent flow reverses as Luxury groups get serious about digital". Financial Times [Online] Available from: http://www.ft.com/intl/cms/s/f14f0c66-5637-11e5-9846-de406ccb37f2,Authorised=false. html?siteedition=intl&\_i\_location=http%3A%2F%2Fwww. ft.com%2Fcms%2Fs%2F0%2Ff14f0c66-5637-11e5-9846-de406ccb37f2.html%3Fsiteedition%3Dintl&\_i\_referer=&classification=conditional\_standard&iab=barrier-app#axzz3su8kvZUv [Accessed: 12/10/2015].

<sup>36</sup> See endnote 31 above, Fortune (2015).

"My duty is to understand; to understand the world. This is our exchange for the luck of being alive. From people who have lived before us we can rediscover different vision of the world through art – this is the true meaning of culture – and by comparison, we form our own ideas of a world better than the one we are in, the one that we've made a mess of. We can change our future. In the pursuit of ideas you will start to think, and that will change your life. And if you change your life, you change the world."<sup>37</sup>

Preoccupied by the constant need to stay relevant the fashion industry acts from an anxiety reflex - responding, instead of inventing. No longer a key-leader in the field of "needs and solutions", the fashion industry perpetuates the terrible destructive perception of fashion as a shallow immaterial field. The great French designer, Jean Paul Gaultier, once said that "Fashion is not Art" nevertheless fashion has a practical role in our daily life, capturing the Zeitgeist of our times. Moreover, beyond the needs level, fashion should use its design potential in order to influence, stimulate, and shape our future just like smart wearables do. If you cherish design, reflect for a minute what is in store for these creative people. Creative directors in open spaces, sitting behind their desks under neon lights with only their computer to keep

them company – literally technical human machines. This is how fashion design will look like in the future.

We should always aspire to know the people behind the products and the story behind the people. Commonly mistaken as a French native fashion designer, Alber Elbaz was born in Morocco. The former Lanvin creative director immigrated to Israel, spending his childhood in a small housing project in the city of Holon (outside Tel Aviv). His story represents the globalization dream of open borders calling upon talented fantasists to start their journey. In a lecture he gave this year at the Condé Nast International *Luxury Conference* entitled "Can Computers Ever Replace the Creative Mind of a Fashion Designer?" Elbaz spoke reflectively about fashion and technology, as if he's woken up from a bad dream:

"In Paris I was invited to a party celebrating the launch of the iWatch. It was the best dinner party in Paris — fun and happy and grateful. I came very late to the party, and I looked at the whole industry, the whole room from the outside because I was not seated. Our industry — the industry of fashion — looked a bit tired, a little bit confused, a little bit stressed and anxious. The Apple boys — they looked sexy and glamorous and beautiful, and they were having fun. I was thinking on my way home, and I couldn't stop thinking about it, and I was saying,

<sup>37</sup> Westwood. V.W and Kelly. I.K, (2014) Vivienne Westwood. London: Macmillan Publishers Limited.

<sup>&#</sup>x27;How come technology took over the glamour of fashion?" 38

<sup>38 (2015).</sup> Crisell, H.C. "Alber Elbaz on the Apple Watch and the Role of Creativity in a Hi-Tech World" New York Magazine. [Online] Available from: http://nymag.com/thecut/2015/04/alber-elbaz-on-the-apple-watch-and-glamour.html# [Accessed: 5/12/2015].

# FASHION IN CEARA: sustainable aspects in professional qualification

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# INTRODUCTION

Fashion is a phenomenon present in the social, economic, and cultural context, it changes with the complexity of trends involving human relations (Erner, 2015). Many scholars explain the "fashion system", a scenario emerged in the twentieth century in relation to the contemporary consumption culture (Lipovetsky, 1989; Barthes, 1999; Baudrillard, 1991; Mello e Souza, 1987; Svendsen, 2010). In this universe SANT ' ANNA (2007), explains the fashion theory and its connections with the various streams of knowledge. Thereby, the "fashion system" is a model derived from the west, organized by the European culture with expansion in America. Historically, France celebrates excellence in high women's fashion market and England. men's fashion Market with its aristocratic refinement. The support to leverage the system began in Paris, the epicenter of fashion, with the creation of the first professional school. Conceived by Alexis Lavigne (1841) came the ESMOD, secular school currently based in several countries. This fact gave rise to professional training as a link aggregated in the fashion field.

In 1942, in the United States at New York city, opened the Fashion Institute of Technology. In 1942 Brazil has the first fashion work educational organization, the National Service of Learning – SENAI, an initiative of the National Industry Confederation - CNI. However, just by the eighties of the twentieth century it began the technical, technological

and academic fashion training in Brazil. In 1984 it was created in Rio de Janeiro the Central Industry Chemical Technology and Textile, called SENAI CETIQT. In São Paulo (1988), Faculdade Santa Marcelina opened the first degree course in fashion. Anhembi Morumbi University came just after, and impanted the fashion degree course in 1990. Anhembi also innovated deploying a fashion online course, made at distance. In sequence, 1991, University Paulista opened degree courses in fashion. Therefore, São Paulo comes as the pioneer city in fashion education in the country. In the nineties, other formats of professional fashion courses were held in São Paulo, Rio de Janeiro, Belo Horizonte and Fortaleza. But it was in Fortaleza that came the first public course in Fashion Styling in 1994, held at Federal University of Ceará. This boundary between the southeast and northeast is also the beginning of a new scenario of knowledge, adopting professional training in fashion. Therefore, this work is qualitative and explores documentary and bibliographical references on the fashion training in Ceara.

# **FASHION AND INTERFACES**

Scholars say that fashion permeates history as a field of knowledge and it has interfaces in various streams of knowledge. Fashion is a sociocultural phenomenon emerged with the social rise of the bourgeoisie since the fourteenth century, occurred in Europe. According to Lipovetsky (1989), its

continuity was maintained by the aristocracy giving it a hierarchical position and ensuring social distinction. Fashion has the symbolic force to identify social stratification, and it carries in its origin references of hierarchy social classes and groups distinction, plus news produced by the contemporary dynamics of living and being.

One aspect of distinction was the imitation of the nobility clothing and taste, practiced from the emerging bourgeois class. Although the clothing is associated with fashion, it perceives several dimensions, so as the distinctive, aesthetic and pragmatic symbolic functions. The dress is a specific type of clothing symbolic expression. The clothing has the function to cover, protect, and adorn the body, distinguishing it.

The body uses clothing in various forms comprehending a set of objects like shoes, props, decorations, jewelry, trinkets, artifacts, derived from the garment industry. In the context, clothes, clothing and dressing are dimensions that make part of the fashion system with its dynamics, as a "reflection in the mirror," precisely because reflects the companies with their characteristics in time and space and the people who are part of it (Mendonça, 2006).

In contemporary view fashion is framed from the perspective of consumption, developed by industry. Brazilian fashion has tradition in organizing their events focused on professional and business, like fairs focusing on the fashion industry. The fashion shows organized by São Paulo Fashion Week are

a professional expression that promote the evolution of Brazilian fashion. In the world, this scenario elects the organization of Productive Textile Chain in its segment, a link driver of fashion and clothing development.

Fashion in Ceara: the connection with the textile and clothing industry

The history of fashion in Ceara has historical peculiarities and its emergence is linked to the textile industry, located in the State in the nineteenth century. The manufacturing process follows with its variables that demarcate four limits of industrial development, from spinning to weaving, resulting in four generations of entrepreneurs. 1. The first begins with the Pioneers (1882-1900); 2. The second generation: Entrepreneurs (1900-1960); 3. The third generation: the Moderns - Tax incentives and Transformations (1960-1980); 4. The fourth generation: the New Business - Textile Industrial Park Strengthening in the end of the twentieth century (from 1980), FIUZA (2002).

From this order, Ceará fashion has always expressed the cultural aspects in social relationships and consumption, however since the second half of the twentieth century it has a new cultural approach: professional qualification in the field of fashion, expecting to rise the production of industry.

Ceara Productive Textile Chain follows its path weaving aspects of regional development for over 120 years. At present, the fashion system issues are considered as a reflection of industrial development associated with human development in the professional dimension, reason to prospect the future. These are actions that underlie the theory and practice, and represent a continuous process of evaluation on inclusive issues, with are competitive on the global stage. According to VIANA (2005), nowadays the Northeast industry shows more efficiency through organizational and governmental policies envisioning competitiveness.

We emphasize the training in fashion and design field education, a model capable to promote development changes that go beyond the Textile Chain. In this sense it is claimed that fashion in Ceara keeps because of the local textile park, adding impetus to the creative process of products made and distributed in the market. This field is suitable for the actuation of the fashion business, stylist or designer, graduated from higher education institutions, that becomes an authorized agent to act in the productive system. The clothing apparel industry consists in a total of 1,592 formal companies: micro, small, medium and large.

CHRISTO (2013) recognizes Fashion as a sociocultural phenomenon that influences the production field of clothing objects. To BRAGA (2011), the fashion culture in Brazil still bears the mark of the European influence, and nowadays reveals performances of a new Brazilianness. GRUMBACH (2009) believes that the European tradition, especially the French, yet achieves notoriety, but recognizes

that Brazilian fashion has indicators of great creativity in consequence of fashion training schools.

# ANALYSIS OF FASHION AND DESIGN TRAINING AREAS

According to Moura (2015) it is relevant to treat the areas of Fashion and Design as stand-alone courses, but also integrated and complementary. He states that since modernity both fashion and design are areas of products production, which interact and stimulate the capitalist system. Both are firmly present in contemporary actions relative to social relations.

In perspective, the training also advances in scientific research, interacting beyond fashion and design, with technology, with innovation, among others, "Brazil's cultural diversity implies in the field of fashion and design. Everyday it becomes more complex to dialogue with the interrelationships between segments of this diversity" (MOURA, 2015, p.57, our translation) which allows to build interdisciplinary and transdisciplinar relations, from its relationship with other sciences and other fields of knowledge.

From the viewpoint of Fashion and Design professional formation in Brazil, just over in the last two and a half decades came this new scenario. There is now a range of courses registered by higher education institutions in the Ministry of Education, available on the platform e-mec. Among the 27 states of the Federation, only the state of Rondonia has no

degree in fashion or design. The others record the total of 664 courses, mostly associated with the design and fashion design, and 23 denominations courses were identified.

It is understood the dominance by design due to the CNE / CES. 67, with the National Curriculum Guidelines for graduate courses that set the framework for Fashion courses to the area of Design, in defining the competencies to be developed by the egress professional. MARQUES (2014) explains that in 2004 the Ministry of Education approved the National Curriculum Guidelines for Undergraduate course Design by Resolution CNE / CES no. 5, of 8 March 2004, based on CNE / CES on. 67 and. 195/2003 of 5 August 2003. In 2006, it were published the catalogs of higher education technology. From these publications, bachelor degrees in Fashion, which had a multitude of different nomenclatures, now belong to the field of design, while the technological courses used the term Fashion Design.

In Ceara are identified two types of higher degree: Bachelor's and technologist. Four bachelor's degree programs are maintained by federal public institution – UFC, and other 20 technology undergraduate courses are in private institutions. The beginning of the first course creation dates of 01.01.1994, from the Federal University of Ceará - UFC.

However, before the bachelor's approval, UFC held two extension courses between 1989 and 1993 through an agreement between the Technological Centre of Ceará Clothing (CTCC), the Department of Trade

and Industry of Ceará (SIC) the National Industrial Apprenticeship Service (SENAI), the Federation of Industries of the State of Ceará (FIEC), textile and clothing industries and under the management of Rector Professor Raimundo Hélio Leite. The result was the professionalization of 40 students absorbed immediately in the fashion clothing market.

The professional performance in the field of fashion and clothing

Academic training is exalted, sure of its importance to the state's economy and to establish a link with the business of the Textile Industry and Confection. Professional internalizes the knowledge, develop the skills and competencies and ensure its integration into the working world developing fashionapparel products. It also guarantees to occupy

a range of market segments in the areas of marketing, communication and others. The playing field can absorb this professional, because fashion expands general knowledge to meet the expectations of the consumer. The field of fashion has a large repertoire of interests and involves different actors establishing the possible rules to maintain relationships.

According to MARQUES (2014), this universe is not limited to performative shows and media publications in editorials from specialized journals. It is not also limited to the action of Fashion consultants with companies; or to the advertising and marketing strategies that leverage the sale of products. Therefore, the stylists and designers act as agents in the clothing objects production field. Fashion moves in several areas, but it asserts itself as a dependent

COURSE NAME	DEGREE	LASTING	TOTAL COURSE
Design	Bachelor	8 semesters	02
Design Digital	Bachelor	8 semesters	01
Design-Moda	Bachelor	8 semesters	01
Design Interiores	Technologist	4 semesters	04
Design de Moda	Technologist	4 semesters	06
Design de Produto	Technologist	4 semesters	03
Design Gráfico	Technologist	4 semesters	06
Moda	Technologist	5 semesters	01
Total			24

Table 1. Identification. Fonte: http://emec.mec.gov.br > acesso em 23.03.2016.

on the Textile and Clothing Sector, because clothing belongs to the cyclic order of fashion communicating consumer trends.

The professional field in Ceará has a creative dynamic in organizing events, fairs, seminars, conferences, fashion shows. It's emphasized the event Dragão Fashion Brazil in Fortaleza, which involves agents, creators, designers and stylists, in order to promote their authorial fashion products beyond national borders. DFB is in its 17th edition as a creative industry model with recognition in national fashion field.

This analysis includes other data that involves local fashion professional. He is invited to participate in the dialogue with the government, at the state level. This is the Clothing Sector Productive Chamber, refurbished in 2012, a permanent action to maintain, improve, and expand the Fashion segment (YEARBOOK OF CEARÁ, 2015). It should be considered that Ceará is the fifth state in Brasil with the greatest textile and clothing confection production. Similarly, fashion professionals can participate in the strategic planning of the clothing industry. Lets meet and contribute to sectoral policies (CAMARA INDUSTRY ATTIRE, 2013). In the context of public policies at Fortaleza city, there is the Municipal Council for Cultural Policy and includes the Permanent Forum of Fashion. Composed of fashion professionals, it aims to develop the creative and solidarity economy in the productive groups of artisanal character. These are opportunities to experience professional knowledge.

# **CONCLUSION**

From this analysis it can be assured the sustainable aspects in the field of Fashion in Ceara, associating professional stylist or fashion designer as a transforming agent of new models that have been drawn. Training is a learning process that develops intellectual and technical capabilities, in accordance with the researchers.

that there is a constant motivation to practice sustainability in the field of fashion and in their interconnections, in order to assess the evolution of Ceara fashion culture.

# REFERENCES

**ANUÁRIO DA MODA NO CEARÁ** 2013-2015. Fortaleza: Editora: Verdes Mares, 2015.

BARTHES, Roland. Sistema de moda. Lisboa: Edições 70, 1999.

BAUDRILLARD, Jean. A sociedade de consumo. Lisboa: Edições 70,1991.

BRAGA, João; PRADO, Luis do. **História da Moda no Brasil**: das influências às auto-referenciais. São Paulo: Pyxis Editorial, 2011.

CAMARA SETORIAL DA CADEIA DE PRODUTOS DO VESTUÁRIO. **Planejamento estratégico** 2013-2018. CSVESTUARIO. Fortaleza, 2013.

CATÁLOGO SINDITÊXTIL CEARÁ. Fortaleza, 2010.

CHRISTO, D. **Estutura e funcionamento do campo de produção de objetos do vestuário no Brasil**. 2013. 146 f. Tese. (Doutorado em Design) – Pontifícia Universidade Católica, Rio de Janeiro, 2013.

GRUMBACH, Didier. **Histórias da Moda**. São Paulo: Cosac Naify, 2009.

ELIZABETH FIÚZA ARAGÃO (Org.) **O Fiar e o Tecer**: 120 anos da indústria têxtil no Ceará. Fortaleza: Sinditextil/FIEC, 2002.

ERNER, Guillaume. **Sociologia das tendências**. 1.ed. São Paulo: Gustavo Gili, 2015.

CURSO de Estilismo ainda em nível de extensão. O Povo, Fortaleza, 27 mar. 1990. Vida e Arte, B.

LIPOVETSKY, G. **O império do efêmero**. São Paulo: Companhia das Letras, 1989.

MARQUES, Cyntia Tavares. **Do estilismo ao design**: os currículos do bacharelado em moda da Universidade Federal do Ceará. Tese de Doutorado, 195 f. Cyntia Tavares Marques. Fortaleza, 2014.

MENDONÇA, Miriam da Costa Manso. **O reflexo no espelho**. Goiânia: Editora da UFG, 2006.

MOURA, Mônica. Ensino e pesquisa científica no design e na moda no Brasil: caminhos que se cruzam e se realimentam. In. MATTOS, Maria de Fátima da Silva Costa de. (Org). **Pesquisa e Formação em Moda**. São Paulo: Abepem: Estação das Letras e Cores, 2015.

SANT'ANNA, Mara Rúbia. **Teoria de Moda**: sociedade, imagem e consumo. Estação das Letras. São Paulo, 2007: Companhia das Letras, 1987.

SOUZA, Gilda de Mello e. **O espirito das roupas**: a moda no século dezenove. São Paulo: Companhia das Letras, 1987.

SVENDSEN, Lars. **Moda**: uma filosofia. Tradução Maria Luiza X. de A. Borges. Rio de Janeiro: Zahar, 2010.

VIANA, Fernando Luiz Emerenciano. A indústria têxtil e de confecções do nordeste: características, desafios e oportunidades. Fortaleza: Banco do Nordeste do Brasil, 2005.

# FASHION AND

INTRODUCTION

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# THE AESTHETICS OF DRESS

Ian W. King London College of Fashion i.king@fashion.arts.ac.uk This paper precedes a book of the same name (to be published by Springer in late 2016) that calls for a revision of our understanding, and its application, of the terms *aesthetics with dress*.

There are a number of texts that have examined and sought to elaborate the guise of aesthetics but this has traditionally been realised through examples borrowed from fine art (for further information see Cazeaux, (2001, 2010); Levinson, (2005). Often this literature is very dense and sometimes quite ambiguous and confusing (see Shusterman, 1999). I do not intend to repeat this type of examination here rather I want to restrict my observations to argue that when fine art examples are used to exemplify aesthetics these are then normally situated within two or three-dimensional frames (for example: paintings, sculptures etc.). Thus providing relatively thin and inaccessible examples that are too remote for the majority of people living in everyday life. For me, part of the problem of our confusion over the meaning of aesthetics is the use of these types of examples. Aesthetics is not a dusty, academic concept rather it is a term requiring everyday accessible examples that exemplify the potential of this area. It is in these circumstances that in this short paper I will attempt two aims: firstly, our bodies are mobile and can be discussed over multiple dimensions and it is the richness of this discussion in terms of dress and

communication that is vitally important in terms of understanding the meaning of aesthetics: and secondly, focusing on the body (rather than fine art) is more consistent with the original introduction and understanding of the term as introduced by the Ancient Greeks.

### **UNDERSTANDING AESTHETICS**

Let me start by allocating a few lines to providing a context and definition of aesthetics and its relevance to dress. The term Aesthetics can be traced back to the Ancient Greeks and derives from the Greek word for 'perception (aisthesis). A word/ term used by Plato and then later Aristotle to mean lived, felt experience; that is, knowledge developed through the senses which traditionally is in complete contrast to eidos, which is knowledge derived from reason and intellection. It was this latter route (eidos) that became the appropriate one for examination during and following the period of enlightenment. In particular three philosophers shaped our understandings of aesthetics: Alexander Baumgarten, Immanuel Kant and Georg Wilhelm Friedrich Hegel. Baumgarten's epistemological-scientific approach construed aesthetics as a general science of sensory perception that was involved in discerning and producing beauty. Though beauty was important to the field, the emphasis of the aesthetic (as reflected in its etymological root) was more concentrated on its mode of perception or consciousness. and the scope of aesthetics was much wider

than art, including not only natural beauty but also our daily practices. Baumgarten thus advocated improved aesthetic perception (achieved through various forms of training) not simply for fine arts but as a way of improving our general, including practical, functioning. In Kant, we find aesthetics as a theory of taste that emphasizes beauty and the sublime in nature (with respect to which judgments of taste were alleged to be purer) and in art (where their purity was marred by representational, conceptual meanings). But Kant sharply distinguished the aesthetic from the realm of truth and from practical or ethical matters. In Hegel, aesthetics is defined as the philosophy of fine art. He notes the perceptual etymology of the term 'aesthetic' only to brand this meaning as irrelevant, just as he rejects the term 'kallistic' (from the Greek word for beauty, j\_kkoy) as too general for designating the aesthetic field, because he claims the science of aesthetics should deal only with 'artistic beauty', while making its prime focus 'the highest ideas' that art presents through its beautiful 'sensuous forms'.

In terms of the context of this paper, it was not until the twentieth century that we can note a distinct change in direction (actually it might be claimed this was a return the original understanding of aesthetics) with two key philosophers who were confident enough with their respective contributions to 'shake-off' the confines imposed by the three writers above. Chronologically the first was American John Dewey and he was clear from his 1934 text that it is through

our embodied engagement with everyday events that meaning emerges. This approach complements post-second-world war French Writer Maurice Merleau-Ponty who following in the phenomenology traditions advocated for the primacy of the lived body as it engages with everyday life. That is, things are meaningful by virtue of our engaged relations through qualities of situations, people, feelings, emotions, images, image schematas, and concepts.

Mark Johnson (2007), drawing from both Dewey and Merleau-Ponty, argues that it is the integration of all the elements of ordinary experience that provides a feeling of wholeness in the interactive flow of organismenvironment transactions. In this way, for Johnson, aesthetics is not confined to the arts or simply used to assess the beautiful; rather it is based on our sensorimotor experience, our feelings, and our visceral connections to those aspects of the world with which we engage; and on the various imaginative capacities we possess for using sensorimotor processes to understand abstract concepts. Furthermore, this is not a single snapshot' experience that is based upon the 'here and now' of immediate experience but rather, one that acknowledges it is part of a person's on-going relational engagement that draws on the qualities of events from the past, the present and predicts into the future. Cumulatively, my present (and this is in draft at this time – so don't quote me!!) working definition of aesthetics is: "A body-centric, mobile, engaged means of making sense of qualities of people, situations

or objects in and across our life-worlds".

Traditionally, philosophy has focused on aesthetics in terms of observation or engagement within traditional scientific frameworks, that is, where I would adopt a position of me viewing the object, person or situation at a distance and then record the experience it engenders within me. Furthermore, if I were to adopt this ontological positioning then it is likely that I will confine my observations to measureable events, and record these via words and sentences (or utterances of them). Yet as Johnson amplifies most of the content that makes up much of our meaning (its qualities of life) of any situation like this will fall outside these understandings. The qualities of an object, or our engagement with people, or of a given situation, are qualitative in guise and require examinations that can exceed words etc. Some of my own assessments of everyday life are simply 'expressions, or grimaces or textures'. If I were to ignore these type of signals from my engagement then, for me, much of the experience of the event would be overlooked. For me, these non-word assessments provide the 'glue' that holds our understandings together and we cannot afford to lose them.

These argument culminate in my final claim in this section - that is, whilst much of this discussion will be focused on the 'experience' for the individual we cannot ignore 'appearance'. The Aesthetics literature does consider appearance in terms of paintings but it is noticeable in the recent

advances of the body-centric approach the absence of the importance/complementarity of appearance in their pages. My claim is that if our body-centric engagements are relational then a vital factor in this experience is the appearance of ourselves (and the other) in this social context.

# **DRESS AS A COMUNICATOR**

I also want to argue that for me dress is more appropriate to discuss in terms of aesthetics than fashion. I claim here that whilst I could employ any of the terms clothing, dress or fashion – it is dress that I will emphasise here. Let me explain my reasoning. For me, simply wearing clothes lacks the intentionality to communicate and this is a vital feature of my discussion. What I mean is that simply picking up and wearing a garment, or piece of clothing, might be simply to keep warm or to protect oneself from harm. Whereas, both the terms fashion and dress are intentional communicators. What distinguishes these terms for me is that 'fashion' is frequently associated with impression and a reflection of the contemporary. Whereas 'dress' seems to be more interested in the potential of expression that goes to the very core of issues such as identity, collectivity versus indviduality etc. My interest is to delve beneath the intention to communicate via impression and examine it in terms of meaning and thereafter its contribution to knowing.

What also attracted me to the term 'dress'

is that it exceeds our understandings of clothing and fashion. That is, there has been a long tradition of why and how we decorate our bodies (see Calefato, 2004; Johnson and Foster (2015). Dress encapsulates this variety ranging from individualised clothing, shoes, make-up, nails, hair to tattoos, piercings, other types of more recent accessories – for example: ... dogs!! Unfortunately, there is no space for me in this paper to discuss these contributions. In these circumstances, let me introduce Eicher and Roach Higgins' definition of dress: "... an assemblage of body modifications and/or supplements displayed by a person in communicating with other human beings." (Eicher and Roach Higgins, 1992:5). Likewise, space precludes me from elaborating on a number of other issues – such as notions regarding the intention to communicate, individuality, identity etc - instead in the rest of this section I will limit myself to discussing only the basics regarding whether dress can communicate.

John Fiske (1990) introduces two basic approaches to communication that are relevant to our basic question – can dress communicate?

The first is often known as the process school. Here communication is perceived as a process and its basic guise is that the sender sends a specific message to another and this generates some form of understanding from the receiver. In terms of dress, let me provide a simple example: a person might choose to wear a particular branded quality garment intentionally to suggest to their audience

that they are affluent or shop in a particular store. The question is: do we, as an audience, infer from this dress the correct intention of the wearer and therefore successfully decode the message? Of course, the characteristics of audiences differ and crudely it might be inferred that the more familiar with we are with the item, or with the person, then the greater likelihood of the effectiveness of the communication (see King, 2015). Of course, if no one understands the message then either the choice of garment or the model is inappropriate.

Anecdotal evidence exists to suggest that this model of communication can work for dress. However, it is unlikely (as in other forms of communication) that all forms of dress will fulfil the intention of the wearer in all circumstances. As Fred Davis observes dress possesses low semantic characteristics and as McCracken (1988) further elaborates, dress is capable of only repeating existing or pre-fabricated messages – dress cannot create new messages.

The second approach offered by Fiske is the semiotic or structuralist approach. This approach asks the most fundamental question: what is communication? Here communication is less about the sending and receiving of messages (as in the process model) and more about 'the production and exchange of meanings (Fiske,1990:2). That is, this model interprets the sender as a member of a particular community and, in terms of our context, dress is seen as an indicator of its association with a particular group. Therefore

particular items of dress (individually or collectively) can be seen as a communicative phenomenon. Barnard suggests this second model people can often adopt 'looks' to appear to be members of a type of group (for example: skin heads, rockers, etc) and then this association characterises all of their subsequent messages.

Thus, for Fiske, the semiotic model 'is concerned with how messages, or texts, interact with people in order to produce meanings (Fiske, 1990:2). For me, these two models are complementary. For the individual, the process model seems to possess more currency as an effective model for dress but it is limited as to the sophistication of what can be communicated. If we were to extend our discussion to collectives - say as part of a recognised community, then the negotiated meanings of that community can be enhanced through appearance/dress. It only fails when other audiences either choose or deliberately ignore the associations with their specific group.

Semiology provides a further means to demonstrate that intentionally prading on our body a form of dress is a sign (this references the work of Swiss linguist F. Saussure) and therefore acts as a signifier (standing for representing something else). Of course we need to situate these claims in the contexts above – but a simple example might be that a man's collar worn open in some societies suggests casualness – whilst in others – it is everyday wear. Of course, many of these semiological frames are well known (for

example: a leather jacket, or jeans or short skirt or black dress or pink for a girl and blue for a boy!) and these suggest codes that are international - that is, a shared set of rules that seemingly connects signifiers with signified (see Barnard, 2006). We can note that over time these relationships can be come more and more sophisticated leading to some quite sophisticated relationships to accommodate specific needs. Finally, I should also include brief recognition of the term 'connotation'. This is where we might employ dress as a means of complementing a word or expression and thus achieve a richer understanding for the audience. An example (to continue with the example above) an open neck shirt might suggest casualness vet its brand, together with the nature of the person, may suggest casualness associated with wealth, class etc. So in formal terms we might separate these understandings and vet through examples such as dress in everyday life they work together and provide a clarity of understanding.

# CONCLUSION

This brief paper introduces a forthcoming book to be entitled 'The Aesthetics of Dress'. In this preliminary paper we have provided explanations for the term aesthetics and why dress is a relevant term for this discussion. In addition we have started to introduce some of the basic theory supporting the premise that dress can communicate.

# **REFERENCES**

Barnard, M. (2002) **Fashion as Communication**, 2nd edition. Routledge Oxford.

Calefatto, P., (2004) **The Clothed Body**, trans. Lisa Adams. Bloomsbury UK & C.Black.

Cazeaux, (eds.) (2001, 2010) **The Continental Aesthetics Reader**, Routledge

Corrigan, P., (2008) **Dressed Society**: Clothing, the Body and Some Meanings of the World, Sage publications US.

Davis, F. (1993). **Fashion, culture and identity** . Chicago: University of Chicago Press.

Eicher, J. B. & Roach-Higgins, M. E. (1992). Definition and classification of dress: Implications for analysis of gender roles. In: R. Barnes & J. B. Eicher (Eds.). **Dress and gender**: Making and meaning (pp. 8–28). Oxford–New York: Berg Publishers.

Fiske, J.(1990) **Introduction to Communication Studies**, Routledge.

Johnson, D.C. and H.B. Foster (2015) **Dress Sense**: Emotional and Sensory Experiences of the Body and Clothes, Bloomsbury UK.

Johnson, M. (2007): **The Meaning of the Body**: Aesthetics of Human Understanding. Chicago: University of Chicago Press.

King, I. W. (2015) What to wear?' Clothing as an example of expression and intentionality, **Argument: Biannual philosophy journal**, 5,1 pp59-78

Levinson, J., (eds.) (2005) **The Oxford Handbook of Aesthetics**, Oxford Universuty Pfress, Oxford. UK.

McCracken, G. (1988) "Clothing as language." In **Culture** and **Consumption**. Indiana University Press.

Merleau-Ponty, M. (1945/1962). **Phenomenology of perception**. (C. Smith, Trans.). New York-London: Humanities Press / Routledge & Kegan Paul.

Shusterman, R. (1999) Somaesthetics: A Disciplinary Proposal, The Journal of Aesthetics and Art Criticism, 57, 3. pp. 299-313.

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# IDENTITY, AUTONOMY AND INCOME GENERATION THROUGH FASHION AND MANUFACTURE FOR COMMUNITIES OF "RIO NEGRO" – AMAZON. CASE STUDY: ALINHAVANDO O FUTURO PROJECT

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# INTRODUCTION

Through the Alinhavando o Futuro Project, the residents of the riverside communities of the Sustainable Development Reserve of Rio Negro – Amazonas, received training over a period of two weeks in the field of fashion confection, with a focus on preparing them to be future makers and creators of their own pieces of clothing.

On the world stage, in 2000, the United Nations promoted and organized meetings, conferences and gatherings about the Millennium Development Goals. Representatives of the 189 countries present, set eight goals to be achieved by 2015. Four of them were directly related to the development of the Alinhavando o Futuro Project focused on the textile and clothing industry: Eradicating hunger and extreme poverty; Promoting gender equality and empowering women; Developing a global partnership for development; and ensuring environmental sustainability. In 2012, the UN proposed the International Year of Cooperatives, was coincidentally also the year the Alinhavando o Futuro project was implemented in the community of Tumbira /AM.

# ALINHAVANDO O FUTURO<sup>1</sup>

The project adapted and developed educational processes based on the field of

<sup>1 &</sup>quot;Alinhavando o futuro" can be loosely translated as "Weaving the future". 2 to 13 of july, 2012 – Tumbira Community – Amazon | 60 hours | Idealization, guidance and project management: In Totum SP | Coordenation: Marco Antonio Andreoni e Maria Cecilia Costa.

fashion with technology and methods used in the production of clothing associated with cultural training, comprehensive and humanist art, using the local cultural expression as a differentiating value and also as a driving and manufacturing force, providing the maximum involvement of people in the construction of knowledge within an entrepreneurial vision.

The involvement with the world of fashion, in particular through confection, allows the participants to develop their personal growth and self-esteem, critical view, ability to discern, analyze and decide. The project deals with human development, and is focused on training and innovation for people to be able to evolve, adapt to a world in constant change and, in the future, cause and seek change.

Since the beginning of time, man has used clothing to overcome his feelings of inferiority and to achieve the conviction of his superiority over the rest of creation, including over the members of his own family and tribe and to provoke admiration and ensure that he belongs. (LURIE, 1997).

Registering and studying the process with which the project was established will allow for replication, expansion and adaption to other communities that are in the same or in a close degree of development, focusing on the future of an intelligent network of creative economy.

The proposed Project values the involvement of students to understand the importance of creating fashion through the articulation of experience acquired with

practice and theory in the development of shirts with prints and local Amazonian inspirations.

Besides learning to tailor and sew (reading the sketches, scratching out, cutting and sewing), the training introduces participants the access to the culture of fashion, textile technology, creativity, sustainability and customization with a view for product differentiation with an own identity of the forest and the environment in which they live.

Practical and in-person classes with a focus on production allow the participants to develop each stage of production faster and without dispersion of knowledge, aiming to develop skills and acquisition of knowledge.

The experience was structured in making workshops, creative workshops and workshops with information/knowledge. These guided the first steps for the insertion of the individual in making fashion, through knowledge and "know-how" focused on organizational activities, creation, development and manufacturing of clothing products.

Teaching structured by "doing" is focused on groups/communities where the experience of the day-to-day is the main factor by which learning takes place, because many people in this community have difficulties in literacy and in continuing their studies. These difficulties were circumvented by the construction of knowledge in other forms of understanding, combining formal and informal education where transmission of knowledge is through

practice and local knowledge.

Stimulate this experience considering the local resources in a creative and experiential environment, both theoretical and practical, becomes a strategy to incorporate the knowledge acquired even faster. These are the premises for teaching by doing consolidating the learning, making immediate assimilations. To experience the "learning by doing" the bridge to exchange local knowledge/wisdom with new knowledge makes the experimentation a knowledge building path.

Teaching, learning and research deal with these two moments of the gnosiologic cycle: those in which what is taught and learned is the existing knowledge and those in which we work in the production of the not yet existing knowledge. (FREIRE, 1996)

This way of building knowledge is also endorsed by constructivist teaching, which has practical activity as one of its pillars. Saviani talks about education and the order changes in teaching learning theory.

The renovating currents had its apex in the form of the New School movement. Currently, given the critical concepts, new versions of learning theories were developed, such as constructivism. Learning moves, therefore, from intellectual understanding to practical activity, from the logical aspect to the psychological, from the cognitive content to methods or processes of learning, from teacher to student, from effort to interest, from discipline to spontaneity, from quantity to quality. (Saviani, 2008).

The project is established in the culture

of fashion, where the world of fashion is understood by us as an indicator and promoter of change, as an area of knowledge and wisdom in which the idea of the most immediate future can be seen, rehearsed and performed. And also as behavior that reflects the current paradigms in search of more balance, facing the realities of inclusion, sustainability, ecology and the pursuit of happiness.

One of the reasons that lead a person to follow fashion is a desire to renew their image, a desire that corresponds with one of the most important cultural imperatives of modernity. (MORA, 2006)

Sewing your clothes and having access to this universe are aspects explored in the project as forms of participation and have the power to mobilize people to realize and act on what is happening now and in the future. The support of cutting/tailoring methodologies, visual media support and access to fashion information with drawings, photos and information are used as tools to create fashion as well as the possibility to generate income.

The search for unity, in which theory and practice are indissoluble components of praxis, autonomous and dependent, is the establishment of a single whole in an interdependence and

reciprocity relationship. The theory no longer governs the practice and practice no longer means the application of theory (CANDAU and LELIS,2008;VAZQUEZ, 2007).

"It is essential to understand

the relationship between theory and practice as a process by which knowledge is constructed. Both should be worked simultaneously constituting an indispensable unit, because the practice is itself guided action and mediated by theory."(SOUZA, 2014)

During the training, basic pieces were made and customized during the different activities; pieces such as t-shirts, tank tops, children's cloths, coats and bags in the sewing and product workshops, developing skills and knowledge about the use of the straight sewing machines, coverstitch sewing machines and overlock as well as practical manuals for various types of sewing and finishing. Textile identification, body measurements, customization of clothes and finally deconstructing and building garments, re-creating and transforming them into a new piece of clothing. Creativity and research are reinforced during the classes in a dynamic and playful way.

The purpose of the Alinhavando o
Futuro Project seeks to be in line with
the income generation needs, looking for
different spaces and educational pathways
to serve in a relevant manner the various
interests involved: the institutional interests,
the interests of the people (students and
teachers), the productive interests (labor
and professional market) and social interests
(aimed at society in general and the local
community itself)

In line with the outlined objectives, the

Alinhavando o Futuro Project uses "learning by doing" through art, crafts, communication, design and fashion. The methodology, application and development of the contents are based on the principles: learning to be, learning to do, learning to live together, learning to learn.

# ABOUT THE SPECIFIC OBJEVTIVES AND ACHIEVEMENTS

Initiate the professional training in the area of fashion confection, developing skills and abilities to exercise the development and production of fashion products;

» Evidence - :: All students produced all the required pieces, developing basic technical knowledge for modeling, cutting, sewing, finishing and customization of the proposed models. The support of the materials in the folder will serve as an aid and for continuity for new products to be generated in the future.

Empower and create awareness for the student in their autonomy in the process of creation, development and production;

» Evidence - :: All students developed their abilities to create and developed by doing and the repetition of doing, increasing their motoric and aesthetics qualities. They managed to enlarge the initial limitations through the synergy of the working group, where they proposed changes and improved the achieved results. The customization, post-production, allowed them a great exercise in authoring, creating differentiation in the product, adding local personal values, strengthening its identity and creating distinction by origin of the product. They were working through the process of "empowerment" in the creation and development of products.

Awaken the development of entrepreneurship, leadership, social and environmental awareness; strengthening selfesteem.

» Evidence - :: Quickly a group was formed and some were helping others spontaneously. As well as teaching what they already knew, showing a lot of curiosity and thirst for more knowledge and learning.

Develop in the student the interest for research, allowing to awaken the creative ability to propose solutions and the development, implementation and evaluation of projects and fashion products.

» Evidence - :: Some students themselves were doing the modeling and reduction of pieces for other sizes of interest. Ex .: female gowns were modeled to fit children.

# **EXPECTATIONS**

The achieved results came from the appreciation of human beings and social inclusion, such as personal self-esteem, group valuation, acquisition of knowledge through practice, autonomy to make: creating, developing, producing and reproducing, modifying: innovating.

# ABOUT THE METHODOLOGY - "Learning by Doing"

"Learning by doing" is a set of techniques and educational practices supported by a triple base - Visual Information, Practice, Creativity / Playfulness, developed from the interaction between the tailoring and and sewing methodologies and the expertise In Totum that seeks the interaction using the means of dynamics of involvement necessary to stimulate the exchange of knowledge and wisdom.

There is another kind of language, another form of communication: communication through feelings and images. This is the contact that prevents people from becoming incommunicable and demolishes barriers. Will, feeling, emotion, this is what removes the barriers between people, otherwise they would find themselves on opposite sides of a mirror, on opposite sides in a way. (TARKOVSKY, 1998)

For the transmission of content the project uses practical and visual information

where the images like drawing, painting, photography and video become accessible communication tools for participants and transformative learning.

... Through visual thinking the information is transmitted directly. The key feature of the visual language is in its immediacy in his spontaneous understanding. Visually, our perception of the content and form is simultaneous. When properly developed, a visual message goes directly to our brain to be understood without decoding, translation or conscious delays. (DONDIS, 2003)

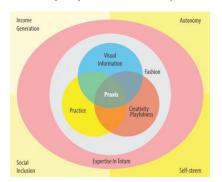


Figure 1 – Illustration about the Methodology

# EXPERTISE IN TOTUM: Fashion and Design together with the Communities

A search for the integration of local knowledge and techniques with the activities of Fashion and Design, through projects and workshops of creativity and manual activities, encouraging artisans, associations in their autonomy in the process of generating their own design.

- Integrate knowledge and efforts
- Generate collections of objects with Design and fashion appeal.
- » Promote autonomy to create and make, seeking to generate opportunities for personal and intellectual growth, employability, entrepreneurship and income generation.

# **HOW THE PROJECT CAME ABOUT**

- Survey and research: about the possibilities to generate a local identity and the available resources.
- Planning the workshops: development and adaptation of strategies to integrate the workshops, definition of objectives and products.
- Preparation of material: starting material workshops.
- » Content Development: Curator of existing knowledge and definition of the theoretical contents substantiating the construction of knowledge.

- Workshops: different, to explore the potential of communities, raw materials, techniques and resources.
- » Assessment: the workshops reports with results and suggestions.

# SOME STATEMENTS FROM PARTICIPANTS

It has been my dream for a long time to do this course. Because of this it has been very rewarding, a delicious way to learn.

I am happy to have met you and for this opportunity to learn from you. *Thank you for your patience!* 

I can only thank all and get on with the work and share the knowledge that *I absorbed during the course with those* who couldn't join.

> I surprised myself and with the performance of my colleagues, the

patience of the teachers is admirable.

Thank you for everything, for learning, for the patience, the affection. I will forever keep all that I learned from you.

> ... that you may 'weave' the future of many people.

# FOR US...

"Customize, Personalize, Recycle, Play, develop knowledge about fashion. Circulate through the possibilities of fashion, in its various and interrelated pathways "

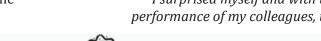
Search for the appreciation of human beings and social inclusion, personal selfesteem, group valuation, acquisition of knowledge through practice is a powerful way towards the autonomy of doing: creating, developing, producing and reproducing for innovation.

"To teach is not to transfer knowledge but to create the possibilities for its production or its construction." (FREIRE, 2013).

# REFERENCES

CANDAU, V.M. & LELIS, I.A. A Relação Teoria-Prática na Formação do educador. In: CANDAU, V.M (Org.). Rumo a uma nova didática. 10 ed. Petrópolis: Vozes. 1999

DONDIS, D. A. Sintaxe da Linguagem Visual. São Paulo. Martins Fontes, 2003.







ALINHAVANDO O FUTURO



Figure 2 – Workshops in Tumbira Community during the project

FREIRE, Paulo. **Pedagogia da autonomia**: saberes necessários à prática educativa. 46ª Ed. Rio de Janeiro: Paz e Terra, 2013.

LURIE, Alison. **A linguagem das roupas**. Rio de Janeiro: Rocco, 1997

MÓDOLO, C. M. Infográficos: características, conceitos e princípios básicos. In. XII Congresso Brasileiro de Ciências da Comunicação da Região Sudeste, Juiz de Fora. 2007.

MORA, Emanuela. Collective production of creativity in the Italian fashion system. **Poetics**. Vol. 34, 2006

SAVIANI, D. **A pedagogia no Brasil**. História e teoria. Campinas, SP: Autores Associados, 2008. 2º Ed. Paris, United Nations Educational, Scientific and Cultural Organization, 2015

SOUZA, S. T. Relação teoria-prática na perspectiva do professor iniciante nos anos iniciais do ensino fundamental. Brasília, 2014

TARKOVSKY,A. **Esculpir o tempo**. São Paulo: Martins Fontes,1998

VÁZQUEZ, A.S. **Filosofia da práxis**. São Paulo: Expressão Popular, 2007. http://www.unicef.org/brazil/pt/overview\_9540.htm

IN TOTUM - http://intotum.com.br/portfolio/projeto-social-alinhavando-o-futuro/

Alinhavando o Futuro Project - https://www.youtube.com/watch?v=6l4TeFvjsN0

Alinhavando o Futuro Fashion Show - https://www.youtube.com/watch?v=XT6I-pozotc

Project Completion Report - https://issuu.com/intotum/docs/relatorio\_final\_alinhavando\_o\_futuro

# SOCIAL SUPPLY CHAIN MANAGEMENT IN THE CLOTHING INDUSTRY: a literature review

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### INTRODUCTION

As apparel and fashion supply chains are becoming increasingly global (BRUCE; DALY; TOWERS, 2004), the rising level of outsourcing to developing countries has emphasized the focus on sustainability (ABREU et al., 2012; BIN SHEN et al., 2012; DIABAT; KANNAN; MATHIYAZHAGAN, 2014; DICKSON; WATERS; LOPEZ-GYDOSH, 2012; FAHIAN ANISUL HUQ; MARK STEVENSON; MARTA ZORZINI, 2014; FREISE; SEURING, 2015; MANI; AGRAWAL; SHARMA, 2015; MUTHU, 2015; PERRY; TOWERS, 2013; STRÄHLE; KÖKSAL, 2015; VACHON; KLASSEN, 2008). Therefore the need to understand how to integrate sustainability to globally fragmented supply chains is highly important (FREISE; SEURING, 2015).

In fact, there has been rising concern about sustainable supply chain management (SSCM) in general over the last years among both managers and academics. Obviously, this can be seen by the number of papers published but also by daily news and the increasing Corporate Social Responsibility (CSR) efforts of fashion companies. In academic communities a very popular screening is the concept of the Triple Bottom Line (TBL) which has been developed by Elkington (1998). Many years later, as the sustainability debate began to be on the upswing, Carter and Rogers (2008) concisely discussed about sustainable supply chain management by building on the TBL concept and its integration of the three dimensions (environmental, social and economic) to

the supply chain. Based on this, when a company aims to achieve at least a minimum of sustainability, it has been suggested that it extends all three components of the TBL to every link in its supply chain (AHI; SEARCY, 2015; ALHADDI, 2015; BESKE; LAND; SEURING, 2014; CARTER; ROGERS, 2008; CRISTINA SANCHA et al., 2015; DYLLICK; HOCKERTS, 2002; ELKINGTON, 1998; GIMENEZ; SIERRA; RODON, 2012; SEURING, 2013). Seuring and Müller (2008) expanded the area of sustainable supply chain management research significantly by taking goals from all three dimensions of the TBL into account which are mainly triggered by pressures and incentives of external demands such as governments, customers and other stakeholders. Although the major research stream did not investigate all three dimensions simultaneously in one study (HASSINI; SURTI; SEARCY, 2012; SEURING, 2013), generally accepted that the social, environmental and economic dimensions of the TBL are complementary and connected to each other, and have some common drivers, enablers and barriers (GIMENEZ; TACHIZAWA, 2012; WALKER; IONES. 2012: SEURING: MÜLLER. 2008) within a supply chain. Nevertheless, there might be differences on the relevance of one dimension in specific industries. For instance, the clothing sector, which is acknowledged for its labour intensiveness and its outsourcing activities to developing countries with usually high corruption rates (DICKEN, 2007). As a consequence, this shows a clear deficit

regarding e.g. transparency of suppliers and thus directs the focus more importantly on the social dimension. Moreover, despite the growing number of papers, latest literature reviews reveal that there is still a clear deficit regarding social issues in sustainable supply chain management research and thus there is a call for more specific research in the field (ALIREZA TAJBAKHSH; ELKAFI HASSINI, 2015; BESKE; LAND; SEURING, 2014; BRANDENBURG; REBS, 2015; GIMENEZ; TACHIZAWA, 2012; GOLD; SEURING; BESKE, 2010; MARTA ZORZINI et al., 2015; MARTÍNEZ-JURADO: MOYANO-FUENTES. 2014; SEURING, 2013; SEURING; MÜLLER, 2008; TOUBOULIC; WALKER, 2015). By quickly scanning previous literature reviews it can easily be observed that research papers tend to focus on environmental issues in sustainable supply chain management (SSCM) spread out in various industries (OUARSHIE: SALMI; LEUSCHNER, 2015). This tendency has also been supported by Zorzini et al. (2015) who conducted, to the best of the author's knowledge, the latest literature review regarding social issues in SSCM so far. For the period 1997 to 2013 Zorzini et al. (2015) reviewed a total of 157 papers and focused only on the social dimension of responsible sourcing which has been declared as an important aspect of the broader SSCM agenda. Hence, the paper at hand extends the period of review than this of Zorzini et al. (2015), but focuses on one specific industry, i.e. textiles/ clothing industry, solely. This should help to gain a more detailed insight into the field with

the purpose to discuss potential expansion areas to trigger socially related research in sustainable supply chain management. More specifically this paper aims to answer two questions:

- » RQ1: How can be socially related research in the clothing industry integrated to the dominant conceptualizations of SSCM?
- » RQ2: What are potential areas for future development of socially related research in SSCM?

By conducting a literature review including content analysis on the social dimension of SSCM within the clothing sector, the authors contribute to both academics and professionals. The paper at hand summarizes what is known so far and suggests further research areas in socially related SSCM research for academics.

The second section provides a brief summary of recent SSCM related literature reviews including a presentation of a conceptual framework and the characteristics of the clothing industry (not included in this paper) to justify (not included in this paper) the study at hand. The third section describes the methodology used to identify the papers for the content analysis (in progress). In section 4 the review results are presented (in progress). Key research findings are then discussed in Section 5, by adapting the conceptual framework provided in the literature review (in progress). Finally this

paper ends with conclusions in Section 6 (in progress).

# SUMMARY OF RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

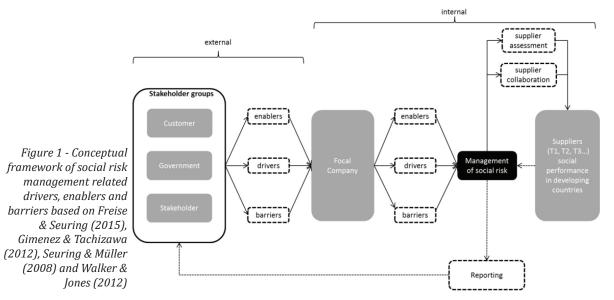
So far, research already clearly distinguished SSCM from conventional supply chain management (SCM) (SEURING, 2013). To understand the debate of SSCM one definition of Seuring and Müller (2008) is provided. "Sustainable SCM is the management of material, information and capital flows as well as cooperation among companies along the supply chain while integrating goals from all three dimensions of sustainable development, i.e. economic, environmental and social, which are derived from customer and stakeholder requirements". Within the sustainable supply chain, there are three important actors which are the focal company, suppliers and stakeholder groups (SEURING, 2013). While focal companies play a key role in SSCM and cooperation with suppliers to fulfil customer needs is essential, stakeholders play a vital role according to the above mentioned definition and in contrast to conventional SCM (SEURING, 2013; SEURING; MÜLLER, 2008).

As already stated during the Introduction Section, a proliferation of literature reviews regarding SSCM can be found. Generally it can be observed that many studies investigate SCM issues under the umbrella of the TBL concept (BRANDENBURG; REBS, 2015; CARTER; ROGERS, 2008; SEURING; MÜLLER,

2008) to develop and offer conceptual frameworks for further research i.e. theory building and conceptual development in the field.

Carter and Rogers (2008) conceptualized the discipline of SSCM based on the TBL and four supporting aspects of sustainability; risk management, transparency, strategy and culture. Seuring & Müller (2008) expanded the area of sustainable supply chain management research significantly by taking goals from all three dimensions of the TBL into account, but integrating pressures and incentives of external demands such as governments, customers and other stakeholders to their framework. The conceptual model of Seuring and Müller (2008) suggests that the focal company usually passes pressures, deriving from external demands such as NGOs, on to suppliers in order to counteract the problematic issues by implementing strategies i.e. supplier evaluation for risk and performance and supply chain management for sustainable products. Furthermore, with their review of 191 papers on SSCM, they address the limitation of the studies and revealed that social aspects are often neglected in sustainable development (SEURING: MÜLLER, 2008). During the debate of the operationalization of TBL in the supply chain, the term supply chain risk management has gained increased attention (FREISE; SEURING, 2015). As risk can be understood as an effect that prevents companies to achieve its targets (BAGOZZI; YI, 1988) it can be transferred to the sustainability debate. Risk

management practices include standards (e.g. Code of Conducts) and certifications, e.g. ISO 14001 or SA8000, individual monitoring, e.g. audits, to track and trace suppliers, and pressure group management which deals with the effort to present a positive image to stakeholders, e.g. collaboration with NGOs or implementation of visible and transparent CSR efforts (BESKE; LAND; SEURING, 2014; FREISE; SEURING, 2015; TATE; ELLRAM; KIRCHOFF, 2010). While corporate social and environmental strategies can be described as the responsibility to take action in order to maintain ethical and environmental norms of the society in which a company is active (CARROLL, 1979), it is suggested to report the efforts. Accordingly and coherent to other studies, conducting CSR reports ensures opportunity to signal and communicate positive social and environmental contributions to stakeholders in a transparent way (TATE; ELLRAM; KIRCHOFF, 2010). It seems rigorous to argument that such CSR reports can be accepted as the report of sustainable risk management. Thus, when a company sets the goal to operationalize the three dimensions of the TBL in its supply chain it needs e.g. to conduct environmental and social management systems such as ISO 14001 and SA8000 and report the efforts in order to avoid or mitigate related risks deriving from NGOs (SEURING; MÜLLER, 2008). Consistently Freise and Seuring (2015) developed a conceptual model for risk management in SSCM and tested the framework empirically in the clothing industry. Their findings support



that the main driver to adopt practices of environmental and social risk management to the supply chain is to deal with pressures and incentives from stakeholders (FREISE; SEURING, 2015). Nevertheless, in this context it is quite interesting to mention the prior paper of Seuring (2013), who reviewed existing modelling approaches for SSCM. He found that papers including CSR in their title are more likely to model environmental issues and ignore social impacts, thus misused by researchers. Furthermore he calls for more detailed evaluation of social impacts before integrating to the present multi-objective modelling approaches (SEURING, 2013). The coherence of the constructs is pictured in Figure 1 and extended with the findings and ideas of other relevant papers.

# **RESEARCH METHOD**

To answer the research questions of this study the authors conduct content analysis which is an appropriate tool to assess relevant journal publications in order analyse the verbal and formal content (MAYRING, 2008). Furthermore, it has been declared as an effective tool to conduct systematic literature reviews in a transparent way in order to provide insight to the research area (SEURING; GOLD, 2012). Moreover, the content analysis method has been described by Seuring and Gold (2012) with a more specific view on SCM. Based on the idea of Mayring (2008) and their analysis they provide guidelines for conducting content analysis which is in turn the foundation for

the paper at hand. In the following section the authors discuss the four suggested stages in conducting content analysis based on Mayring (2008) i.e. material collection, descriptive analysis, category selection and material evaluation but extend the process with the suggestions of Seuring and Gold (2012). These proposed stages by Mayring (2008) ensure validity as well as reliability and have been conducted successfully by other researchers of the field for similar objectives (BESKE; LAND; SEURING, 2014; BRANDENBURG; REBS, 2015; SEURING; GOLD, 2012; SEURING; MÜLLER, 2008). Additionally, in terms of validity and reliability, the content analysis research can be enhanced with the involvement of one more researcher during data search and analysis (DURIAU; REGER; PFARRER, 2007).

# Material collection

In the first stage the aim is to define and delimitate the material according to the topic of the present paper. The paper at hand examines related publications in major electronic databases, namely Elsevier (sciencedirect.com), Sage (sagepub.com), Wiley (wiley.com), Emerald (emeraldinsight.com), and Springer (springerlink.com) by using the library service of Ebsco (ebsco.com). The technique of keyword search has been recommended, especially when encompassing a specific topic that is present in various academic disciplines (SEURING; GOLD, 2012). The following keywords were conducted during search: "clothing/apparel/textile";

"supply chain"; "supplier" "CSR", "social\*"; "social risk"; "social sustainability"; "sustain\*"; "ethic\*"; "sweatshop"; "code of conduct"; "SA8000". The alternation of the keywords resulted in a total of 1228 articles between 2005 and 2016. Subsequently, the duplicated results were deleted and a quick review of irrelevant papers resulted in 124 articles. The next step will be a careful abstract analysis and only publications which have a clear link to the clothing industry and socially related aspects within the supply chain will be considered for further evaluation.

# Descriptive analysis

This stage offers information at a glance at least about the relevant articles by depicting the distribution over the time period and over different journals

# Category selection

In this phase it is essential to choose between inductive and deductive category selection. Seuring and Gold (2012) recommend a two-step process, which seems suitable for the paper at hand. Thus, based on the two research questions of this study, the offered SSCM framework during the literature review offers categories and dimensions which is related to a deductive approach. Nevertheless further unexpected categories can emerge during the analysis of papers inductively and hence integrated to the

existing analytical framework

### Material evaluation

The combination of statistical as well as content analysis is expected to provide detailed insight to the research field and to answer research question two of the study in order to reveal new research areas in socially related SSCM

### REFERENCES

ABREU, Mônica Cavalcanti Sá De et al. A comparative understanding of corporate social responsibility of textile firms in Brazil and China. Journal of Cleaner **Production**, v. 20, n. 1, p. 119–126, jan. 2012.

AHI, Payman; SEARCY, Cory. Assessing sustainability in the supply chain: A triple bottom line approach. **Applied Mathematical Modelling**, v. 39, p. 2882–2896, 1 jun. 2015.

ALHADDI, Hanan. Triple Bottom Line and Sustainability: A Literature Review. 2015.

ALIREZA TAJBAKHSH; ELKAFI HASSINI. Performance measurement of sustainable supply chains: a review and research questions. **International Journal of Productivity and Performance Management**, v. 64, n. 6, p. 744–783, 3 jul. 2015.

BAGOZZI, Richard P.; YI, Youjae. On the evaluation of structural equation models. **Journal of the Academy of Marketing Science**, v. 16, n. 1, p. 74–94, mar. 1988.

BESKE, Philip; LAND, Anna; SEURING, Stefan. Sustainable supply chain management practices and dynamic capabilities in the food industry: A critical analysis of the literature. **International Journal of Production Economics**, v. 152, p. 131–143, 1 jun. 2014.

BIN SHEN et al. The impact of ethical fashion on consumer purchase behavior. **Journal of Fashion Marketing and Management: An International Journal**, v. 16, n. 2, p. 234–245, 4 maio 2012.

BRANDENBURG, Marcus; REBS, Tobias. Sustainable supply chain management: a modeling perspective. **Annals of Operations Research**, v. 229, n. 1, p. 213–252, jun. 2015.

BRUCE, Margaret; DALY, Lucy; TOWERS, Neil. Lean or agile: A solution for supply chain management in the textiles and clothing industry? **International Journal of Operations & Production Management**, v. 24, n. 2, p. 151–170, 1 fev. 2004.

CARROLL, Archie B. A Three-Dimensional Conceptual Model of Corporate Performance. **Academy of Management Review**, v. 4, n. 4, p. 497–505, out. 1979.

CARTER, Craig R.; ROGERS, Dale S. A framework of sustainable supply chain management: moving toward new theory. **International Journal of Physical Distribution & Logistics Management**, v. 38, n. 5, p. 360–387, jun. 2008.

CRISTINA SANCHA et al. Does implementing social supplier development practices pay off? **Supply Chain Management: An International Journal**, v. 20, n. 4, p. 389–403, 1 jun. 2015.

DIABAT, Ali; KANNAN, Devika; MATHIYAZHAGAN, K. Analysis of enablers for implementation of sustainable supply chain management – A textile case. **Journal of Cleaner Production**, v. 83, p. 391–403, 15 nov. 2014.

DICKEN, Peter. **Global Shift: Mapping the Changing Contours of the World Economy**. [S.l.]: SAGE Publications Ltd, 2007.

DICKSON, Marsha A.; WATERS, Yazbehl; LOPEZ-GYDOSH, Dilia. **Stakeholder Expectations for Environmental Performance within the Apparel Industry: The Urgency of business Response**. [S.l: s.n.], 2012. (The journal of corporate citizenship: Textiles, fashion and sustainability).

# Social Supply Chain Management in The Clothing Industry

DURIAU, Vincent J.; REGER, Rhonda K.; PFARRER, Michael D. A Content Analysis of the Content Analysis Literature in Organization Studies: Research Themes, Data Sources, and Methodological Refinements. **Organizational Research Methods**, v. 10, n. 1, p. 5–34, 1 jan. 2007.

DYLLICK, Thomas; HOCKERTS, Kai. Beyond the business case for corporate sustainability. **Business Strategy & the Environment (John Wiley & Sons, Inc)**, v. 11, n. 2, p. 130–141, 3 abr. 2002.

ELKINGTON, John. Partnerships from cannibals with forks: The triple bottom line of 21st-century business. **Environmental Quality Management**, v. 8, n. 1, p. 37–51, 1 set. 1998.

FAHIAN ANISUL HUQ; MARK STEVENSON; MARTA ZORZINI. Social sustainability in developing country suppliers: An exploratory study in the ready made garments industry of Bangladesh. **International Journal of Operations & Production Management**, v. 34, n. 5, p. 610–638, 28 abr. 2014.

FREISE, Matthias; SEURING, Stefan. Social and environmental risk management in supply chains: a survey in the clothing industry. **Logistics Research**, v. 8, n. 1, p. 1–12, 21 maio 2015.

GIMENEZ, Cristina; SIERRA, Vicenta; RODON, Juan. Sustainable operations: Their impact on the triple bottom line. **International Journal of Production Economics**, v. 140, p. 149–159, 1 nov. 2012.

GIMENEZ, Cristina; TACHIZAWA, Elcio M. Extending sustainability to suppliers: a systematic literature review. **Supply Chain Management: An International Journal**, v. 17, n. 5, p. 531–543, 3 ago. 2012.

GOLD, Stefan; SEURING, Stefan; BESKE, Philip. Sustainable supply chain management and interorganizational resources: a literature review. **Corporate Social Responsibility & Environmental Management**, v. 17, n. 4, p. 230–245, 7 ago. 2010.

HASSINI, Elkafi; SURTI, Chirag; SEARCY, Cory. A literature review and a case study of sustainable supply chains

with a focus on metrics. **International Journal of Production Economics, Sustainable Development of Manufacturing and Services**. v. 140, n. 1, p. 69–82, nov. 2012.

HELEN WALKER; NEIL JONES. Sustainable supply chain management across the UK private sector. **Supply Chain Management: An International Journal**, v. 17, n. 1, p. 15–28, 20 jan. 2012.

MANI, V.; AGRAWAL, Rajat; SHARMA, Vinay. Supply Chain Social Sustainability: A Comparative Case Analysis in Indian Manufacturing Industries. **Procedia - Social and Behavioral Sciences**, Operations Management in Digital Economy. v. 189, p. 234–251, 15 maio 2015.

MARTA ZORZINI et al. Socially responsible sourcing: reviewing the literature and its use of theory. **International Journal of Operations & Production Management**, v. 35, n. 1, p. 60–109, 5 jan. 2015.

MARTÍNEZ-JURADO, Pedro José; MOYANO-FUENTES, José. Lean Management, Supply Chain Management and Sustainability: A Literature Review. **Journal of Cleaner Production**, Special Volume: Making Progress Towards More Sustainable Societies through Lean and Green Initiatives. v. 85, p. 134–150, 15 dez. 2014.

MAYRING, Philipp. **Qualitative Inhaltsanalyse : Grundlagen und Techniken**. [S.l.]: Weinheim ; Basel : Beltz, 2008, 2008. (Beltz Pädagogik).

MUTHU, Subramanian Senthilkannan (Org.). **Roadmap to Sustainable Textiles and Clothing**. Singapore: Springer Singapore, 2015. Disponível em: <a href="http://link.springer.com/10.1007/978-981-287-164-0">http://link.springer.com/10.1007/978-981-287-164-0</a>. Acesso em: 21 jan. 2016. (Textile Science and Clothing Technology).

PERRY, Patsy; TOWERS, Neil. Conceptual framework developmentCSR implementation in fashion supply chains. International Journal of Physical Distribution & Logistics Management, v. 43, n. 5/6, p. 478–501, ago. 2013.QUARSHIE, Anne M.; SALMI, Asta; LEUSCHNER, Rudolf. Sustainability and corporate social responsibility in supply chains: The state of research in supply chain management and business ethics journals. Journal of Purchasing and Supply Management, 2015. Disponível

em: <a href="http://www.sciencedirect.com/science/article/pii/S1478409215300054">http://www.sciencedirect.com/science/article/pii/S1478409215300054</a>>. Acesso em: 7 mar. 2016.

SEURING, Stefan. A review of modeling approaches for sustainable supply chain management. **Decision Support Systems**, Rapid Modeling for Sustainability. v. 54, n. 4, p. 1513–1520, mar. 2013.

SEURING, Stefan; GOLD, Stefan. Conducting content-analysis based literature reviews in supply chain management. **Supply Chain Management: An International Journal**, v. 17, n. 5, p. 544–555, 3 ago. 2012.

SEURING, Stefan; MÜLLER, Martin. From a literature review to a conceptual framework for sustainable supply chain management. **Journal of Cleaner Production, Sustainability and Supply Chain Management**. v. 16, n. 15, p. 1699–1710, out. 2008.

STRÄHLE, Jochen; KÖKSAL, Deniz. IMPACT OF BRAND-AND COUNTRY IMAGE ON THE PERCEPTION OF SUSTAINABILITY IN THE FASHION BUSINESS. **International Journal of Business and Commerce**, v. Vol. 5, n. No. 01, p. 25–28, 2015.

TATE, Wendy L.; ELLRAM, Lisa M.; KIRCHOFF, Jon F. Corporate Social Responsibility Reports: A Thematic Analysis Related to Supply Chain Management. **Journal of Supply Chain Management**, v. 46, n. 1, p. 19–44, 1 jan. 2010.

TOUBOULIC, Anne; WALKER, Helen. Theories in sustainable supply chain management: a structured literature review. **International Journal of Physical Distribution & Logistics Management**, v. 45, n. 1/2, p. 16–42. 2 mar. 2015.

VACHON, Stephan; KLASSEN, Robert D. Environmental management and manufacturing performance: The role of collaboration in the supply chain. **International Journal of Production Economics**, v. 111, n. 2, p. 299–315, fev. 2008.

# WHY DO WE NEED A FASHION REVOLUTION?

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The fashion industry nowadays, is not only important in terms of shaping beliefs, behaviours and culture: but also in terms of economic power. The global fashion industry (Clothing, textiles, footwear and luxury goods) is worth an estimated US\$3 trillion according to Bodimeade (2013) quoted by Ditty (2015, p.6) and has "outperformed the overall market and every other sector across geographies for more than a decade" according to McKinsey (2015) quoted by Ditty (2015, p.6) — more profitable than even high-growth sectors like technology and telecommunications (DITTY, 2015, p. 6).

The garment manufacturing has become the world's third biggest industrial industry - behind only automotive and electronics manufacturing (FINANCIAL POST, 2014) quoted by Ditty (2015, p.6), where Brazil corresponds to the fourth largest garment manufacturer and the fifth largest textile producer (ABIT 2013, p.14, our translation).

Fashion is one of the most labour intensive industries, directly employing at least 60 million people (ILO, 2015). In Brazil, the sector employs 1.7 million people directly and it goes up to more than 4 million if considering direct and indirect jobs, where over 70% of these workers are women, many of which are heads of house (ABIT 2013, p.14, our translation).

For the past two decades, the world have been facing an enormous increase of production and consumption of all types of goods, where new products are launched everyday and prices are lower than ever

before. In the late nineties, the mainstream fashion industry realised that there was a growing desire for cheap clothes, when consumers no longer expected quality or exclusivity, but products with the best design as affordable as possible. Since then, people started over consuming things they didn't need and discarding huge amounts of clothing and accessories. Researches show that "we purchase 400% more clothing today than we did just 20 years ago" (FORBES, 2014) quoted by Ditty (2015, p. 13).

Making more for less became a business opportunity, according to José Maria Castellano, former chairman at Inditex, "this business is all about reducing response time. In fashion, stock is like food. It goes bad quickly" quoted by SIEGLE (2011, p.22). The biggest high-street retailers in the world then copied this fast fashion model: short lead-time and multiple seasons along with reduced delivery time.

By the mid 2000s, fashion had become a huge global business with production constantly moving to countries that offered the lowest wages, the least regulation and the least protections for workers and the environment in order to keep up the system of producing more for less as quickly as possible (DITTY, 2015, p. 6). At this point, it is not only the case for high street fashion, but for luxury fashion too.

In the Brazilian scenery, this system has been affecting the national economy in a negative way. The share of imported garments, especially from Asia, has been growing enormously, taking the place of Brazilian products in large and small scale. In 2012, compared to 2011, the national clothing industry recorded a decline of production of 28.000 tons and a loss in domestic sales of 22.000 tons, while imports grew 18.000 tons (ABIT 2013, p.28, our translation).

Additionally, the human footprint on Earth increases as fast as fast fashion does, mostly because of the unsustainable consumption habits consumers have acquired along the years.

Fast fashion isn't really about speed, but greed: selling more, making more money [...] but fast is not free. Short lead times and cheap clothes are only made possible by exploitation of labour and natural resources. (FLETCHER, 2007).

As sustainability and ethics involve critical reconsiderations of prevalent production processes and consumption habits, it becomes relevant to drive efforts and attention to how the relationships between products, people and resources are originated and built, as well as how they affect a large and long-standing system. "With 'dysfunctional' consumption, both individual and collective, rising more quickly than the 'functional', the system is basically becoming parasitic upon itself" (BAUDRILLARD, 1998, p.41).

Social and environmental catastrophes in the fashion supply chains have become more and more often. On the social realm,

for instance, we find garment workers in Cambodia working six days a week, earning barely enough to meet their basic living expenses, and risking malnourishment, which in recent years, combined with poor working conditions, have caused numerous incidents of mass fainting and collapses in the factories (CLEAN CLOTHES CAMPAIGN).

Thousands of producers and garment workers around the world are forced to work overtime, there is a lack of job security, many workers have their human rights denied, and are not allowed to create trade unions while facing poor health conditions, sexual harassment, and discrimination.

The legal minimum wage in most garment producing countries is rarely enough for a worker to live on. It is estimated that the current minimum wage in Bangladesh still only covers 60% of the cost of living in a slum. In Cambodia and China the minimum wage would need to be at least twice as high to cover the basic costs of living (FASHION REVOLUTION, 2015, p.10).

However, despite most incidents are reported in Asian counties, cases of exploitation in the CMT (cut-make-trim) sector are frequently reported in Brazil as well. Both national and international renewed brands have already been caught producing clothes in illegal factories under extremely bad conditions.

Another critical social problem connected to the fashion supply chain is the child labour, which is forbidden by law in most countries. The United Nations Convention on the Rights of the Child stipulates that all work done by children under the age of 15 and all hazardous work done by children under the age of 18 are illegal and yet there are an estimated 168 million to 200 million children working around the world today in several supply chains (SOMO, 2014, p.1).

In the fashion supply chain, children have been put to work at all stages – from the cotton harvesting and yarn spinning to all the phases in the cut-make-trim sector. For instance, the government of Uzbekistan (one of the world's largest cotton exporters) has been forcing adults and children to pick cotton under appalling conditions for decades. The government also threats, detains and tortures Uzbek activists, who seek to monitor the situation, and refuses to address the problem of forced labour (INTERNATIONAL LABOR RIGHTS FORUM).

On the environmental matter, cotton production accounts for the use of \$ 2 billion of chemical pesticides each year and to 16% of all insecticides in the world (EJF, 2007, p.2). In addition, more than 250.000 cotton farmer suicides have been recorded in India over the last 16 years - the largest wave of suicides in history - and that is directly related to the monopoly of cottonseeds in the country (FASHION REVOLUTION).

Fashion industry accounts for the second most polluting industry in the world, behind only oil industry (FASHION REVOLUTION). There are numerous environmental impacts related to all stages in the fashion chain that have been contributing to climate change

and creating almost irreversible damages to a variety of ecosystems, such as air and water pollution; contamination of people and wildlife; and tons of textile waste been sent to landfill everyday.

An estimated 20% of industrial water pollution comes from textile dyeing and treatment (TEXTILE EXCHANGE, 2010) as cited by Salcedo (2015, p. 28) and an estimated 8.000 synthetic chemicals are used throughout the world to turn raw materials into textiles, many of which will be released into freshwater sources (Ravasio, 2012). Unfortunately, it only shows the little respect fashion industry gives to the citizen's right to safe water.

In Brazil, where a fifth of the Rainforest has been lost since 1970 and 65% to 75% of that can be attributed to the growth of cattle ranching, the global consumer's demand for cheap products is connected to the Amazon deforestation, according to Lucy Siegle. No doubt that cattle ranching in the Amazon is predominantly intended to produce meat for the global market (Brazil is the world's largest beef exporter), but along with China, the country also shares the top exporter position of tanned leather and is the single largest exporter by value of unfinished leather to China. Therefore, the author concludes that leather is no side story (SIEGLE, 2011, p.215).

However, waste is one of the next biggest problems for the fashion and textile industry. In 2014, the world's consumption of textiles reached around 73 million tons and is expected to grow 4% annually until 2025

according to APIC (2014) quoted by Ditty (2015, p. 11), yet only 20% of textiles are recycled each year around the world according to Soex presentation at Textile Exchange conference (2014) quoted by Ditty (2015, p. 11). Textile waste is generally categorized into two different types, the pre-consumer: leftover materials from the production of clothing; and the post-consumer: what is discarded by consumers after use (DITTY, 2015, p. 11). "Meanwhile, 80% of textile waste going to landfills can actually be reused" according to WRAP (2015) cited by Ditty (2015, p. 11)

It is time for a fashion revolution

On the 24th of April 2013, the Rana Plaza factory building in Bangladesh collapsed, killing 1.134 people and leaving over 2.500 seriously injured, corresponding to the worst ever accident in the history of garment industry. The disaster, however, brought worldwide attention to hazardous workplaces within the fashion supply chain.

For this reason, the global movement Fashion Revolution was born, the Rana Plaza collapse acted as a metaphorical call to arms, as 1,134 is too many people to lose in one factory, on one day without that standing for something. Carry Somers, Fashion Revolution founder, wants everyone "to say enough is enough" (FASHION REVOLUTION, 2014).

None of us can accept that fashion may cost someone's life and we must not allow tragedies like this to remain an unfortunate and frequent reality of contemporary fashion production chain. Such tragedy is, however, a symptom of a systemic problem and it opens up discussions around the ethics and the real structures supporting the textile, clothing and accessories industries.

It is a great opportunity to gather consumers and producers, governments and NGOs, academia and business to set up a new agenda to address all the impacts fashion industry has been causing to people and the environment. Fashion Revolution is now present in over 80 countries to bring everyone together to create a safer, cleaner, more just and fair future for fashion. The campaigners believe "in a fashion industry that values people, the environment, creativity and profit in equal measure" (FASHION REVOLUTION).

However, at the moment "there is very little transparent, credible or reliable information available to the public about what we buy" (FASHION REVOLUTION). Fashion Revolution, in its turn, gathers people around the world to "demand that there is better access to information about how companies operate and how things are made, where and by whom" (FASHION REVOLUTION), making transparency the key element that will transform the current fashion industry.

In that matter, Fashion Revolution encourages people to ask brands a simple but powerful question: *who made my clothes?* It is the first step to get consumers thinking differently about what they wear. Consumers can play an extremely important role to help transform the scenario for the better just by having a voice, demanding transparency

from the brands they consume and changing some shopping habits. If brands and retailers are encouraged to answer this question, they indeed will have to take a closer look at their supply chains.

Fashion Revolution campaigns both online and offline and has already built a large, growing and engaged audience on social media. The movement has been gaining momentum each year, only on the second Fashion Revolution Day (24 April 2015): 63 million people used the hashtag #whomademyclothes?; it reached 26.5 billion people through a variety of online vehicles: and became the trending topic on Twitter for 2 years consecutively on the 24th April. The Internet is a really powerful tool that helps reaching a wide public and amplifying voices to boost the revolution that will change the way fashion is sourced, produced and consumed (DITTY, 2015, p.24).

### The catalysers of big changes

By bringing the consumer voice into the sustainability conversation we can help articulate and encourage behavioural changes that can accelerate the growth of a more sustainable economy, whereas personal online contents can reach huge dimensions within a digital and collective mind set.

According to Tapscott, "honesty, consideration, accountability, and transparency are the foundation of trust for this generation" (TAPSCOTT, 2009, p. 217); hence the Millennials will be the main

responsible for affecting the way people produce and work in the future, as they represent new languages and behaviours that can be directly influential on consumer habits.

Along with that, fashion can be used as a powerful force to promote new trends, influence and inspire new consumer behaviours and should be taken as a strong device to move contrarily from the dominant system towards more sustainable futures. For this reason, we must have a closer look at the point where it all starts: the fashion education system.

We need to rethink the way fashion has been taught at the university level, as this generation urgently requires a new approach to the creative and productive processes that includes more holistic, critical and ecological theories and practices. Reshaping the fashion education will demand a reconsideration of how we understand, relate to and influence aesthetics, culture, collective wellbeing and living infrastructures nowadays.

It is necessary to initiate a discussion about the role of educators and students in the classroom as well as on how to incorporate a different rhythm, new possibilities and technology to the fashion design and communication agenda. "It is essential to combine it to a new paradigm - where the student becomes the protagonist" (ARANHA; FEFERBAUM, 2015, p. 1, our translation).

This generation is developing and spreading its own way of thinking and acting through digital technologies and it will be very influential to the construction of new

lifestyles and the to promotion of social transformations. Young people around the world "care strongly about justice and the problems faced by their society and are typically engaged in some kind of civic activity at school, at work, or in their communities" (TAPSCOTT, 2009, p. 6). These young people represent a growing search for positive changes, having social responsibility and engagement as some of their priorities.

### The power of consciousness

Apparently, Millennials have already realised that the world needs a crucial transformation and that now is the moment to finally face social and environmental challenges and act collectively to find new solutions for old problems. Everyone is essential in this process and should try and find ways to contribute somehow. These solutions can manifest on the creative impulse and shared vision of designers, producers, and consumers, all working together, whilst in harmony with nature. Through innovative and inspiring design, fashion can be a powerful tool to help the young generation imagine and truly create a better future.

To that end, **Fashion Revolution Brazil**, **27 Million Brazil** and **Stop the Traffik** have teamed up to create the *Fashion Experience*, a project that intended to raise consumers awareness about the fashion industry's impacts on people and the planet. The two NGO's that work against human trafficking and modern slavery partnered with the Fashion

Revolution team in Brazil to fight for workers rights and better working conditions in the fashion supply chain.

It worked as an interactive social experiment to engage people in the promotion of positive changes in the industry through more conscious consumption habits. Having almost 3.000 visitors in only one week, the *Fashion Experience* has proved that as long as consumers have information they care. When people can really see what is behind the clothes they wear, they feel responsible for their buying choices. As a society, we are also responsible for the welfare of the planet we are leaving to future generations and as Toffler points out "giant historical shifts are sometimes symbolized by minute changes in everyday behaviour" (TOFFLER, 1981, p. 275).

The point is that the same fashion that subjects people to a constant cycle of consumption can also stimulate powerful transformations in lifestyles and influence mind-set changes, because it has the ability to present the promise of new futures. Sustainability, social and environmental responsibility are fundamental supports for this transitory time, all we have to do is to start seeing the world in a different way, with different eyes and with a more humane and holistic approach.

### **REFERENCES**

ABIT. Indústria Têxtil e de Confecção Brasileira: Cenários, Desafios, Perspectivas, Demandas. 2013. Available on http://www.abit.org.br/conteudo/links/publicacoes/ cartilha\_rtcc.pdf. Accessed on 23 Mar. 2016.

ARANHA, F.; FEFERBAUM, M. Editorial: Mudam-se os Tempos, Mudam-se as Vontades. Ei! Ensino Inovativo, Volume Especial, p. 1, 2015.

BAUDRILLARD, J. The Consumer Society: Myths and Structures. London: SAGE Publications Ltd, 1998

CLEAN CLOTHES CAMPAIGN. Available on http://www.cleanclothes.org. Accessed on 21 Mar. 2016.

DITTY, Sarah. It's Time for a Fashion Revolution: White Paper. 2015. Available on http://fashionrevolution.org/wp-content/uploads/2015/11/FashRev\_Whitepaper\_Dec2015\_screen.pdf. Accessed on 21 Mar. 2016.

EJF (ENVIRONMENTAL JUSTICE FOUNDATION). The Deadly Chemicals in Cotton. 2007. Available on http://ejfoundation.org/sites/default/files/public/the\_deadly\_chemicals\_in\_cotton.pdf. Accessed on 23 Mar. 2016.

FASHION REVOLUTION. Available on http://fashionrevolution.org. Accessed on 23 Mar. 2016.

FASHION REVOLUTION. Fashion Revolution Day: Press Release. 2014.

FASHION REVOLUTION. How to be a Fashion Revolutionary. 2015. Available on http://fashionrevolution.org/wp-content/uploads/2015/11/HowToBeAFashionRevolutionary.pdf. Accessed on 23 Mar. 2016.

FLETCHER, K. Slow Fashion. In: The Ecologist, 2007. Available on http://www.theecologist.org/green\_green\_living/clothing/269245/slow\_fashion.html. Accessed 13 Aug. 2013.

ILO (INTERNATIONAL LABOUR ORGANIZATION). Available on http://www.ilo.org/global/lang--en/index. htm. Accessed on 22 Mar. 2016.

INTERNATIONAL LABOR RIGHTS FORUM. Available on http://www.laborrights.org/industries/cotton. Accessed on 26 Mar. 2016.

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RAVASIO, P. How Can We Stop Water From Becoming A Fashion Victim? In: The Guardian, 2012. Available on http://www.theguardian.com/sustainable-business/water-scarcity-fashion-industry. Accessed on 22 Mar. 2016.

SALCEDO, E. Moda Ética Para Um Futuro Sustentável. São Paulo: G. Gili, 2015.

SIEGLE, L. To Die for: Is Fashion Wearing Out the World? London: Fourth Estate, 2011

SOMO. Child labour in the textile & garment industry: Focus on the role of buying companies. 2014. Available on http://www.somo.nl/publications-en/Publication\_4058. Accessed on 26 Mar. 2016.

TAPSCOTT, D. Grown Up Digital: How the Net Generation is Changing Your World. New York: McGraw Hill, 2009.

TOFFLER, A. The Third Wave (2nd Edition). London: Pan Books Ltd. in association with William Collins Sons & Co. Ltd, 1981.

# STRUGGLING TO BUY FASHION TO WEAR: a working model of the fashion clothing involvement of those who born blind, those who became blind and those who are visually impaired

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### INTRODUCTION

The relationship between fashion, the body and the world is complex (Johnson, 2008). As such, the modern appetite for fashion (and especially luxury branding) indicates that clothes are more than simple covering for the body. As possessions are tied to emotion and a sense of identity (Goffman, 1959; Belk, 1988; Mittal, 2006), clothes may tell of a desire to reinvent oneself. Clothing choice may indicate an effort to deal with the expectations of others, to enhance self-image, to elicit love or to display power (Dittmar & Howard, 2004; Dittmar et al. 2009). However, it could be argued that these dynamics between the body and fashion clothing become even more complex in the case of individuals who have never experienced or have lost their sight.

Despite World Health Organization (2014) data suggesting that every five seconds someone goes blind somewhere in the world, there has yet been little research conducted or initiatives launched to investigate and explore how blind and visually-impaired individuals develop relationships with their environments and, more particularly, how fashion clothing may help these persons cope in a visionoriented society. The absence or diminishment of vision challenges the concept of fashion clothing since in such instances the clothing is unseen by the buyer and wearer. This, in turn, opens up possible new conversations about how, in a highly visually-driven world, blind and visually-impaired people might feel about

their identity, self-image and not least about how they feel in managing to adapt to and engage in everyday tasks. With the National Health System (NHS, 2012) reporting that sight loss is set to rise by one-third over the next decade, estimating nearly 700,000 extra cases by 2020 in the United Kingdom alone, more attention to the relationship between the absence of sight, the sense of self and of well-being and the experience of choosing what to wear is more than warranted, as this is a real-life problem affecting many people all over the world.

Social theories suggest that 'disability' is actually produced by society's failure to create working policies that enable accessibility for all persons (Oliver, 1996), a failure that makes current negative attitudes towards and lack of interest in blind and visually-impaired consumers routine and seemingly normal both in theoretical conversations and in management practices. It is important to note that present-day behaviour is a result of our past history, the latter which still influences current perceptions of what it is like to be blind in a visual world. Life without sight is represented in works of art such as The Blind Leading the Blind by Louise Bourgeois (1947-1949) and *Jesus Opens the Eyes of a Man Born* Blind by Duccio di Buoninsegna (1311), which capture popular imagination by portraying blindness as pain and conveying the mysticism surrounding blindness in various socialcultural interpretations of this phenomenon.

Throughout the history traced by Greek, Roman and biblical figures, the mysteries of blindness has inspired. This inspiration re-emerges in contemporary novels such as Blindness by José Saramago (1995), which has been translated into 25 languages. On the other hand, publications such as Blind Vision by Cattaneo and Vecchi (2014) present cutting-edge scientific findings that support the possibility that the brain can re-adapt, learning and enhancing other sensorial experiences when vision is absent, a possibility that opens up new avenues to gaining greater understanding of how life without sight is experienced. Because from the sighted perspective we don't vet know and fully understand what it is like to be blind or visually impaired, we are led to speculate about this experience, concluding that individuals with vision loss have little or no interest in the arts or in fashion clothing, since these are associated primarily with the appeal of vision.

The central purpose and focus of this study: Since fashion is an active field of study bridging art and psychology and is an extension of culture, religion, gender and sexuality, it can be perceived and experienced in many forms. For example, it is present in the handicraft of embroidery and is an agent of technological innovation. Nevertheless, fashion also involves aesthetic values, offering both sufficient complexity to sustain free play and imagination (Davis, 2012) and the ability to take us far beyond branding symbolism or marketing strategies. Fashion is the individual's experience not only in the seeing of items, but also in the feeling, touching and

hearing of them, along with other aspects that connect the body, clothing and imagination. The experience thus doesn't necessarily rely only on vision to occur. This study's objective has been to investigate how the experience of choosing and buying fashion clothing and of feeling and creating an involvement behaviour are influenced or changed when fashion is not seen by consumers.

### THE IMPORTANCE OF SKINNER'S BEHAVIOURAL PERSPECTIVE FOR THE STUDY OF BLIND AND VISUALLY-IMPAIRED FASHION CLOTHING INVOLVEMENT

The literature on product involvement fundamentally reflects marketers' ways of thinking about consumer behaviour (Fairhurst, Good, & Gentry, 1989; Poiesz & de Bont, 1995). Marketers generally view consumer behaviour as a continuum spanning a range of cognitive and behavioural processes (O'Cass, 2001), at the high end of which consumers actively search for information to make informed product selections to satisfy their needs, wishes and wants (Mittal & Lee, 1989). Researchers accordingly classify consumer behaviour as 'low involvement' or 'high involvement' (Kassarjian, 1981; O'Cass, 2001). However, when consumers are not fully able to engage actively with marketing and to exercise retail involvement, alternative theories must emerge to address the needs and experiences of consumers who don't fit the typical profile.

This study contributes to the redirection of the general focus of fashion clothing involvement studies, moving the emphasis away from the product and towards a greater stress on consumers' perspectives. The study aims to produce new knowledge about involvement, which refers to how consumers rank and connect aspects of fashion clothing consumption such as the overall importance of fashion, the buying process and the experience of wearing fashion, creating gestalt-like perceptions of the centrality (or not) of fashion clothing in consumers' lives. As the idea of blindness is also a social construct. as previously mentioned, issues such as how various social situations influence daily consumer choices remain a high priority for this investigation's framework. By attempting to investigate involvement as behaviour. key determinants of radical behaviourism (e.g., positive or negative reinforcements, extinction behaviour) have been adopted. The idea behind operant conditioning theory is to understand the processes by which behaviour is experienced and learned and by which its consequences may translate into future behaviour outcomes (Homans, 1958; Skinner, 1938; Skinner, 1958; Davey & Cullen, 1988). This exploration aims also to investigate differences between those who were born blind, those who became blind and those who are visually impaired, as the possible relationship between the variables can be contrasted, creating behavioural patterns that can be illustrated.

When fashion clothing involvement is

studied as behaviour, it becomes a result of social contingencies, which influence consumers' susceptibility to high or low product-involvement levels. Skinner's theory (1938; 1965; 1971; 1974) may, therefore, play an important role. Currently, the study of fashion involvement is primarily based on a cognitive perspective, which remains central to consumer literature and has been applied to consumer behaviour in different areas, such as motivation (Wells & Foxall, 2012; Alonso-Dos-Santos et al., 2016), information processes (Norris & Williams, 2016), selfcontrol (Baumeister, 2002; Goel et al., 2010; Sutton, 1988), patronage (Vieira, 2009) and inner drive (Amatulli & Guido, 2011: 123). However, in the case of blind and visuallyimpaired consumers, this study suggests that the ideas of radical behaviourism seem able to provide a new and insightful perspective based on a social rather than mentalist focus. proposing that behaviour can be observed and then understood.

Consequently, this study suggests that in these early stages of enquiry the adoption of a cognitive approach could limit both methods and the data validity outcome based on the fact that cognitivists primarily focus on studying internal processes, typically using the laboratory experiment to study behaviour and explaining behaviour largely in terms of how the mind operates (Barsalou et al., 2003; Adams et al., 2009), as opposed to the social environmental nature of this study.

Nonetheless, despite the disagreement, cognitivism and behaviourism share the same

interest in the study of human action, mental or non-mental, as an extension of physical laws (Ertmer et al., 1993). As a result, the argument here revolves around the view that despite cognitive approaches having successfully identified factors determining behaviour, they tend to ignore others, e.g., social and cultural factors and genetic factors (Jarvis, 2000). Besides the fact that a great amount of cognitivist consumer literature is influenced by the dominant position of the eye and vision in modern society and in psychological studies, seeing is conceived as the ability to generate internal mental representations (Cattaneo et al., 2011).

However, despite the strong association between cognition and vision, the term 'cognition' refers not only to visual input but incorporates all sensorial processes by which 'sensory input is transformed, reduced, elaborated, stored, recovered, and used' and is able to 'operate in the absence of relevant stimulation, as in images and hallucinations' (Neisser, 1967: 4). In denying this, consumer (cognition) studies remain primarily associated with visual triggers despite current debate and major disagreements on 'how closely vision really is tied to cognition process' (Pylyshyn, 1999: 341). In fact, evidence suggests that 'our brain does not need our eyes to "see" (Cattaneo et al., 2011) and that the absence of vision may possibly enhance our experience through the other senses (Cattaneo et al., 2011). A recent publication by Ornandi (2014), The Innocent Eye: Why Vision is not a Cognitive

*Process*, offers a convincing argument on the connections between vision and how the external environment moulds visual activity.

It is clear why visual cognitive influence is important to consumer fashion studies and literature, as vision is vital for the majority of product stimulations, in particular for fashion products that are strongly linked to characteristics such as colour (Turley et al., 2002), advertising (Butkevičienė, 2015; Scaraboto et al., 2013), aesthetic art, perception of luxury (Zhang et al., 2014), merchandising (Park et al., 2015), in-store buying behaviour (Clement et al., 2015) and branding. As a result, visual inputs (experiences) have allowed accredited researchers to make sense of the debate by emphasising cognitivist rather than behavioural psychological and philosophical approaches, justifying their mentalist focus in the investigation of consumer involvement variables rather than behavioural choice.

This study challenges the crucial fact that the great majority of consumer studies and all available consumer fashion clothing involvement models to date (e.g., O'Cass, 2004; Mittal & Lee, 2015; Wang et al., 2006; Kim, 2005; Afonso-Vieira, 2009; and Naderi, 2013) were designed to investigate the majority population – namely, mainstream (sighted) consumers. Within this line of thinking, these studies' theoretical choices and instruments design could be justified and validated, as their participants were fully capable of immersing themselves in the mentalist idea, which gives total control and

initiation to the perceiver (the consumer). By taking part in these studies' tasks, they were able to initiate 'an image of the outer world', striking the retina of the eye and activating the most intricate processes, resulting in vision: the transformation of the retinal image into perception, 'creating an inner representation of reality' (Skinner, 1974: 81).

In summary, this study explores consumer fashion involvement as behaviour. Therefore, it asserts that this involvement can be studied as a chain of effects and is the result of an individual's experience in an environment. Thus Skinner's (1938) theory provides an explanation for behaviour with a social alternative, which seems more relevant for this study's questions. What follows is a short introduction to the study's sampling followed by the methodology design.

The study's subjects: Normal visual acuity is referred to as 20/20 vision. From an inclusive perspective, this study takes as a sample group a combination of those who have been blind from birth, those who are visually impaired and those who became blind at some point in life. It includes males and females of ages ranging from under 17 to 82 years old, as the goal was to have the most varied sample as possible. Therefore, this sample can be classified as stratified sampling, as the study has identified the different types of people that make up the target population (born, became blind and visually impaired), providing a real representation of consumers within visual impairment groups.

### FRAMEWORK DESIGN AND DATA COLLECTION

From an exploratory approach, the instruments selected for the data collection were questionnaires, interviews and videography. The Likert questions replicated O'Cass's (2004) and followed the same design strategy as Afonso-Vieira's (2009) and Kim's (2005) extension of the original fashion involvement model. The Likert-scale questions selected have been validated and tested in diverse fashion involvement studies (O'Cass. 2000; O'Cass, 2004; Vieira, 2009; Kim, 2005). To complement and extend the O'Cass (2004) model, three new hypotheses were added to the model. These new hypotheses were grounded in previous studies, such as those of Church et al., (2003), Agree (2014), Iwarsson et al. (2003) and Dunn (1990), regarding disability, accessibility, living and social arrangement they were tailored to investigate the needs and limitations of the consumers. groups under study and to explore the realities of how social dynamics impact aspects of the study such as disabled consumers' free will and choices in the research context.

The questionnaire's sample size was 315 and the interview and sensory ethnography sample involved a total of 24 respondents. The total sample size was 339 participants.

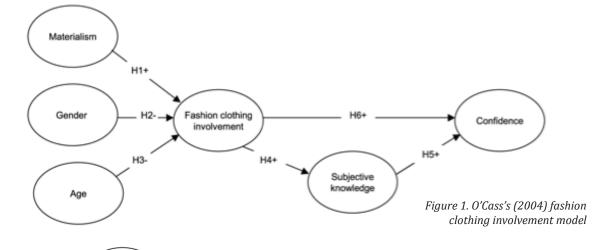
The data analysis was divided into two parts. With the support of JMP and Nvivo software, interview data was content-analysed and film-edited into a short narrative. Data was coded to enable interpretation by both

qualitative means (to remain in context) and quantitative means (to explore correlations), allowing the coding scheme to be based on actual observations and not pre-research assumptions. Descriptive statistics plus chisquare tests were adopted. Where chi square could not be applied due to sparse data in some cells the non-parametric Wilcoxon test was used instead.

### A BRIEF REVIEW OF KEY RESULTS RELATING TO THE PROPOSED STUDY: TESTING A NEW FASHION CLOTHING INVOLVEMENT MODEL

Since behaviourism is fundamentally grounded on observable behaviour, H1 testing is a result of all the other hypotheses and the result will indicate how both the individual biological variables (the make-up of the organism, e.g., age, gender) and the social variables (e.g., living arrangement, accessibility), as influenced by the environment, shape observable (i.e., external) behaviour, which is then objectively and scientifically measured (Skinner, 1974; Bond & Fox, 2015).

Materialism has a significant effect on the consumer fashion involvement of the blind and visually impaired. This hypothesis was accepted. Of the people that agreed to the statement, 'I consider fashion a central part of my life', 57.14% of these also disagreed with the statement, 'I usually buy only things that I need', and 27% of all the respondents both thought that fashion was a central part of their



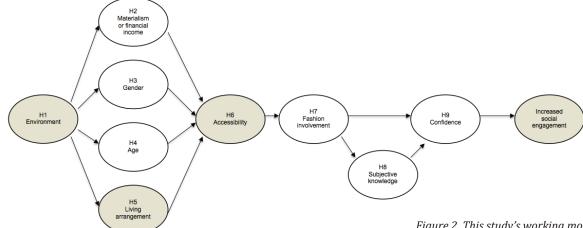


Figure 2. This study's working model proposition

lives and bought things they didn't need.

This study suggests that the adoption of materialism as a variable needs to be reevaluated with regard to consumers suffering from sight loss. Materialism is defined as 'the importance a consumer attaches to worldly possessions' (Belk, 2015: 291; Brouskeli,

2014), in this case the 'wanting' of an item of clothing or a brand of clothing. However, this study found that questions that have been adopted to measure materialism, such as agreeing with statements such as 'My life will be a lot better if I could have things that at present I don't have', can be misleading in this

disability context.

Considering its multifaceted meanings (Larsen et al., 1999), materialism can be viewed from both socio-psychological and cultural perspectives and also as a direct result of individual perspectives (Hunt et al., 1996). Moreover, for a blind or visually-impaired person it may signify paying for services such dry cleaning and ironing or being able to have a guide dog or to pay for shopping assistance, transportation, etc. Relevant aspects of these consumers' fashion involvement, in other words, are not necessarily seen as part of consumption in the mainstream literature. Despite these limitations, the significance of materialism prevails since an association was found between blind and visually-impaired persons and the idea that shopping tends to be more individually driven, career focused and independent. In particular, these individuals ranked their job title as an important fact for their engagement in society. Consequently, as an individual phenomenon these subjects value materialism highly (Ger et al., 1996; Schouwenburg, 2015).

The hypothesis of greater fashion involvement when gender is female was rejected; however, gender as a whole (both males and females) proved to be significant. In contrast to mainstream fashion research (O'Cass, 2004; Kim, 2005; Wu et al., 2015), there was no significant difference found between female and male behaviour. With a 57% agreement level, participants defended the importance of fashion clothing in the past and, with 45% agreement, its importance

in the present. Despite the decrease over time, participants never disagreed about the importance of their relationship with their clothing in the present and their possible involvement in the future. Similarities were also present with respect to product characteristics that influence buying choices, with 23.65% of males and 20.54% of females agreeing on the importance of the 'feel' of clothing and 25.12% of males and 25.89% of females agreeing on the importance of 'fit'.

Consequently, the overall result doesn't conform to existing fashion involvement models (O'Cass, 2004) or to consumer literature (e.g., Michon, 2008; Jain et al., 2014) in which females tend to be more involved in fashion than males. An explanation of the absence of gender differences may rely on the possibility that when vision is absent both genders may share the same awareness of the importance of fashion clothing, since they know that people are watching them and this may make males and females feel equally aware.

Another explanation may be linked to the fact that since gender has been associated with social stereotyping of femininity and masculinity (Fischer et al., 1994; Fischer, 2015) this imagery plays an important role mostly in how mainstream (sighted) males and females shop, not only for fashion but for everything else (Zhu et al., 2015), and how they associate themselves with products, brands and services (Kim et al., 2014; Das, 2014). Therefore, this study speculates that the gender equilibrium in behaviour for the

blind and visually impaired may be explained by the fact that these consumers lack exposure to these stereotyping images driven by media, marketing and society.

The age hypothesis was accepted. It was noticed that shopping frequency decreases with age. The largest group that shopped both weekly and once or twice a month was the age group from 18 to 24 years old. The largest group that shopped every six months or less was the age group of over 65 years old. One of the key aspects of this hypothesis was the gap in behaviour pattern and consumer product knowledge between the older and younger generations of the blind and visually impaired. This suggests the importance and key role of the accessibility of assistive technology such as the iPhone and products such as speechtext conversion devices.

With a P value of < 0.001 showing a strong correlation between age and online shopping, a question that needs to be further investigated regards whether these findings point only to the importance of age or if this younger generation's interest in fashion is a direct result of assistive technology accessibility, since the results shows that 51.01% of those who have access to the internet think about fashion a great deal. Interestingly, though 45.45% of those who don't have access to the internet also thought about fashion a lot, they did not know how to obtain information about fashion. Additionally, the online shopping frequency of consumers who live alone was 24.1%, in contrast to consumers who live with their families, for

whom online shopping frequency was 40.45%. This points to how family and friends work as a mediator for this fashion involvement, helping these consumers discuss or find information and expanding their product knowledge.

The hypotheses relating to accessibility, product knowledge, living arrangement and confidence also all proved to be relevant.

These findings contribute new insights about blind and visually-impaired consumers' consumption decisions, helping to identify a number of gaps in the current research and directions for future research. For example, this study suggests that the impact of age in the case of blind consumers is transitory. highlighting the fact that older generations still have interest in fashion clothing but lack opportunities to exercise this behaviour. Data also suggested that, despite positive changes, technology usage amongst older blind and partially-sighted people remains lower than in the mainstream older population (Bruvere et al., 2006; Foley, 2012). This study speculates that the importance of age as a variable is changing, based on the assumption that older blind and visually-impaired generations of the future will be more likely to be familiar with technology, as opposed to the older generation of the present-day, who are living in a transitional period of technological progress (e.g., the shift from braille to touch technology), which makes it harder to adapt.

The importance of living arrangement is supported, since family and friends facilitate fashion involvement. Data points to 55% of

respondents who shopped weekly living with family. It appears that those living with a family are more involved in shopping activities and thus shop more often. Of those who live alone, only 17% shopped for fashion clothing more frequently than every six months.

The study's hypotheses and propositions regarding fashion involvement and confidence were supported by data findings. Rather than focussing on physical accessibility, a subject given great attention in literature and practice. this study instead investigated several types of social accessibility, including access to the internet, education, fashion knowledge and the impact of the latter on involvement behaviour and confidence. Accessibility in terms of fashion clothing specifically includes the ability to receive product information before purchase, a repeated concern among the study's participants. The importance of accessibility was raised early in the responses of females from several different age groups, with an 81-year-old expressing similar concerns as an 18-year-old.

The findings are consistent with the disability literature and reports from institutions for the blind, which call attention to the urgent need for more inclusive policies. The Royal National Institute of the Blind (2010) points to the fact that 95% of their members reported experiencing difficulty reading labels while shopping for food, following on reports that discuss how these difficulties are present in the identification of medicine labels (Brady et al., 2013). Only one in 10 blind and visually-impaired people

are able to use a cash machine on their own (Edwards, 2011), and 45% experience difficulties in distinguishing between denominations of bank notes and coins (Edwards, 2011).

These reports are in agreement with this study's findings, as these struggles are common everywhere in the world. Only 1% of this study's participants agreed with the statement 'Consumer service is always helpful'. The statement that follows, from a 'became blind' female who was 81-years-old at the time of the study, illustrates this reality.

If only some of the big shops would have somebody available to go round with you pointing out the colours, styles, because you cannot see what size it is, what fashion it is.... I just live in blouses and skirts all the time. I'm sure that if big shops could have somebody, also with underwear.... You only seem to have the big shops – everything there is just hanging on rails or in little piles, it doesn't mean anything. [Pause] So if the big shops could only find it in their hearts...[pause] someone to walk around pointing things, it will be a very big help. (F, 81, became blind)

Accessibility is not only a design matter; it is also a social issue with huge implications for social well-being. A majority of the study's participants (53%) expressed awareness that people are reluctant to talk about fashion clothing with them. This figure conforms to

the finding of SCOPE (2014) suggesting that 75% of the British people tend to ignore or avoid people with some disability. This lack of integration helps to spread the idea that persons who are blind or visually impaired are not interested in what they wear. For the great majority of the participants, the present study was the first time that their opinions about fashion clothing were considered.

### THEORETICAL, PRACTICAL AND SOCIAL IMPLICATIONS

Theoretically, this study contributes to theories of fashion, behaviour, gender, age and technology for disabled consumers that support the importance of Skinner's (1974) views on the need to understand social environments. The results of this study call for reflection on how the theory and practices of fashion tend to be designed for the majority of sighted consumers and tend to forget about minority groups that don't fit the average consumer profile.

The O'Cass (2004) model proved to be useful in the early stages of enquiry, as it helped this study to create a focus and a framework to investigate if there were possible differences in how variables change when investigating consumers with sight loss. The findings support emerging discussions about gender and fashion choices, since scholars suggest a shift towards possible gender equality in the fashion future and an increase in males' interest in clothing (Afonso-Vieira, 2009).

This study is a step in the right direction of dispelling the myth that blindness means a lack of interest in fashion clothing. With increasing numbers of people suffering from sight loss globally, this problem deserves attention both theoretically and in practice.

### METHODS REVIEW / METHODOLOGICAL FLAWS / ACKNOWLEDGMENT

In contrast to previous fashion involvement models that adopt only the questionnaire as a key method (O'Cass, 2004; Afonso-Vieira, 2009), this study has adopted triangulation, suggesting the importance both of gathering significant and sizable data that allows observation of consumer experience and of capturing consumers' narratives and perspectives regarding the research problem. The researcher is satisfied with the methods selected as they enhanced each other and helped the study develop a broader view of the reality. One point to note is that the practical success of this methodology is due to the access and support granted to the researcher by key organizations for the blind and visually impaired, which advised well thought-out processes in which ethics and the confidentiality and safety of the participants were a priority. Both these organizations and the researcher share similar views about the importance of fashion clothing and are working towards increasing the chances of a better fashion future for those who are blind and visually impaired.

### REFERENCES

Adams, F. & K. Aizawa. (2009). "Why the Mind is still in the Head," in **The Cambridge Handbook of Situated Cognition**, P. Robbins and M. Aydede, Cambridge University Press (78–95).

Agree, E. M. (2014). The Potential for technology to enhance independence for those aging with a disability. **The Disability and Health Journal**, Vol. 7(1): S33-S39.

Alonso-Dos-Santos, M., Vveinhardt, J., Calabuig-Moreno, F., & Montoro-Ríos, F. (2016). Involvement and Image Transfer in Sports Sponsorship. **Engineering Economics**, Vol. 27(1): 78-89.

Amatulli, C & Guido, G. (2011). "Determinants of purchasing intention for fashion luxury goods in the Italian market: A laddering approach". **Journal of Fashion Marketing and Management**, Vol. 15 (1): 123 – 136.

Atkisson, M. (2010). Behaviorism vs. Cognitivist. Accessed on December 2015 < https://woknowing.wordpress.com/2010/10/12/behaviorism-vs-cognitivisim/>

Afonso Vieira, V. (2009). An extended theoretical model of fashion clothing involvement. **Journal of Fashion Marketing and Management**. Vol. 13 (2): 179-200.

Baumeister, R. F. (2002). Ego depletion and self-control failure: An energy model of the self's executive function. **The journal of Self and Identity**, Vol. 1(2): 129 -136.

Barsalou, L.W., Simmons, W.K., Barbey, A.K., and C.D. Wilson (2003). "Grounding conceptual knowledge in modality-specific systems." **Trends in Cognitive Sciences**. Vol. 7: 84–91.

Belk, R. W. (2015). Culture and materialism - **Handbook** of culture and consumer behavior (299-323). Oxford.

Bourgeois, L. (1911-2010). The Blind Leading the blind (1947–1949). French American Artist (1911-2010). Manhattan: New York.

Belk, R, W. (1988). "Possessions and the Extended Self." **Journal of Consumer Research**, Vol. 15: 139–68.

Bond, T & Fox, C. M. (2015). Applying the Research model: Fundamental measurement in the human sciences. Routledge.

Brady, E., Morris, M. R., Zhong, Y., White, S., & Bigham, J. P. (2013, April). Visual challenges in the everyday lives of blind people. In **Proceedings of the SIGCHI Conference on Human Factors in Computing Systems** (pages: 2117-2126).

Brouskeli, V., & Loumakou, M. (2014). Materialism, Stress and Health Behaviors among Future Educators. **Journal of Education and Training Studies**, Vol. 2(2): 145-150.

Bruyere, S. M. (2014), People with Disabilities: Sidelined or Mainstreamed? By Lisa Schur, Douglas Kruse and Peter Blanck. Cambridge University Press: New York.

Butkevičienė, V., Stravinskienė, J., & Rūtelionienė, A. (2015). Impact of consumer package communication on consumer decision- making process. **Engineering Economics**, Vol. 56(1): 57-65.

Cattaneo, Z & Vecchi, T (2014). Blind Vision: The Neuroscience of Visual Impairment. MIT Press: USA.

Church, R. L & Marston, J. R. (2003). Measuring accessibility for people with a disability. **The Journal Geographical Analysis**, Vol. 35(1): 83-96.

Clement, J., Aastrup, J & Forsberg, S. (2015). Decisive Visual Saliency and Consumers' In-store Decisions, **Journal of Retailing and Consumer Services**, Vol. 22, 1.2015, p. 187-194.

Davey, G. & Cullen, C. (1988). Human Operant Conditioning and Behaviour Modification. John Wiley & Sons: UK.

Das, G. (2014). Impacts of retail brand personality and self-congruity on store loyalty: the moderating role of gender. **Journal of Retailing and Consumer services**, 21(2): 130-138.

Davies, S. (2012). The Artful Species: Aesthetics, Art, and Evolution, Oxford University Press: Oxford.

Dittmar, H. & Howard, S. (2004). Ideal-body internalization and social comparison tendency as moderators of thin media models' impact on women's body- focused anxiety. **Journal of Social and Clinical Psychology**, Vol. 23: 768-791.

Dittmar, H. (2009). Do 'Body Perfect' Ideals in the Media have a Negative Impact on Body Image and Behaviors? Factors and Processes Related to Self and Identity. Editorial note for Special Issue on Media, Body Image and Eating Behaviors, **Journal of Social and Clinical Psychology**. Vol. 28, Special Issue: Body Image and Eating Disorders: 1-8.

Dunn, P. A. (1990). The impact of the housing environment upon the ability of disabled people to live independently. **The Journal of Disability, Handicap & Society**, Vol. 5(1): 37-52.

Duccio di Buoninsegna (1278-1319. Jesus Opens the Eyes of a Man Born Blind (1311). Italian Artist.

Edwards, A. (2011). Safe statistics and key messages about sight loss. RNIB Press: UK.

Ertmer, P. A., & Newby, T. J. (1993). Behaviorism, Cognitivism, Constructivism: Comparing critical features from an instructional design perspective. **Performance improvement quarterly**, Vol. 6(4), 50-72.

Fairhurst, A., Good, L & Gentry, J. (1989). Fashion involvement: An instrument validation procedure. **Clothing and Textiles Research Journal**, Vol. 7(3): 10-14.

Fischer, E. & Arnold, S. J. (1994). Sex, gender, identity, gender role attitudes, and consumer behavior. **Psychology and Marketing**, Vol. 11:163–182.

Fischer, E. (2015). Towards more marketing research on gender inequality. **Journal of Marketing Management**, Vol. 3, (15-16): 1718-1722.

Foley, A., & Ferri, B. A. (2012). Technology for people, not disabilities: ensuring access and inclusion. **The Journal of Research in Special Educational Needs**, Vol. 12(4): 192-200.

Ger, G., & Belk, R. W. (1996). Cross-cultural differences in materialism. **Journal of economic psychology**, Vol. 17 (1): 55-77.

Goffman, E. (1959). The representation of Self in Everyday Life. Random House: USA.

Goel, S., Hofman, J. M., Lahaie, S., Pennock, D. M., & Watts, D. J. (2010). Predicting consumer behavior with web search. **Proceedings of the National academy of sciences**, Vol. 107(41): 17486-17490.

Homans, G. C. (1958). Social behavior as exchange. **American Journal of Sociology**, Vol. 63(6): 597–606.

Iwarsson, S., & Ståhl, A. (2003). Accessibility, usability and universal design: positioning and definition of concepts describing person-environment relationships. **Disability and rehabilitation**, Vol. 25(2): 57-66.

Jain, V., Takayanagi, M & Carl Malthouse, E. (2014). Effects of show windows on female consumers' shopping behavior. **Journal of Consumer Marketing**, Vol. 31(5): 380-390.

Jarvis, M. (2000). Theoretical Approaches in Psychology. Routledge: London.

Johnson, M. (2008). The Meaning of the Body: Aesthetics of Human Understanding. University of Chicago Press: USA.

Kassarjian, H, H. (1981). "Low Involvement: A Second Look." **Advances in Consumer Research**, Vol. 8 (1): 31-34.

Kim, H. S. (2005). Consumer profiles of apparel product involvement and values. **Journal of Fashion Marketing and Management: An International Journal**, Vol. 9 (2): 207-220.

Kim, E. A., Ratneshwar, S., Roesler, E., & Chowdhury, T. G. (2014). Attention to social comparison information and brand avoidance behaviors. **Marketing Letters**: 1-13. Springer Business, Science and Media.

Michon, R., Chebat, J. C., Yu, H., & Lemarié, L. (2015). Fashion orientation, shopping mall environment, and patronage intentions: a study of female fashion shoppers.

### Struggling to Buy Fashion to Wear

**Journal of Fashion Marketing and Management**, Vol. 19 (1): 3-21.

Mittal, B., Lee, M.S. (1989). A causal model of consumer involvement. **Journal of Economic Psychology** Vol. 10: 363-389.

Mittal, B. (2006). I, me, and mine: how products become consumers' extended selves. **Journal of Consumer Behaviour**, Vol. 5: 550–562.

Mittal, B., & Lee, M. S. (2015). Extended Consumer Involvement Profiles: The Concept and its Illustration. In **Proceedings of the 1991 Academy of Marketing Science (AMS): Annual Conference** (pp. 46-50). Springer International Publishing.

Neisser, U. (1967). Cognitive psychology. New York: Appleton- Century-Crofts.

NHS England Department of Health (2012). Sight problems predicted to rise in UK. Accessed on 19 March 2016 < http://www.nhs.uk/news/2012/02February/Pages/rise-in-macular-degeneration-eye-problem.aspx>

Naderi, I. (2013). Beyond the fad: A critical review of consumer fashion involvement. **International Journal of Consumer Studies**, vol. 37(1): 84-104.

Norris, J. I & Williams, C. E. (2016), What Do We Really Need? Goals and Values, Security, and the Perception of Consumer Necessity. **Psychology and Marketing**, Vol. 33: 73–81.

O'Cass, A. (2000). An assessment of consumer's product, purchase decision, advertising and consumption involvement in fashion clothing. **Journal of Economic Psychology**, Vol. 21 (5): 545-576.

O'Cass, A, O. (2001). "Consumer self-monitoring, materialism and involvement in fashion clothing." **Australasian Marketing Journal**, Vol. 9. (1): 46-60.

O'Cass, A. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. **European Journal of Marketing**, Vol. 38(7): 869-882.

Oliver, M. (1996). "The social model in context."

### **Understanding Disability**. Macmillan.

Orlandi, N. (2014). The Innocent Eye: Why Vision is not a Cognitive Process, Oxford University Press.

Park, H. H., Jeon, J. O., & Sullivan, P. (2015). How does visual merchandising in fashion retail stores affect consumers' brand attitude and purchase intention? **The International Review of Retail, Distribution and Consumer Research**, Vol. 25(1): 87-104.

Pylyshyn, Z. (1999). Functionality and the Needs of Blind and Partially-Sighted Young People in the UK: A Survey of Young People, Parents, Educators and Mobility Specialists. Published by The Guide Dogs for the Blind Association: Reading

Poiesz, T and de Bont, C. (1995). Do we need involvement to understand consumer behavior? **Advances in Consumer Research**, Vol. 22: 448-452.

Royal National Institute of Blind People RNIB. (2010) "Facing blindness alone." Edited by Madeley, Richard, and Judy Finnigan. RNIB Press: UK.

Scaraboto, D., & Fischer, E. (2013). Frustrated Fatshionistas: An institutional theory perspective on consumer quests for greater choice in mainstream markets. **Journal of Consumer Research**, Vol. 39(6): 1234-1257.

SCOPE. (2014). Current attitudes towards disabled people Survey 2014. Accessed on January 2016 < http://www.scope.org.uk/Scope/media/Images/Publication%20Directory/Current-attitudes-towards-disabled-people.pdf?ext=.pdf>

Saramago, J. (1995). Blindness. Caminho Publishers: Portugal.

World Health Organization (2014). World Sight Day: 10 of October. Accessed on 24 March 2016, http://www.who.int/mediacentre/news/releases/pr79/en/>

Schouwenburg, H. (2015). Back to the Future? History, Material Culture and New Materialism. **International Journal for History**, Culture and Modernity, Vol. 3 (1): 59–72.

Skinner, B.F. (1938). The Behavior of the Organism ": an experimental analysis". Appleton-Century: Oxford.

Skinner, B.F. (1961). "Teaching machines." **Scientific American**, Vol. 205: 90-112.

Skinner, B.F (1965). Science and Human Behaviour. The Free Press: USA.

Skinner, B.F. (1971). Beyond freedom and dignity. Knopf: NY.

Skinner, B.F. (1974). About behaviorism. Knopf: NY.

Sutton, S. (1998) Predicting and explaining intentions and behavior: How well are we doing? **Journal of applied social psychology**, vol. 28(15), 1317-1338.

Turley, L. W., & Milliman, R. E. (2000) Atmospheric effects on shopping behavior: a review of the experimental evidence. **Journal of business research**, 49(2): 193-211.

Wang, H. C., Pallister, J. G., & Foxall, G. R. (2006). Innovativeness and Involvement as Determinants of Website Loyalty: A test of the style/involvement model in the context of Internet buying. **The Journal of Technovation**, Vol. 26(12): 1357-1365.

Wells, V & Foxall, G (2012). Handbook of developments in consumer behaviour. Edward Elgar Publishing: U.K.

Wu, M. S. S., Chaney, I., Chen, C. H. S., Nguyen, B., & Melewar & T. C. (2015). Luxury fashion brands: Factors influencing young female consumers' luxury fashion purchasing in Taiwan. **Qualitative Market Research: An International Journal**, Vol. 18(3): 298-319.

Zhang, H., Zhao, X., & Lee, C. (2014). Luxury Brand Perception and Consumer Attitude to Extended Luxury Brand: A Case of Korean Young Consumers. **Brand Management in Emerging Markets: Theories and Practices: Theories and Practices**, 191.

Zhu, L. L., Brescoll, V. L., Newman, G. E., & Uhlmann, E. L. (2015). Macho Nachos. **Social Psychology**, Vol. 46: 182-196.

## THE RELATION BETWEEN CLOTHING AND VIOLENCE AGAINST WOMEN IN BRAZIL

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### INTRODUTION

The fashion is, historically, a means for visual communication. This process takes place both in the user's choice, expressing their identity through clothing, as the perception of viewers towards it. The relationship of women with the fashion and society itself, gave her, throughout history, several judgments about the fabric that cover them – or not. The harassment against women finds, within a social model of male power, a justification based on the clothing that shows the body and means, according this society, a kind of consent to physical approaches.

Thus, the subject of this study is the relationship between clothing and violence against women. It seeks to answer the following question: What factors influence that violence against women is justified through clothing in Brazil? The hypotheses consider a possible relation of power exercised by man over woman, as well the sexual significance around the female body and Brazilian woman. Therefore, the aim of this study is to present the possible reasons to justify the violence against women through garment – analyzing the roots of relationship between the fashion and woman, female body, gender power relations and perceptions of the Brazilian woman.

With a qualitative analysis, the following chapter contains a study on the "clothing communication" process. Then it is talked about the historical relationship of women with fashion, establishing parallels with the

present. Forward, is approached the female body and its historical meanings and culturally assigned. So, having defined the gender concept, we discourse about the social power relations of men over women – it analyzes the nature of male domination. Finally, it presents a proposal for a collection based on the issues discussed throughout this study.

### FASHION, INDIVIDUAL AND EXTERNAL ENVIRONMENT

Historically, it is fashion's property, as vesture, transmits multiples symbolic informations on the individual through clothing. Aspects such as age, gender and income can be deducted from garment, as well as cultural and ethnical references. Lurie (1997) and Coelho (1995) agree that the fashion is an unconscious reading done about the other, even before knowing him. Thus, by opting for a style of dress, it weaves a selfimage to the social environment.

The usage of certain adornment says about, not only as how the individual himself makes use of the fashion information, but also as how he is inserted into a behavioral consensus. Now, the fashion assumes a paradox: based on the social scope, it provides an ideal predetermined to the individual and at the same time allows individuality through their own choices within this ideal. To Hollander (1996, p.229) "seen in a way, the fashion makes that many look alike; seen in other way fashion enables each one be

unique".

In this process of visual communication, Goffman (1982), propose that the others impression assumes a crucial role on individual's perception about himself. According to the author, the link between the individual and its reflection can be dismembered in his realistic perception of himself, that is, his self definition, followed by romanticizing the "I", that is, the facet that want to display and finally, the social image the perceptions of the others about him. About the importance to reach the ideal desired. Simmel (2014) proposed that, afraid of wrong interpretations about himself, the self punishment became part of the relationship of the individual with the fashion.

Regarding the interpretation on the other, Laraia (1997) explain that the ability of interaction and communication between the human being is a cultural procedure, based on the cumulative nature of culture, where the man learns from the environment and passes on the information. According to the author, the cultural repertoire of the individual is built by information and learning that have been transmitted from childhood. For Geertz (1989), the concept of "culture", which is based on daily interpretations, is a group of meanings in which the individual is the creator and the creature, at the same time.

Once analyzed the process of garment communication, the next step of the study is about the relation between fashion and women.

### **FASHION AND WOMAN**

The process of communication through a body adornment began still in the early days of human race, according to Laver (1989). Incorporated by men, the adornment symbolizes hunting achievement, provisions to their groups, like skin and bones. Throughout the history, according Castilho (2004), the male garment was preserved protuberant, with the same goal of transmit the users values. When the men's care resigned to sobriety, was fit to women display the opulences and so became their social reflectors. This way, Simmel (2014) affirms that the social value of woman started to be determinate, above all, by clothing. Coelho (1995, p. 105) complements:

The woman faces an imprisonment cycle in fashion: she is a slave of the tendencies and a facet that is to be assumed – she is fashionable, but don't really know why. This process occurs because of a dependency of an approval from the others, the search for love and reassurance of their own selfesteem. The feminine look is a form of demonstration of social power that the woman seeks to acquire, with the help of fashion.

Wolf (1992) appoints that in the occidental culture, the esthetic values in relation to women had influences of religious principles from Middle Age – from A.D. 476

until 1500, according to Laver (1989). Such as in the beginnings, in century XIX, is up to man the professional role, and for woman it was reserved the domestic ambit. As stated by Souza (1987), the man was unlinked from extravaganza in a moment of history when the social politics scenario becomes more egalitarian – so, feeling the need of more intellectual recognition. To women, was allotted the domestic learning and wait for marriage.

Lurie (1997) affirms that the female mien at the beginning of the century XIX was constituted for tight parts, hindering the body movements, assigning to women the appearance of fragile and dependent - this stereotype was associated to the partner, which should guarantee the condition of living only in home environment, free from further efforts and public spaces. The energetic woman, blushed, represents social inferiority, since she guarantees their livelihood working.

Thus, Simmel (2014) attributes to women the legacy of desire to captivate, in aspiration for recognition and male acceptability. The interaction between man and woman did consist, therefore, in the perception of the woman as worthy or not of value, or care. Historically, was assigned to woman announce her availability, but without giving up of modesty and so, win the men consideration.

Media, violence and Brazilian woman

From the close relationship between women and fashion, are developed

symbologies around female garment: imagistic ideals, concepts developed for a certain lifestyles, to be sold along with fashion (CRANE, 2006). According to Rabine (2002), the communicated fashion establish to the receptor an utopian concept of identity, through floating lifestyles that invites you to go out of your reality to copy them. The receptor of this information will assimilate this unrealistic plan of personal image as a possibility, although it is obviously inaccessible.

About the fashion images, Wolf (1992) points that the imagetic informations related to ideal female beauty are based on male preferences in relation to women – thereby, continuing a culture fundamented on men's interests. Rabine (2002), in line, points out that the male perspective has become crucial in the construction of imagistic content for women, contextualizing them in their sexual preferences. This way, it demands an image of women focused on eroticization.

Crane (2006) highlights that women mien in media fashion content and popular culture is built for lower positions, nudity and degradation. Wold (1992) compliments that this kind of image has an impact on perception of the younger about women – they assimilate that the degradation and violence against women are natural.

In this context, the documentary "Mulheres Brasileiras: do ícone midiático à realidade" (2014) exposes the high sexual connotation with which women are represented in the Brazilian media. According

to the documentary, the eroticization and standardization of women impacts in their perceptions about themselves since childhood, once that most people consume these media.

The Brazilian woman carries a cultural legacy of stereotypes historically related to promiscuity, as stated by Araújo (2001). This feature is mainly the predominant racial diversity in Brazil since its discovery. Freyre (1999) highlights that the promiscuity was associated with black woman because of the white man's servant position and festive habits of slaves.

Araújo (2001) says that the mien of indigenous woman was sexualized too, due to nakedness of the natives and tropical weather of the country. This way, the women of color and curvilinear forms, seen as the union of the white man with the black or indigenous woman, became part of Brazil's identity, associating their features to libertinism.

The female body

Just like the bodies of the Brazilians enunciate ethnic stereotypes, the body also has its communication function. According to Castilho (2004), it is on the body that reflects the culture, trough several items of differentiation. Thus, the body works like a base for the fashion phenomenon. Being socially constructed, the body can also communicate by itself through silhouettes, changes, and physical characteristics (WEEKS, 1999). About this, Goldenberg (2007, p. 23) points out:

There is a cultural construction of the body, with an appreciation of certain attributes and behaviors over others, so that there is a typical body for each society. This body, which may vary according to the historical and cultural context, is acquired by members of society through the prestigious imitation. The individuals mimic acts, behaviors and bodies that have been successful and have prestige in their culture.

Regarding the body, Castilho (2004) points out that the female body will always have greater sexual attributions than men. Wolf (1992) adds that both men and women learn to assign sexual meaning only the female body - the author again draws a parallel with the Middle Ages, when the body of the woman was associated with the sexual offense temptation. In line, Weeks (1999) points out that the female image acquired a representation of the sexual act itself. Perrot (2003) ends assuming that once the female body itself is blamed in relation to male desire.

According to Wolf (1992), the female body is highlighted only for-profit media: women are culturally bound to have their sexual image associated with male pleasure, and not with her own pleasure. The female body in this way is sexualized and exposed, but should not be used by women out of media images. In line, Weeks (1999) states that, historically, the social pattern is related to the interests of

the heterosexual man – therefore, the sexual manifestations that are beyond this normative context are considered misfits.

### RELATION OF GENDER POWER

Based on the analysis of cultural meanings of the female body, it can be concluded that the bodies are surrounded by social construction, separating them by gender. These social distinctions of sexuality are understood by sexual "gender" - that is, the social functions that build the concepts of "man" and "woman" (DE ALMEIDA; SZWAKO, 2009). Bourdieu (2002) adds that this distinction builds a social organization, being constantly strengthened culturally as the natural course of life in society.

Laraia (1997) and Wolf (1992), in line, stresses that the designated gender roles are

not the result of biological determinations – It is abolished that man and woman are born with a predisposition to different tasks. The authors are based on the analysis of other cultures, as indigenous environment where men and women play multiple roles. Thus, the social roles of gender are independent of human or evolutionary nature.

This way the gender power exercised by man over woman can be explained by male social dominance, as Bourdieu (2002) and social economic interests in keeping the female in a favorable stereotype to consume (WOLF, 1992; FRIEDAN, 1971). According to Bourdieu (2002), the condition of dominated class confers a position of submission, linking personal characteristics such as devotion and care. So, in the social environment, woman's place is facing to zeal, while the male, to the authority and leadership. The deviation of



Figure 1: Collection. Prepared by the author

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femininity expectations, therefore, ends up invalidating the woman who doesn't match.

According to Bourdieu (2002), the man's identity was historically built from the male body symbology and from acts of virility, achievements and honors test. The segmentation of the sexes was based on genital masculine forms, relating them with rise, superiority. It assigns thus, an energy approach to man, responsible for social functioning. According to the author, the domination of man translates attitudes to legitimize attitudes of masculinity, such as harassment against women.

### **COLLECTION PROJECT**

Based on the concepts analyzed over this study, it was created a fashion collection, as observed in Figure 1. This one can be defined, according to Treptow (2007), as a series of products that obey an esthetic coherency, considering factors like season and behavioral tendencies. Therefore, the collection was developed hypothetically for a Brazilian brand, Cavalera, whose identity is geared to the young culture and artistic inspirations.

The collection development was through researches as previous collection analysis from the brand, audience definition and product type, behavioral tendencies and raw materials. Composed by ten sketches, therefore the collection it was thought for autumn/winter 2016. The chosen thematic approaches the previously studied questions as a form of art manifestation that elucidates

the female problematics, being called "art as manifest."

This theme is brought to announce, with inspiration in the works of women artists, the problem of sexual abuse justified through clothing. The collection, therefore, is divided into two moments: the first is melancholic, based on women's fear. The second moment brings a female resistance through a more aggressive and satirical aesthetics.

### REFERENCES

BOURDIEU, Pierre. A dominação masculina. Rio de Janeiro, RJ: Bertrand Brasil, 2002. 160 p.

CASTILHO, Kathia. Moda e linguagem. São Paulo, SP: Anhembi Morumbi, 2004. 207 p. (Moda e comunicação.)

COELHO, Maria José de Souza. Moda: um enfoque psicanalítico. Rio de Janeiro: Diadorim Editora Ltda, 1995.

CRANE, Diana. A moda e seu papel social: classe, gênero e identidade das roupas. São Paulo, SP: SENAC São Paulo, 2006. 499 p.

DE ALMEIDA, Eloísa Buarque; SZWAKO, José. Diferenças, igualdade. São Paulo, SP: Barlendis e Veteccia, 2009. 228 p. (Coleção Sociedade em Foco: introdução as ciências sociais)

DEL PRIORE, Mary. História das mulheres no Brasil. [3. ed.]. São Paulo, SP: Contexto, 2000. 678 p.

DE MATOS, Maria Izilda Santos; SOIHET, Rachel. O corpo feminino em debate. São Paulo, SP: UNESP, 2003. 221 p.

FREYRE, Gilberto. Casa-grande & senzala. 13. ed. Rio de Janeiro, RJ: Editora Universidade de Brasília, 1963. 589 p. (Biblioteca básica brasileira; 7.)

FRIEDAN, Betty. Mística Feminina. Rio de Janeiro, RJ: Editora Vozes, 1971. 323 p.

GEERTZ, Clifford. A interpretação das culturas. 1. ed. Rio de Janeiro, RJ: LTC, 2008. 213 p. (Coleção antropologia social)

GOFFMAN, Erving. Estigma: notas sobre a manipulação da identidade deteriorada. 4 ed. Rio de Janeiro, RJ: Jorge Zahar, 1982. 158 p. (Coleção antropologia social)

GOLDENBERG, Mirian. O corpo como capital: estudos sobre gênero, sexualidade e moda na cultura brasileira. Barueri, SP: Estação das Letras e Cores, 2007. 176 p.

HOLANDER, Anne. O sexo e as roupas: a evolução do traje moderno. Rio de Janeiro, RJ: Rocco, 1996. 260 p.

LARAIA, Roque de Barros. Cultura: um conceito antropológico. 11. ed. Rio de Janeiro, RJ: Jorge Zahar, 1997. 116 p. (Antropologia Social)

LAVER, James. A roupa e a moda: uma história concisa. [1. ed.]. São Paulo, SP: Companhia de Letras, 1989. 285 p.

LOURO, Guacira Lopes. O Corpo educado: pedagogias da sexualidade. Belo Horizonte, MG: Autêntica, 1999. 174 p.

LURIE, Alison. A Linguagem das roupas. Rio de Janeiro, RJ: Rocco, 1997. 285 p.

SIMMEL, Georg. Filosofia da Moda. Lisboa: Texto & Grafia, 2014. 127 p.

Mulheres brasileiras: do ícone midiático à realidade. Direção: Laura Toledo Daudén, Andrea Gago Menor e Alba Onrubia García. Produção: Pueblos-Revista de Información y Debate y Paz con Dignidad. Documentário, 14'05". Disponível em: < http://youtu.be/MyDfr4N7dWk> Acesso em 20 de maio de 2015.

SOUZA, Gilda de Mello e. O espírito das roupas: a moda no século dezenove. São Paulo, SP: Cia das Letras, 1987. 255 p.

TREPTOW, Doris. Inventando moda: planejamento de coleção. [4. Ed.]. Brusque: Ed. Do Autor, 2007.

WOLF, Naomi. O Mito da beleza: como as imagens de beleza são usadas contra as mulheres. Rio de Janeiro, RJ: Rocco, 1992. 439 p.

### LIQUID FASHION: change and transience associated to postmodernism

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### INTRODUCTION

Since Lyotard (1979) coined the concept of "post-modernity" in the late nineteenseventies and declared the "end of grand narratives," developed societies throughout the world have begun to perceive a powerful sense of liberation. This new freedom has provided the basis for certain authors focusing on post-modernity, to tackle the question of consumption by jettisoning the idea of hierarchical fashion consumption and replacing it with a form of consumption based on pleasure and convenience (Lipovetsky, 2007; Maffesoli, 1990). That is to say, fashion is no longer consumed due to the power status it provides, but due to the powerful style it grants to each individual. The main consumer in this scenario is the cool, individualistic and consumerist "narcissist", an optimist, an individual who lives in the present, who has forgotten the past and who is not too concerned about the future (Lipovetsky, 1996).

The sense of acceleration generated by these reduced time-periods and short-term perspectives can also be applied to the idea of consumption. In fact, the degree to which consumption has changed in terms of time and place is more than evident.

### THE PROBLEM OF TIME ACCELERATION

We must bear in mind that, in the modern age, time has ceased to be a passive and

inert factor, having become an indicator of change regarding all existing things. The fact is that acceleration has become the engine of modernity, at the same time as it has become something of a problem (Koselleck, 1993).

From the point of view of the individual (Giddens,1991; Beck,2006), this process of acceleration has been accompanied by an almost insatiable hunger for experiences and the desire to try everything in a world that offers a tempting abundance of possibilities. This excess of opportunities, possibilities and potential directions rarely leads us to any solid conclusion. The overbearing fear of missing something has intensified our pace of life, which, in turn, has boosted our quota of experiences (Han, 2015). The result of this form of acceleration, one that affects all social changes, is a sensation of unstoppable momentum.

The liquid life that Bauman (2006) refers to is precisely characterised by this loss of direction due to acceleration and, within the same context, by the need to constantly start anew and choose a new option or version, which makes it extremely difficult for people to establish any stable identity during this process. According to Bauman (2007), everything today is ephemeral and temporary, consisting merely of a succession of new beginnings. In this respect, our sense of identity in this type of consumer society is constantly recycled and liquid life consists of an ongoing process of forgetting, erasing, throwing away and replacing.

### LIQUID SOCIETY: EVERYTHING FLOWS VERY RAPIDLY

If there is one thing that sets solids apart from liquids and gases it is fluidity, the factor that enables them to constantly change their form. Fluids are not tied to either time or place, do not preserve the same shape for any length of time and are always liable to change form. In the case of fluids, the important thing is the flow of time, given that the space they occupy is only filled for an instant, and that is why they are associated with virtual weightlessness, mobility and inconstancy.

Zygmunt Bauman (2003) defines liquid modern society as that society in which the conditions according to which its members act change before any forms of behaviour are consolidated into specific habits or routines. The "liquid modernity" coined by Bauman has become a metaphor for the idea of change and transience. For Bauman this process consisted of the transformation from a solid society to a liquid society, and he establishes some of the categories and dualities that encompass all of his reflections: freedom/dependence, us/them, union/separation, exchange/free gift, power/choice, self-preservation/moral duty, nature/culture and order/chaos.

In the liquid society we live under the rule of sell-by-dates and seduction and social models and structures cease to apply sufficiently in order to govern public customs. Globalisation has robbed the State of part of its power and the true State is money (Brenna Becerril, 2010). Thus, the sense of identity

that the solid society had previously enjoyed with the Nation-State is also diminished. In the liquid society nobody any longer identifies himself with any group of structures that are in any way complex or that might require a little thought. Thought in the liquid society is, as pointed out by Arendt in *The Human Condition* (2005), a privilege of the few. Present-day hyperactive restlessness, revolution, anxiety and unease do not sit easily with reflection.

In the liquid society we live within a climate of uncertainty and insecurity, due to improvisation, which makes it very difficult to make any predictions. Furthermore, amnesia and emotional rootlessness are presented as a condition for success, and this demands greater flexibility and fragmentation from individuals, not to mention a willingness to share interests and emotions, and a preparedness to change strategies and abandon solid commitments when necessary.

In Bauman's view, the solidity of modern life has been liquefied and, in its place, an idea has emerged in which things flow and adapt to reality without taking on any specific form, generating only uncertainty.

In short, the acceleration of time, growing individualism and freedom associated with post-modernism have all given rise to transforming processes that affect both the individual and the social dimension. These have generated new parameters in terms of place, time and pace (Brenna Becerril, 2010). Bauman has analysed these factors in order to understand how society has been liquefied.

### **SOLID SOCIETY (modernism)**

- » The nation is entrusted with resolving problems.
- » Predictable future and forecasts. Reliable relationships based on work, expert know-how, science and technology as sources of progress and social change.
- » Social stability based on trust, solidarity and friendship.
- » Long-term perspectives.
- » Institutions featuring rigid characteristics.
- » Collective identity based on membership of a "group," "class" or "sector" with similar interests and concerns.
- » Coactive security based on the objectives of universal truth, justice and equality.
- » The nation represents society.
- » Balance between political and economic roles.
- » Cooperative society.
- » Nation and society are one and the same. Universal social principles.

### **LIQUID SOCIETY (post-modernism)**

- » The power of the State has been dissolved by globalisation.
- » A climate in which predictions are difficult to make. Uncertainty and insecurity due to improvisation.
- » Actions are based on freedom, diversity and difference, which means that society is more fragmented and individual reality is often different to social reality.
- » Short-term perspectives.
- » Difficulties in terms of maintaining shape or form.
- » Unstable jobs.
- » Individualism.
- » Insecurity and difficulties regarding choices that entail committing time and resources.
- » No balance has been found between political and economic roles.
- » Nation and society are separate. Society consists of a series of consuming individuals who are more governed by desire than by need.
- » Social relationships based on vulnerable, transitory and unstable ties due to increasing individualisation.

Table 01 source: own elaboration

### "NEOMANIA" AND "USE-AND-THROW" CULTURE

Neomania or a passion for the new (Campbell) is a distinguishing feature of our post-modern mentality and the consumer society in which we live. The temporal scope of consumer items is also transformed. The long-lasting durability of items that the solid society aspired to has been replaced by the planned obsolescence of consumer items in the liquid society, thus generating greater instability and accelerating consumer desires.

Neomania dictates that all of the consuming inhabitants of a modern society aspire to always have "the latest" and "the newest" products, in which respect their compulsion to buy is inevitable. The notion of functionality has been lost in many products, because consumers do not continue using them until they are no longer useful, but renew them long before for more modern versions.

For this reason, in this transition from a solid to a liquid society, the business model has also been diluted and drastically changed. Companies have sought to adjust production to demand (Erner,2008). The need we feel to constantly renew our wardrobes means there is a rising demand for "use-and-throw" clothing, and, for this reason, fashion companies have chosen to give priority to the trends of the moment, even though this may be to the detriment of creativity.

We have become beings guided by a "use-and-throw" culture and by the growing sensation that everything is ephemeral and

that all the products we purchase and use have a very short useful life (Martinez Barreiro, 2008). We are moved by what is new, by greater speed, by more style or simply by a desire for change.

### CAN WE TALK ABOUT LIQUID FASHION TODAY?

Life in a liquid modern society cannot stop. Modernisation is essential: attributes that have exceeded their sell-by date must be thrown out. In the foreword to "Liquid Modernity" (2003) Bauman talks "about lightness and liquidity" and states the following:

"Fluids travel easily. They 'flow,' 'spill',
'run out', 'splash', 'pour over', 'leak', 'flood',
'spray', 'drip', 'seep', 'ooze'; unlike solids, they
are not easily stopped – they pass around some
obstacles, dissolve some others and bore or
soak their way through others still. From the
meeting with solids they emerge unscathed,
while the solids they have met, if they stay
solid, are changed - get moist or drenched.
The extraordinary mobility of fluids is what
associates them with the idea of 'lightness'."

Can these liquid properties not be extrapolated and also applied to fashion flows and trends in today's consumer society?

If there is one quality that characterises current fashion it is the speed and fluidity with which it progresses, just like liquids, being tied to neither time nor place. In a liquid modern society, the way individuals act changes before these forms of behaviour are consolidated

and turn into routines or habits, and the same occurs in the world of fashion.

New products and new trends constantly emerge, as rapidly and in so short a time period that there is simply no time for consumers to assimilate them and for the products to survive on the market for any length of time. The metaphor for postmodernist change and transience created by Bauman can also be applied to fashion with regard to the manner in which fashion is produced. With the acceleration of time, "fast fashion" has taken centre stage and the fashion cycle has been increasingly reduced. This model is based on rapidity and low-cost consumption, both economic and psychological. The consequence of this is that it is easier to renew products and, therefore, incentivise a "use-and-throw" culture. This means that certain solid factors that were always rooted in fashion, such as creativity, art, handcrafted appeal and high-quality clothing and fabrics have either been lost or have been diminished.

Furthermore, if in Bauman's liquid society globalisation has robbed the State of part of its power and has meant that social structures are no longer able to offer sufficient guarantees, something similar has occurred in the world of fashion. In the transition to post-modernism, fashion has been globalised and democratised. It is no longer something reserved for the few, but is now within everybody's reach. In this respect, fashions and consumers are so changeable that it has become almost impossible to stay up to date.

Today it is very difficult to predict trends and anticipate individuals' tastes and, as a consequence, fashion companies have decided to adjust their production to market demands and the trends of the moment, to the detriment of creativity. Liquid society demands greater flexibility and fragmentation from individuals, whilst also expecting them to be prepared to change strategy and abandon commitments. And this abandonment of long-term planning means that fashion has lost the "durability" factor. Clothing no longer needs to be long-lasting or of high quality, it simply has to satisfy the consumer at the moment in which it is purchased.

The dissemination of trends follows a rapid and fluid process. First they will be worn by *trendsetters* and *early adopters*, the most innovative fashion consumers. A year later they will begin to appear in shops and showcases, until they reach the mainstream or the mass consumer. And when they begin to be seen in the street and become popular among the public, that is the sign that this trend will soon die.

Fashion has no depth or form. It simply depends on the thought of each individual and, as occurs in the liquid society, it has become increasingly divergent. The acceleration of time and place in modern society has been hugely influenced by technology because everything is now instantaneous and unconnected with place. Feeling free today means not coming across any obstacles to movement and, being well aware of this and with a view to retaining their consumers and

### LIQUID SOCIETY

- » The power of the State has been dissolved by globalisation.
- » A climate in which predictions are difficult to make. Uncertainty and insecurity due to improvisation.
- » Actions are based on freedom, diversity and difference, which means that society is more fragmented and individual reality is often different to social reality.
- » Short-term perspectives.
- » Difficulties in terms of maintaining shape or form.
- » Unstable jobs.
- » Individualism.
- » Insecurity and difficulties regarding choices that entail committing time and resources.
- » No balance has been found between political and economic roles.
- » Nation and society are separate. Society consists of a series of consuming individuals who are more governed by desire than by need.
- » Social relationships based on vulnerable, transitory and unstable ties due to increasing individualisation.

### **LIQUID FASHION**

- » Fashion has been democratised and is global: for everybody.
- » It is impossible to reliably predict fashion trends and anticipate consumers' tastes.
- » The sense of "durability" is eventually lost.
- » With greater freedom there is greater diversity and different urban groups and tribes emerge associated with different fashion styles.
- » Creative destruction. Fashion is ephemeral and is constantly renewed based on short time-periods.
- » Fashion is not tied to either time or place.
- » New and more dynamic jobs to enhance the fluidity of fashion and market trends.
- » Fashions are adopted at different rates, but the number of followers increases when it is thought that they have been chosen by the rest.
- » Changes in the way fashion is produced, based on more rapid business models ("fast fashion")
- » Technological advances change the progress and dissemination of trends.
- » The vulnerability of individuals and their scarce attachment to things means that it is very easy to throw items away.

attracting new consumers, fashion companies have made the necessary changes to renew their appeal, effectively enabling consumers to interact with them and take part in the dissemination of fashion and trends. They achieve this through the social media, which have become the most immediate form of communication today. In this respect, we can also observe the success of the new and most dynamic professions within the industry, such as coolhunters, stylists, bloggers, visual merchandisers and community managers (De Beneddittis, 2002).

In table 02 we can observe how the characteristics of the liquid society can be perfectly applied to the realm of fashion, confirming the idea that the same changes that have been witnessed in society in its transition from a solid modern society to a liquid postmodern society, have also been witnessed in the world of fashion.

### CONCLUSIONS

In summary, in response to the question posed in this research, we have been able to confirm our hypothesis that the acceleration of time so characteristic of post-modernism and the dissolution of certain solid factors over time can be observed within society, but also within the realm of consumption and the world of fashion. In this respect, we have achieved the aim of this paper in terms of confirming that the properties and attributes of Bauman's liquid society can be perfectly applied to the fashion industry. In

### **Liquid Fashion**

short, fashion and trends today travel with consummate ease, companies channel them by adapting them to consumer demands and they *flow* throughout the market. According to the role adopted by each individual within the realm of trends and innovation, these innovative trends drip down, first over the most innovative players, who then *splash* the early adopters. In turn, these trends then run out into the mainstream. Fashion floods the mass market until it is drenched, and when the market begins to *spill over* this provides proof of saturation and indicates that the trend has reached its end and must flow out into a new trend. Fashion and trends are not easily stopped, given that technology and the social media have boosted their dissemination. What is more, they pass around some solid obstacles or end up soaking and drenching them, due to globalisation and democratisation. And, finally, the extraordinary mobility and speed of production processes based on the fast fashion model is what associates fashion with the idea of "lightness." In this sense, having shown that the attributes of liquids can be applied to the fashion cycle and trends, we can confidently state that, in addition to being able to refer to fashion in terms of liquidity, today we can also talk about the existence of something known as "liquid fashion."

### REFERENCES

ARENDT, Hannah (2005). La condición humana. Barcelona. Paidos.

BAUDRILLARD, Jean (1974). La sociedad de consumo: sus mitos, sus estructuras. Barcelona, Plaza y Janés.

BAUDRILLARD, Jean (1997). **Pantalla Total**. Barcelona. Anagrama.

BAUMAN, Zygmunt (2007). **Vida de consumo**. Madrid: Fondo de cultura económica.

BAUMAN, Zygmunt (2006). **Vida líquida**. Barcelona. Paidos

BAUMAN, Zygmunt (2001). La sociedad individualizada. Madrid. Cátedra.

BAUMAN, Zygmunt (2003). **Modernidad líquida**. Madrid. Fondo de cultura económica.

BAUMAN, Zygmunt (2005). Amor líiquido. Acerca de la fragilidad de los vínculos humanos. Madrid. Fondo Cultura Económica.

BAUMAN, Zygmunt (2005). **Modernidad y ambivalencia**. Barcelona. Anthropos.

BAUMAN, Zygmunt (2007). **Miedo líquido. La sociedad contemporánea y sus temores**. Barcelona, Paidós.

BECK, Ulrich (2006). La sociedad del riesgo. Barcelona. Paidos.

BECK, Ulrich y BECK-GERNSHEIM, Elisabeth (2007). La individualización. Barcelona. Paidos.

BOCOCK, R. (1995). El consumo. Madrid. Talasa.

BOURDIEU, Pierre (1991). **La Distinción**. Madrid. Taurus.

BRENNA BECERRIL, Jorge E. (2010). La sociología líquida de Zygmunt Bauman. México. UAM-Xochimilco.

CASTELLS, Manuel (2006). La Era de la Información: Economía, Sociedad y Cultura. Madrid. Alianza.

CASTELLS, Manuel (2003). La Galaxia Internet. Madrid. Plaza y Janés.

DE BENEDITTIS, Mario (2002). Creare, producere e comunicare: le mille professioni della moda provincia di Milano. Osservatorio Mercato del Lavoro (OML). Milano. Franco Angeli.

ERNER, Guillaume (2008). **Sociología de las tendencias**. Barcelona. Gustavo Gili.

GIDDENS, Anthony (2001). **Un mundo desbocado. Los efectos de la globalización en nuestras vidas**. Madrid. Taurus.

GIDDENS, Anthony (1991) **The consequences of modernity**, Cambridge, Polity Press.

GIL MARTIL, Victor (2009). **Coolhunting, el arte y la ciencia de descifrar tendencias**. Barcelona. Urano

HAN, Byung-Chul (2015). El Aroma del Tiempo: Un ensayo filosófico sobre el arte de demorarse. Barcelona. Herder.

KOSELLECK, Reinhart (1993). **Futuro pasado: una semántica de los tiempos históricos**. Barcelona. Paidos.

LASH, Scott (1997). **Sociología del posmodernismo. Buenos Aires**. Amorrortu editores.

LIPOVETSKY, Gilles (2004). El imperio de lo efímero. La moda y su destino en las sociedades modernas. Barcelona. Anagrama.

LIPOVETSKY, Gilles (2007). La felicidad paradójica. Ensayo sobre la sociedad de hiperconsumo. Barcelona. Anagrama.

LIPOVETSKY, Gilles (1996). La era del vacío. Ensayos sobre el individualismo contemporáneo. Barcelona. Anagrama.

LYOTARD, Jean-Francois (1974). La Condición Posmoderna. Madrid. Cátedra.

MAFFESOLI, Michel (1990). El tiempo de las tribus. Barcelona. Icaria.

MARTINEZ BARREIRO, Ana (2009). **Hacia un nuevo sistema de la moda: el modelo Zara**. Vol. 51, sept-dic, 102-122. Revista Internacional de Sociología (RIS).

POIRET, Paul (1930). **En habillat l'époque**. París. Editions Bernard Grasset.

## SOCIAL INNOVATION IN THE AMAZON RAINFOREST THROUGH THE MATERIALITY OF THE COLOURED RUBBER

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### INTRODUCTION

In the Amazon rainforest, rubber trees grow extensively in the wild, and what might seem at first sight to be a simple, ordinary natural material, a useful resource serendipitously available to local residents, in fact opens up a vast and complex system of relations between local producers and the global market. Currently, the adoption of new methods of production has provided socio-economic opportunities to rubbertapping communities in vulnerable situations in the Amazon rainforest. Although many communities have learnt new production processes, but not all of them are able to make this activity sustainable. This goes beyond introducing new methods and implementing physical structure in order to surpass emerging challenges. Evidence demonstrates that to make local production feasible continued efforts from both community and stakeholders are necessary. Designers have been a part of the network of social innovation occurring in the rainforest and elsewhere - in places where socio-economic and cultural configuration depends on the use and the preservation existing natural resources, such as natural rubber. The integration of the coloured rubber FSA1 in the economic activity in the rainforest provides framework to the perception of the influence of design and crafts in the ongoing process of social innovation, and therefore on individual and

<sup>1</sup> The translation of Folha Semi-Artefato (FSA) is Semi-Artefact Sheet. The material is known internationally by its acronym FSA.

collective transformations.

### **CONTEMPORARY CHALLENGES**

The rubber tapper is familiar with large areas of rainforest, having a deep relationship with the flora and fauna of vast areas, which integrates a cosmology, composed of a vast ecological knowledge (Lima and Possobon, 2005). Although the rubber tappers became known as the 'guardians of the rainforest' due to their political engagement to protect the rainforest in the 1970s and 1980s, the reality is that current economic challenges have put their livelihood at risk (Hall, 2000). The lack of market opportunities added to the difficulties of earning a living from local products are causing these populations to migrate to urban centres, abandoning areas vulnerable to deforestation – and leaving behind their deep knowledge of the natural resources (Gomes et al., 2012; Vadjunec et al., 2011). In this context, the attainment of sustainability depends upon meeting a number of complementary and mutually interdependent goals, such as biophysical preservation, economic feasibility, organizational competence and socio-political solidarity (Hall, 1997: 95). Antony Hall argues that in the case of the Amazon rainforest sustainability can be defined as 'the productive use of natural resources for economic growth and livelihood strengthening, while simultaneously conserving the biodiversity and socio diversity, which form an integral and indispensable part of this process' (Hall, 1997: 95).

### TECHNOLOGY AND ECOLOGY OF THE COLOURED RUBBER FSA

Innovative methods of producing rubber are the outcome of projects and research aiming to provide options for the continuation of the rubber production in the Amazon rainforest (Eg.: Tecbor and Poloprobio). They generate improved and specialised kinds of rubber, thus being more able to create new markets, promoting better income and working conditions, among other benefits. FSA is one of the new kinds of rubber being

produced by local communities. Its production process results in a coloured, flexible and ready to use material to be applied in handcrafts, fashion, and design products. This technology was developed by the chemistry laboratory LATEQ at the University of Brasília in the early 2000s and is currently benefitting small-scale producers. This rubber exemplifies a process of social innovation, which encompasses a methodological change on the way of production, and has triggered further socioeconomic opportunities by adding commercial and aesthetic value to the material.



Figure 1: FSA production process, from wild trees to final rubber sheets.



Figure 2: FSA rubber sheets produced by the community of Parque das Ciganas, Acre, 2012.

Figure 1 shows the processing of latex into coloured rubber FSA. The rubber tapper<sup>2</sup> brings latex collected from trees to a production unit built next to his house, where family and other community members work together. The latex is then mixed in trays with coagulant, and in the case of the coloured rubber FSA, pigments and a vulcanizing mixture are also integrated into the rubber

recipe<sup>3</sup>. It solidifies after some hours, acquiring a spongy texture. Then the artisan producer<sup>4</sup> passes the rubber through a roller

press to expel the water and turn the rubber into a thin sheet, which is then hung up to dry (Figure 2).

### TECHNOLOGICAL AND CREATIVE INTEGRATION

Craft activities with wild rubber previously uninspiring due to the physical limitations of the raw rubber - have already produced examples of how social innovation can flourish. In the Amazon rainforest, where natural rubber has been mostly a commodity for the industry, FSA represents a technological and a creative innovation. While the technological feature relates to a methodological and technical change, the creative feature is about the possibility of transforming the coloured rubber through handcrafts. The former potentially expands the rubber economic activity in the rainforest. The manipulation of FSA during its solidification enables the manufacture of structured artefacts. This opens a range of creative possibilities, through which process some rubber tappers, man and women, are discovering the talent to become artisans.

To be effective, new methods of production need to be integrated by the locals in their work routines, this can be understood as Technological Integration. More than technological integration, a Creative Integration would involve a transformation of the material being processed, also integrating it to the economic production. Creative integration highlights the potential of social

<sup>2</sup> Tapping the trees for latex collection is predominantly a male activity. The production method of the FSA enable the involvement of women and older children in the rubber processing, as it occurs near their house, is easy and can co-exist with other daily activities.

<sup>3</sup> In terms of chemicals, the FSA incorporates the vulcanizing mixture (MV), which is mainly sulphur, zinc oxide and accelerators. They are all classic rubber vulcanizing materials, present in items from tyres to gloves and condoms. The pigments are common minerals like iron oxides, widely used in latex house paints. The latex coagulant is pyroligneous acid, present in smoke.

<sup>4</sup> Artisan producers: I employ this term, which is also used by Littrell and Dickson (2010), in order to refer to both artisans and producers whose work is connected with the use of local materials. Either their roles are not separated, as the producer may be also an artisan, or the content of the text applies equally to artisans and producers without any clear distinction.

innovation to prosper and succeed as it goes beyond adopting a new production method without questioning it. This means taking ownership upon materials and methods, thus it transforms a top down innovation into a bottom-up innovation. It becomes a powerful capability, that is to say, an effective opportunity, through which people take agency towards social change and their own wellbeing, taking on the responsibility of developing and changing their own lives and their community (Sen, 1999: 282-283). According to Amartya Sen, capabilities depend on a set of factors that are not just material but also immaterial, such as skills, knowledge, means, context and freedom of choice.

Through crafts, creative integration becomes a phenomenon that exceeds the generation of economic value by generating cultural, aesthetical and symbolic capital. Among rubber tapping communities, the process of creative integration has also had a positive impact on the reaffirmation of their local identity, personal satisfaction and personal recognition by counterparts. According to Marianne Schmink (2011: 154), projects that emphasize the marketing of forest products have reinforced the historical identity of the rubber tappers and created national and international opportunities. Amartva Sen (1999) recognizes the importance of economic production in relation to people's wellbeing, moreover, he states that social change and wellbeing go far beyond that. Feelings of contentment, self-reliance, identity and affection are, for

example, immaterial but fundamental aspects of wellbeing.

The case of the rubber tapper and artisan José Araújo exemplifies technological and creative integration. He applies FSA in the manufactures of rubber shoes (Figure 3). Through this transformative process, he left a condition of poverty to become a recognised artisan producer who, nowadays, sells his work both nationally and internationally and employs people. Araújo also became a multiplier<sup>5</sup> of this social innovation, teaching other rubber tapping families. Since he learnt about coloured rubber, he also has collaborated with designers in order to improve his shoes. His work displays the importance of handcrafts and design in thriving individual and collective changes. Local recognition became very clear to me when I was working with Araújo, who is fiercely proud of his reputation. There is a clear sense of admiration and pride regarding his work, which enhances the standing of his community, therefore representing the creation of symbolic capital as another consequence of social innovation.

Another example I have been following is the continuation of the rubber and handcraft production by the community of Parque das Ciganas and the community of Curralinho, in Acre, whose processes were introduced to them by me while participating in a



Figure 3: Rubber shoes made by the artisan and rubber tapper Araújo, 2016.

project in 2012. In a video released in 2015<sup>6</sup>, Mr. Raimundo, a rubber tapper from the Curralinho community declares that before learning the new methods of making rubber they 'had nothing and [they] could do nothing', but nowadays they 'can live with dignity', having, for an example, built a stronger and bigger house for their families. In addition, rubber tapper Mr. Pedro from the Parque das Ciganas community tells us that as he learnt to tap the trees from his father, so he will also teach his children to make a living from rubber. These assertions reinstate the desire that many rubber tappers have to continue living in the rainforest, as also expressed by Mrs. Andréia in an interview (Sky and

<sup>5</sup> The concept of multipliers provides an interesting opportunity to those involved in social innovation projects; multipliers can be community members or stakeholders in a project who alone or together can help disseminate new methods of production.

<sup>6</sup> WWF-Brasil (2015). Dia da Amazônia - Pedro e Raimundo (Seringueiros). https://www.youtube.com/ watch?t=23&v=MJvE6TMx4Lw Accessed: 10 Sept.

WWF, 2013). In the same video in 2015, she expresses satisfaction and pride of being "a woman rubber-tapper" who is also an artisan, which she says while presenting bracelets and a pair of shoes, made by women in her community with FSA. This displays a proactive engagement with the new production methods, and demonstrates that outcomes of the learning process are an ongoing aspect of a social innovation process. Finally, it illustrates capabilities evolving from the materiality of the artefacts into people's material and immaterial wellbeing.

### DESIGN AIDING SOCIAL INNOVATION OF THE AMAZONIAN RUBBER

During twelve years researching and working with FSA produced by and with communities, I observed communities developing new capabilities and overcoming challenges. Nevertheless, the artisan producers do face challenges in order to establish themselves with the new production methods and they do not work for everybody or in all the communities. Although FSA attracts great interest, the multiplication of the method among communities and its applications in design and crafts are still limited. Amaral and Samonek (2006: 20-21) discuss the difficulties of re-establishing activity relating to rubber in the rainforest, despite the higher economic returns offered by new methods. There are many factors that influence technological and creative integration of the new materials in the

economic activity. These include location: seasonality; support of local and non-local entities; the possibility of choosing other economic activities; individual and collective decisions; local organization into cooperatives and associations that help individuals sell their products; confidence and perception on the potential of the local materials; and market demands. Floriano Pastore (2011 to Amadeu) affirms that the sustainability of the rubbertapping communities in the Amazon rainforest does not occur in isolation, but can only be achieved on a small-scale through continuous and integrated actions of the numerous stakeholders. This process embraces both individual and collective levels of know-how. decision-making and mutual support. Thus, the development of social innovation depends on the proactive participation of the rubber tappers and their communities as well as coalitions with partners from inside and outside the rainforest.

Due to challenges, costs, and efforts involved in the process, designers and companies that do not get involved in the sustainable cause of these communities soon give up purchasing the material and working with it. The rubber from the Amazon is, unsurprisingly, much more expensive than rubber produced from industrial plantations. Logistics, timeframes and quality control are difficult.

Specific understanding of the material, context, and production process are necessary and contribute to resolving the conditions and capabilities needed for production.

This scenario demonstrates that design for sustainability requires further participation on the part of designers. The commitment of designers, entrepreneurs and institutional entities keen to work in a respectful way with these communities – both directly and indirectly – has an important role to play in the development of economic opportunities, and also of social and environmental values.

Interaction between designers and artisan producers

Due to the aesthetic possibilities enabled by the coloured rubber, the involvement of designers and design entrepreneurs with the rubber-tapping communities has been proved its relevance to the process of social innovation. Designers have become involved with rubber tapping communities as consultants, project managers, researchers, collaborators and entrepreneurs. Both the consumption of the material for the development of design products and the designers' direct collaboration with artisan producers in their community context have contributed to open new markets and support the development of new capabilities. In this context, an emergent phenomenon allies design and crafts as agents for social change and sustainability.

By being involved in the process of social innovation through production processes, designers collaborate directly with local artisan producers being able to contribute to technological and creative development

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and integration. This liaison occurs through the materiality of the artefacts, from which creative and collaborative endeavour comes to life. Thereby, the designer can be an important actor who holistically understands the local needs, the production process and the outside market. On another hand, the artisan producers can better understand the reception of the material and of their products outside their local context.

Importantly, whereas there are issues of differences – for example, socio-economic, cultural and educational; limited means of communication and physical distances and barriers (remote areas); connecting directly with the producers seems to be the best way to influence production processes and social change, as well as to help improving materials and adjusting products to an outside market. Friendship, trust and empathy are integral for long-term partnerships and effective results in both material and immaterial ways.

Designers can also help local producers and artisans to perceive the value and beauty of their cultural practices, knowledge, and the materials locally available. By inspiring a new gaze upon local resources from an outside point of view, designers can influence artisan producers to highlight genuine qualities of their work and culture, thus reinforcing a sense of identity of their products and materials through design and crafts.

Three moments of collaboration

Within the ongoing process of social

innovation, the contributions of the designer can be seen in three stages:

- » Seeding: Seeding would happen in the initial stage of technological or creative integration. It would be associated with new ideas and methods, at which point the designer could assist the development of new strategies, materials and products. It could also be related to training and teaching.
- » Cultivating: Cultivating would relate to supporting creative emergence in which the designer can nurture social innovation. For example, collaborating on the creative and technical development of the handicrafts, such as through workshops.

» Harvesting: Harvesting refers to acquiring materials or handicrafts respectfully, linking with new markets, and promoting continuity and autonomy. Other actions could be: involvement with research for the improvement of the material (E.g.: partnership with LATEQ); supporting the development visual communication of community's products.

### **CONCLUSION**

Social innovation is a complex and gradual process that entails the enhancement of people's capabilities and their engagement with opportunities. This continuing process is an outcome of the involvement of numerous



Figure 4: Relationship between local production and global market.

Left: a rubber tapper harvests the raw latex; a woman of the community hangs sheets of rubber to dry; a rubber shoe made by the artisan José de Araújo. Right: designer products made of new rubber materials, produced locally.

professionals in the network of relations. but is primarily led by the determination of the artisan producers. The graphic above (Figure 4) summarises the relationship between local production in the rainforest and a global market in which social innovation have broader consequences within a bigger perspective. Evidence shows that the adoption of the FSA processing has already been beneficial to improve wellbeing among rubber-tapping families with both material and immaterial consequences. The coloured rubber added value means the rubber tapper can better profit. Among the advantages of this process, there is the appeal of the material to young adults and inclusion of women in the family's income generation through coloured rubber production. The results include improvement of socio-economic conditions. reduction of migration to urban centres, local culture and knowledge are maintained and taught to youths; woodcutting and cattle-farming are also avoided, decreasing deforestation. Moreover, this panorama impacts on the political pressure that these communities exert on local governments for the rainforest preservation and on the strengthening of their role as 'guardians of the rainforest'.

REFERENCES

Dean, W. (1987) Brazil and the struggle for rubber: a study in environmental history. Cambridge: Cambridge University Press.

Frediani, A. A. (2010) 'Sen's Capability Approach as a framework to the practice of development', **Development in Practice**. London: Routledge, pp. 173-187.

Gomes, C., Vadjunec, J. M. and Perz, S. G. (2012) 'Rubber tapper identities: Political-economic dynamics, livelihood shifts, and environmental implications in a changing Amazon', Geoforum, 43(2), pp. 260-271.

Lima, D. and Possobon, J. (2005) 'Amazônia socioambiental: sustentabilidade ecológica e diversidade social'. Available at: http://dx.doi.org/10.1590/S0103-40142005000200004.

Loadman, J. (2005) Tears of the tree: the story of rubber-a modern marvel. Oxford; New York: Oxford University Press.

Hall, A. L. (1997) Sustaining Amazonia: grassroots action for productive conservation. Manchester: Manchester University Press.

Hall, A. L. (2000) Amazonia at the crossroads: the challenge of sustainable development. London: Institute of Latin American Studies.

Schmink, M. (2011) 'Forest Citizens: Changing Life Conditions and Social Identities in the Land of the Rubber Tappers', Latin America Research Review, 46(Special Issue).

Sen, A. (1999) Development for Freedom. New York: Oxford.

Sky and WWF (2013) 'Meet the producers behind Lily Cole's jewellery range'. Available at: https://rainforestrescue.sky.com/our-campaign/news-and-blogs/news/meet-producers-behind-lily-coles-jewellery-range [Accessed 05/06/2013 2013].

Vadjunec, J. M., Schmink, M. and Gomes, C. (2011) 'Rubber tapper citizens: emerging places, policies, and shifting rural-urban identities in Acre, Brazil', Journal of Cultural Geography, 28(1), pp. 73-98.

WWF-Brasil (2015).**Dia da Amazônia - Pedro e Raimundo (Seringueiros)**. https://www.youtube.com/

watch?t=23&v=MJvE6TMx4Lw Accessed: 10 Sept.

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# SHAND CULTURF

# FAST FASHION, SOCIAL MEDIA AND THE ENVIRONMENT

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### INTRODUCTION

The researcher is a Professor at the Fashion Institute of Technology in New York City, who is privileged to be on the receiving end of an ongoing conversation from over one hundred and twenty five 18-25 year old students each semester in the classroom. For the sake of this paper they will be called young millennials, born between the years 1990-1999 (U.S. chamber of commerce foundation). The access that the researcher has as a Professor is unique and allows a rare view into the minds and changing beliefs of the students. The latest buzz in the classroom has been about "Fast Fashion", also called "throwaway or cheap clothes". Fast Fashion is a term used to describe cheap and affordable clothes which is the result of catwalk designs moving into stores in the fastest possible way in order to respond to the latest trends (Macmillan dictionary.com). In other words the clothes you buy cheap, wear once or twice, and then throw in the good will or charity bin. These are the clothes that never make it through the washer and dryer more than once or twice! They either shrink to half their former size, shred as the seams cannot stand the tumbling, or fade to an unrecognizable color. As they are also trend worthy, they go out of style very quickly.

"Who cares" a young millennial will say
"I do not want to be seen in that outfit again
anyway" and away the outfit goes into the
charity bin! This phenomenon is not only
prevalent amongst students but has been the

norm in the home of the researcher over the past 8 years. As the mother of two daughters, the researcher has personally seen the rise of fast fashion in her home and bulging closets and drawers of her daughters. In order to fight the growing bags of clothes tossed away, the donation truck is called at least once a month. These bags of clothes gather day after day, pushing and straining on the closet doors until the truck from good will finally comes to take it all away.

This trend did not exist when the researcher was growing up. This generation had a couple pairs of jeans, some t-shirts, a turtleneck, school uniforms (if they went to catholic school) and dresses for church and Easter. The drawers were never bulging and people wore outfits many times over. A pair of Levi jeans with a black turtleneck could be worn everyday without a problem amongst the peer groups. This generation wasn't worried about being "seen" in the same outfit. Nobody carried around cameras, unless you were on vacation. Smart phones and social media did not exist, nor did selfies! Film was expensive and so was developing pictures. It was not economical to photograph and develop twenty pictures of oneself posing in the latest outfit bought for \$20 at a hot fast fashion retailer or kissing your cute new puppy.

What changed all this? Social media, and smart phones with access to cameras of course! More than 85 percent of millennials in the US own smart phones (Nielsen). They are young, beautiful and have great new clothes

from fast fashion retailers. Why not take a picture and post it for all your friends and family to see? Instagram is filled with millions of beautiful young adults posing for the camera. There is nothing wrong with that. The question becomes does social media drive fast fashion in the same way that young women are driven for a new Instagram shot wearing the latest trend? Does social media encourage the demand to constantly have new outfits for the hundreds, if not thousands, of friends to scroll through, like and comment on? This paper will try to find some of those answers through conducting primary research of the target group.

The paper will then report on whether, the young, beautiful millennial in the United States really cares about the effect all this clothing is having on our environment? Part of the theory is they do care. Environmentalism is growing and young people want to be sustainable. The problem becomes that they cannot afford to be. The median income for millennials in the US who are year-round, full-time workers is \$33,883 (US Census Bureau). Although they are better educated than the generation before them, they also have an average of \$25,000 in student debt (U.S. chamber of commerce foundation). They also live in a world where the marketing and pricing of fast fashion is much more accessible than sustainable quality clothing. Social media outlets are bombarded with ads for fast fashion retailers from all over the world. Some of the highest-performing content on social media comes from fast fashion

brands, and platforms such as Facebook and Pinterest are making it easier for people to own the clothes they see on the sites (Lafferty J. 2015). Although the millennials are slowly realizing the cost that fast fashion has on the environment, the amount of cheap accessible clothing available today is still easily attainable and cheaper than ever. Plus, the brands that sell fast fashion such as Zara. Top Shop, H&M and Forever XI have some of the best customer engagement among this age group (Lafferty J. 2015). These brands are constantly on the minds of this age group, and pricing is so alluring, purchasing it becomes difficult to resist. Unfortunately, even if millennials want to be concerned about the environment, the price and accessibility of quality sustainable clothing is just too high for their modest budgets.

The other part of the theory believes that they want to care about the environment, but the lure of a cheap new outfit for Saturday night at the club is just too tempting for a social media obsessed generation. The thrill of a new outfit every week is a possibility today. Fast fashion feeds that possibility and social media reinforces it. Most Millennials use at least two internet devices every day. Nineteen out of twenty Millennials (globally) own Smartphone's and check them an average of 43 times per day. Social media is by far the dominant way these respondents learn about things online. Search engines are ranked near the top but fall below Facebook and Twitter for content discovery. Accordingly, the advice for marketers of fast fashion is to build

relationships and trust with millennials first on social media (Sterling 2015). Fast fashion retailers have large advertising budgets making them experts on engaging this target customer. They are spending their marketing dollars to engage the fast fashion customer through social media.

The paper explores the buying habits of young millennials and their obsession with fast fashion and social media. The researcher would like to believe there is a change coming in the buying habits of the young as the millennials become more educated about the environment. At the school in which the researcher teaches there are classes offered on sustainability in the fashion industry that are very popular amongst the students. As stated, the students are interested in sustainability and education can possibly help create change. Unfortunately the researcher is not convinced that this change is possible. Today the marketing of fast fashion on social media, particularly Instagram, is much more aggressive than sustainable education. Plus the pricing of fast fashion is much more accessible than that of higher quality, designer or sustainable fashion. Finally the income level of the target group is such that sustainable clothing may not be accessible in their budgets even if they want to be more sustainable. This age group has some of the highest student debt and cost of housing than ever before (U.S. chamber of commerce foundation ND). Because of this statistic, the possibility to afford sustainable clothes may not be an opportunity for many years of earning power

in the marketplace.

### **METHODOLOGY**

The researcher created a primary research survey, where 22 questions on fast fashion, social media and the environment were conducted. The sample group was created to record ages 16 to 36+ male and female, from the United States of America and abroad. The survey recorded whether the participants were students. It also recorded whether the participants worked, how many hours a week and the income level of the participants. The survey was administered using Survey Monkey, a popular on line Survey Company in the United States.

The results of the survey will be part of an ongoing study to see if education and awareness on the effects of fast fashion on the environment will make a difference in the demand and consumption of fast fashion brands. It will also measure the influence of social media on fast fashion. The researcher will administer the survey again in 2018 and record the differences in the results. The 2016 survey will be a baseline to measure the opinions of the participants.

### SURVEY RESULTSS

### Demographics

The demographic data was recorded from 358 respondents. 92% of the respondents

were female, 8% male. The age group was primarily 19-21 with 67% of the respondents in that age category. There were 17% in the 22-25 age category, 5% in 26-35 category and 2% in the 36 plus age category. 9% of the respondents were from generation Z. 16-18 years of age. Of the 358 respondents 92% were students. 60% of the respondents worked and 40% did not work. Of the students that worked 19% earned \$0-\$100 per week. 50% of the respondents earned between \$101-\$300 per week, 10 % of the respondents earned \$301 to \$500 per week and 18% made more than \$500 per week. Even though 92% of the respondents were students 60% of them did work. This is common for New York city where it is very expensive to live.

The location of where the students lived was varied, but 59% were from the New York area. 31% were from other states in the United States and 10% were international respondents. As the researcher was interested in the makeup of the international respondents by region, the international population was summarized as such, 34% Asian, 17% European, 22% from South America and 27% from other parts of the world. This completes the summary of demographic information for the study.

### **Shopping Habits**

It was important to the researcher to understand how much money in US dollars the respondents would spend on an item of clothing. The researcher surveyed 3

key pieces of clothing to get an idea of this answer. The results were very interesting. The first question asked how much the respondents would spend on a top or shirt. The second question asked how much money the respondents would spend on a pair of jeans and the third, how much would the respondents spend on a club dress. The results are below. The researcher felt this question was important to get a baseline on how much money the respondents usually paid for a typical article of clothing such as a top, pair of jeans or a dress to wear out on a Saturday night. 77% of the respondents answered that they would spend \$30 or less for a shirt or top. In the US that is a small amount of money to spend on a garment.

The respondents felt a pair of jeans had more value and 59% paid \$30-\$60 for a pair of jeans. The third item was a club dress or an item of clothing that young millennials go out to party in.

Interestingly enough, the respondents answered that they would spend the least amount of money on this item. 41% had spent under \$30 on a club dress and a large 74% had spent under \$45 on the club dress.

The researcher was also interested in how often young millennials were shopping directly from social media sites. This practice is slowly gaining popularity in shopping habits of young millennials and will be used as a baseline for this study. Although it is a fact that the respondents are browsing social media sites, only 1.3% of respondents shopped from these sites all the time. The research found

on the statistics was vague on the subject, although one website stated that in 2015 5% of Internet sales would come from social media sites. Brain Sins (2015).

### Social Media Questions

The next question asked: "If you are photographed on social media in a weeks time frame how many times will you be in the same outfit?" 78% of the respondents said 0 times. This means that 78% of the respondents made sure they were in a different outfit every time they were photographed on social media.

The next question asks:" How important it is that the respondents are photographed in a different outfit each time they are posting on social media?" 63% said yes and 37% said no. Although conclusions will be drawn in the last part of the paper, the researcher believes it is important to note that being in a new outfit is important to this young millennial since they are photographed so often on social media and 0% want to be in the same outfit more than once.

Environmental and Sustainability questions

The first question asked was simple, and used to measure whether the respondents felt they were environmentally active or sustainable in their thinking. The question asked "Do you consider yourself environmentally conscience or

active?"Interestingly enough, 19% of the respondents did not even answer the question. Of the respondents who did answer the question, 27% believed themselves to be environmentally conscious or active where 73% answered somewhat or not active.

The next question asked about the reason why the respondents did or did not buy sustainable clothing. The answers directly lead to price, 68% of the respondents said it was too high priced,whereas 24% said it was not fashionable enough. It should also be noted that 18% of the respondents did not answer the question.

In the hope that the respondents understood the definition of sustainable clothing, the question was asked on the definition of sustainable clothing. It seemed that 50% of the respondents understood that both good quality clothing along with recycled clothing constituted sustainable clothing. It should also be noted that 18% of the respondents did not answer the question.

Selling and donating clothing is a way to make money or get a tax deduction in the United States. It is also one of the ways to be sustainable, as used clothing can be reused by another consumer. The question asks: "How often would you estimate that you donate or sell your clothing." This question was put in the survey to get a baseline on this trend and to measure if it will increase or decrease over time. The answer was that 74% donate or sell clothing once every six months. 12% answered once a month and 12.9% said they never sell or donate their clothing.

The last question that the survey asked was: If money was not a factor, would you reather have have 50 pieces of fast fashion or 15 pieces of high quality sustainable clothing. Contrary to every other question in the survey 77% of the respondents answered high quality fashion or sustainable clothing.

### CONCLUSIONS FROM THE RESEARCH

The primary research conducted by the researcher offered valuable information on both the demographics of the survey respondents and the psychographics of their beliefs on fast fashion, social media and the environment. As the study will be ongoing the survey conducted will be used as a baseline. When the researcher started this study she felt that there was some interest among the young millennials to be more sustainable. The researcher has come to believe, after conducting the study, that young millennials are too interested in the benefits of fast fashion to truly participate. According to the study, 78% of young millennials are photographed from 1-9 times a week on social media. 78.4 % of the respondents also said they would never be photographed in the same outfit. This alone feeds the fast fashion trends. If a millennial is photographed 3 times a week as an average than they will need at least 3 different outfits a week in order not to be photographed in the same outfit. This could be over 12 outfits a month. According to the budgets of the respondents the only way they can feed their need to be photographed

on social media in different outfits is to buy clothing from fast fashion retailers.

Every millennial is constantly on his or her phone posting, tweeting and browsing. Whenever a new celebrity trend emerges on social media sites it grabs the consumers' attention and drives them right to the e-commerce site. As stated earlier in the paper, fast fashion brands engage the consumer better than any other brands. Millennials are one of the main groups that support the fast fashion industry. They want affordable clothing that is popular at the moment and once the season changes, they move on to the next new thing. Viewing fashion posts from Instagram, Twitter, and Pinterest every minute of the day drives consumers to want the next new trend. With each generation becoming more tech savvy, social media has become a part of everyday lives. Young Millennials are constantly on their phones using different apps like Facebook, Instagram, Twitter, and Pinterest. They see fast fashion on their news feeds which capture their attention and make them want to purchase what celebrities and their friends are wearing. Fast fashion knocks off those trends and instantly they are on their Instagram feeds. Social media is a great platform to visually engage consumers. It allows consumers to notice new products or popular items, connecting them to fast fashion websites and leading them to make purchases. Thus my statement stands that social media drives fast fashion.

The other conclusion is the budget of the young millennial. According to the study,

young millennials cannot afford sustainable fashion. They say they would prefer 10 pieces of sustainable fashion over 50 pieces of fast fashion (survey monkey) but they just cannot afford it. The study also states that one of the main reasons that they do not buy sustainable fashion is it's high price tag. It is just too expensive. It also says that it is not fashionable enough. Two strikes in the direction of fast fashion! The best chance of having young millennials be sustainable will be in selling or donating their clothing. According to the survey, the respondents sold or donated their clothing at least once every 6 months. This is an effort in the right direction.

The researcher has come to the conclusion that fast fashion is here to stay. With all the talk of sustainability in fashion the researcher believes that it will have to come from the manufacturer as it will not come from the consumer. Young millennials love their trendy cheap clothes that can be photographed on a daily basis to social media. They also love surfing on social media for new fast fashion trends. Finally, they love being able to buy a trendy outfit hot off the runway for \$15-\$50. Where that outfit ends up at the end of the fashion cycle is not as concerning to the young millennial, as its more important implications of being photographed on trend on Instagram and being able to do it at an affordable price!

### REFERENCE

CLINE, Elizabeth L.. Overdressed, The shockingly high cost of cheap fashion. New York: Penguin group, 2007.

### Fast Fashion, Social Media and The Environment

CORTIZO, J. (2015) . Brain Sins, Social Media Shopping Statistics 2015 #info graphic. Retrieved from http://www.brainsins.com/en/blog/social-media-shopping-statistics-2015-infographic/3727.

DICKSON, M., Loker, S. & Eckman, M. Social responsibility in the global apparel industry. Fairchild Books, New York.2009

EGAN, John (2015) 18 statistics that marketers need to know about millennials retrieved from; http://www.leadscon.com/18-statistics-that-marketers-need-to-know-about-millennials/

LAFFERTY J. (2015). Which Fast Fashion Brands Are Winning on Social Media? Retrieved from; http://www.adweek.com/socialtimes/

NIELSEN (2014). Mobile Millennials: Over 85% of Generation Y Owns Smartphone's. Retrieved from; http://www.nielsen.com/us/en/insights/news/2014/

STERLING J.(2014) Survey: Best way to reach millennials is on social media. Retrieved from Http://marketingland.com

U.S. CENSUS BUREAU (N.D). Retrieved from; http://www.census.gov/censusexplorer/censusexplorer-youngadults.html

US CHAMBER OF COMMERCE FOUNDATION (N.D). Retrieved from; https://www.uschamberfoundation. org/reports/millennial-generation-research-review

SURVEY MONKEY; retrieved from; https://www.surveymonkey.com/home/?ut\_source=header

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# BRAZILIAN TEXTILE HANDICRAFT: cultural manifestation and its relevance for design, fashion and the global market

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### TEXTILE HANDICRAFT AS A CULTURAL ASSET

Designer Aloísio Magalhães (1997, p. 55, our translation) said, about indicators of Brazilian culture: "here, the assimilation of cultures from our original formation – indigenous, Portuguese and African –, (...) is continuously enriched with new ingredients." The author qualifies cultural assets as permanent values and reference points for a nation and adds:

Only the collection of our creative processes, of what we have built as culture, in the scope of reflection, in its widest sense – costumes, habits, ways of living; everything that became crystallized in this process, that throughout history might be identified as permanent value for the Brazilian nation, those are our assets, and it is based on them that we must build a projective process (MAGALHÃES, 1997, p. 47-48, our translation).

Brief history of textile handicraft in Brazil

The domain of the textile handicraft has been historically associated with the "presence of women as an element of cultural action, almost always inclined toward the crafts among all peoples." (FUNARTE; MAIA, 1981, p.9, our translation)

### **Brazilian Textile Handicraft**

About indigenous life in pre-colonial Brazil, Darcy Ribeiro (2006, p. 46, our translation) says: "a woman would weave a hammock or a basket with her most perfect ability, for the enjoyment of expressing herself through her craft, as the ripe fruit of her immense disposition toward beauty." The creation of textile objects useful for the indigenous customs widely explored form, technique and materials representative of their environment and their culture (CAURIO, 1985, p.34).



Figure 1 – Plumed sling from the Urubu Ka'apor ethnic group (rio Gurupi, MA). Collected by Darcy Ribeiro, 1950. Indigenous Peoples Memorial Collection, Secretariat of Culture of DF, Brasília. Source: Photography by the author.

In African territory, black people brought to Brazil as slaves also dominated textile handicraft. They produced fabric with varied patterns, beaded detailing, as well as clothes and accessories. There is a kind of fabric produced in Brazil known as pano-da-costa ("fabric from the coast") that represents a variation of the original textile tradition from Western Africa usually made by men. The full skirts and turbans worn by women in Bahia are also of African heritage (CAURIO, 1985, p. 68).



Figure 2 – Douentza fabric (Mali, African Northwest) known in Brazil as pano-da-costa. R.S. Wassing Collection, The Hague, Netherlands. Source: CAURIO, 1985, p. 70.

However, indigenous culture has been devalued consistently during processes marked by their domestication and extermination. The manifestations of their art were deemed "primitive" and, to a great extent, discarded. The blacks were in a similar situation, but also enslaved on top of everything, so they faced great difficulties in expressing their religion, culture and art for centuries (CAURIO, 1985, p. 34;68).

In the colonial times, blacks and natives worked in textile workshops set up by Jesuit priests, where they produced "coarse fabric" useful in day-to-day activities (CAURIO, 1985, p. 70). Much like other manual work, this

activity was seen as too base to be performed by free men, who sought to distance themselves from the condition of slavery (CUNHA, 2000, p.16). This context contributed for the maintenance of the rudimentary character of textile production and hindered it from incorporating the full aesthetic and symbolic potential of the indigenous and black know-how.

In Europe, lace was a luxury item and was worn as adornment by both women and men. In countries such as Portugal, Spain and Germany, weaving lace fabric was part of the formal instruction afforded to "family" women. As such, the role of bringing lace, embroidery and the like to Brazil is said to have been the crafty Portuguese ladies' (BRUSSI, 2009, p.22; MENDONÇA, 1959, p. 42-43). About homebased production of lace, it is said that:

That line of work during slavery times, even though it was indeed performed mostly by slaves, also had the participation of the family's daughters. And, strange as it may sound, some of them sought to create models and patterns, without detriment to the usual work based on paper models that were kept and passed along from generation to generation. (FUNARTE; MAIA, 1981, p. 13, our translation).

The end of the 17th Century has seen a more abundant and careful production of fabrics in Brazil, associated with the first





Figure 3 – Lace weaver working on bobbin-made lace from a cardboard pattern. Source: Adapted from FUNARTE; MAIA, 1981, p. 53.

manufactures. However, in 1785, Maria I signed the charter that shut down factories, manufactures and looms destined to the production of assorted fabrics, with the exception of raw cotton ones, used by slaves. After this blow by the Crown, some looms remained in operation in areas far from major urban centers. As "female craft" and popular rural art, this production yielded fabrics for family use or for trading with neighbors (CAURIO, 1985, p. 74).

Other types of textile craft such as embroidery, crochet and needlepoint lace were taught to women in religious schools since the beginning of the 19th Century. As for bobbin-woven lace, "(...) it became more popular than other manual crafts, favored and produced by poor women in coastal areas as well as by women from the Northeastern backlands (...)" (MENDONÇA, 1959, p. 44-45, our translation).

Transformations undergone by textile production in Brazil were marked by a lack of official support for qualitative development, as well as the undervaluing of specific languages. On the other hand, indigenous, blacks and the European have taken part in the execution, transformation, transmission and diffusion in national territory of traditional European and native techniques, incorporating them to the ways of life of several communities and making a contribution to the composition of Brazilian material culture.

Textile production in the 20th Century and the designer approach

In the middle of the 20th Century, manifestations of textile craft that fulfilled familiar and local demands began to be admired and commissioned by clients in distant urban centers. That resulted in a

change of destination of products and in the characterization of the work, which gradually got bumped up from occupation to a career (GARCIA, 1981, P. 171-172; GIRÃO, 1984, P.6).

(...) the valuing of craftsmanship can be clearly identified among people in the major urban centers, the nostalgia, an attempt to go back to the roots, to the "rustic", it is a matter of trend. (GARCIA, 1981, p. 167, our translation)

This fact coincides with an interest shown by other sectors of society in manual labor. According to Adélia Borges (2011), in the decade of 1980 there is a surge in new actors connected to craftsmanship in Brazil, such as:

(...) a greater phenomenon in the conjunction of learned people

 including not only designers but also anthropologists, social workers, educators and other professionals – and illiterate or semi-educated people from rural communities and city outskirts. (BORGES, 2011, p. 45, our translation)

In spite of the different visions and approaches of crafts professionals, they shared a goal of stimulating collective organization and entrepreneurship among craftspeople, in lieu of a welfare-driven policy. The presence of designers was directed toward projects that the author characterizes as a revitalization of craftsmanship, which "would materialize by the sum of the preservation of production techniques that were passed on through generations and the incorporation of new formal and/or technical elements to the objects." (BORGES, 2011, p. 45;53, our translation).

In his text What can industrial design do for the country?, Magalhães (1998) calls out designers about the fundamentally divided social and economical realities in the country and the need for action not just driven by reason but also intuition. The reconsidering of the designers' activities would take off from diverting the focus from the development of products geared toward consumer demands. Besides that, it would also demand a broader understanding of what a project could be in a country whose cultural wealth may come from poverty contexts, while rich minorities have their eyes on values imported from other cultures. The interdisciplinary character

of design could contribute to a process of development driven by social, economic and cultural factors.

(...) the industrial designer's horizon is expanded, in developing countries, by the presence of problems that go back to primitive and preindustrial situations, processes and uses sharing space with more sophisticated, so-called "cutting edge" technologies.

(MAGALHÃES, 1998, p. 12, our translation)

Textile handicraft is a part of those preindustrial manufacturing traditions in which the production of objects is not characterized by the operation of machinery, but by manual labor associated with the use of tools. And this type of craft is usually practiced in economically underprivileged areas such as small towns, rural areas and the outskirts of major urban centers.

### RELEVANCE OF TEXTILE HANDICRAFT FOR DESIGN AND FASHION AND FOR THE GLOBAL MARKET

The global design field notoriously favors the handcrafted object and artisanal manufacturing. Fletcher and Grose (2011, p. 146-149) introduce a few important aspects to sustainability in fashion: handicraft carries a political and democratic character, as technique associated to experience is more relevant than authorship or applied

technology; the artisan has more control over the origins of materials and their production, and their productivity establishes the limits regarding quantity and speed, contributing to a sense of moderation in consumption.

According to Colchester (2008, p. 69), designers and architects have been showing more interest on fabric since the end of the 20th Century, making the revival of handicrafts and traditional techniques one of the identified trends. Design curator and coolhunter Lidewij Edelkoort relates the revival of fabric in design to intrinsic aspects of the contemporary scenario. According to the author, after the

(...) reaction to the increasingly digital landscape of our lives, a craving for tactility and dimension has lead several designers to reconsider the role of fabrics once more. The near future will see the overwhelming revival of textiles in our interiors, covering floors, walls and furniture in an expansive and personal manner. These textiles will speak loud and clear and become the fabrics of life, narrating stories, designing pattern, promoting wellbeing and reviving the act of creative weaving. (EDELKOORT in EDELKOORT EXHIBITIONS, 2013, p. 1).

Another important factor in the relevance of handicraft concerns local values: modes of production, symbolism, expression of culture and respect to local ecosystem are seen as

models for the global market. According to Edelkoort (2013), "The local will feed back to the global and will animate world brands to become passionately interactive and reactive. Introducing local colour and craft along the way." According to the author, this relevance of local aspects is a response to the consequences of the excessive production of consumer goods and the homogeneity resulting from globalization.

Design and textile handicraft in Brazilian culture

Design is, roughly speaking, the most important source of the better part of the material culture of a society, which, more than any other society that ever existed, punctuates its cultural identity through the material abundance it is capable of yielding. (DENIS, 1988, p. 22, our translation)

While Denis states that the present society's cultural identity is based on the "material abundance" that it yields, Magalhães argues that

one of the serious problems faced by countries in the modern world is the loss of a cultural identity, that is, the progressive reduction of their own values, of the peculiarities that make cultures distinct from each other. (MAGALHÃES, 1997, p. 54, our translation) In Brazil, the design professional's attention to handicraft is relevant as manual labor represents a significant part of the creative and projective potential of the Brazilian people. Besides, handicraft production has contributed for the formation of a diverse set of cultural assets linked to the know-how and everyday life of several groups.

It is important to stress that handcrafted objects carry the value of something produced in Brazil, which fundamentally expresses our cultural identity and traditions, consisting of collective cultural property. In globalization times, when there is universal pressure toward the homogenizing of standards, the preservation of this heritage is essential, as it maintains the distinctive and unique references of our culture. (SANTOS, 2002, p. 10, our translation)

In the face of the existing demands by global markets for handcrafted products, we can understand the relevance of groups concerned with the manifestation of textile handicraft to try to recognize and give continuity to the singular, specific modes of production.

building awareness and promoting the adequate usage of our values is the only path to hinder, by offering our own alternatives, the inevitable speed of cultural transference among the nations of the world today. (MAGALHÃES, 1997, p. 53, our translation)

This attitude is relevant in Brazilian society, as craftspeople would be deciding how to employ their knowledge and match it to opportunities connected to the interest in artisanal craftsmanship. The role of producers would become active in relation to the different audiences that evaluate and commission their works.

We consider, then, that the presence of the designer needs to start with the understanding of the market demands and present relevance of the handicraft, but, above all, with truly understanding the particularities concerned with different production contexts. And they must do their part in the recognition, strengthening and fulfillment of economic, social and cultural needs of the artisans, as they are the main actors in the process of giving continuity to values and references in Brazilian culture specific to the craft of textiles.

### FINAL CONSIDERATIONS

Textile handicraft is intrinsically related to the history of the production of artifacts in Brazil. Present in indigenous, African and European cultures, in our national territory it has undergone variations stemming from the value bestowed upon manual labor and the difficulties faced when seeking support

for its development as a cultural asset and a socially relevant manufacture. Even then, several typologies of fabric production have been safeguarded as domestic and community crafts all over the country, and have contributed to the shaping of a Brazilian material culture.

In the 20th Century, textile handicrafts have become the object of attention and interest of consumers and professionals from several areas. This recognition, based on cultural, environmental and productive aspects of artisanal craft, have extended into the field of design and fashion and bled into the global market.

In this context, it becomes essential to adopt a critical and broad vision of the role of design in Brazilian society, such as the one instigated by Magalhães (1998). The presence of the designer must contribute for a textile handicraft in Brazil that is geared toward more than just meeting consumer demands, to also cater to the needs and interests of craftswomen and craftsmen.

### REFERENCES

BORGES, Adélia. **Design + Artesanato**: o caminho brasileiro. São Paulo: Terceiro Nome, 2011.

BRUSSI, Júlia Dias Escobar. **Da 'renda roubada' à renda exportada**: a produção e a comercialização da renda de bilro em dois contextos cearenses. 2009. 145 f. Dissertation (Social Anthropology Masters) - Anthropology Department, University of Brasília, Brasília, 2009.

CÁURIO, Rita. Artêxtil no Brasil: Viagem pelo Mundo da

Tapeçaria. Rio de Janeiro: Author's edition, 1985.

COLCHESTER, C. **Textiles**: tendências actuales y tradiciones. Barcelona: ArtBlume, 2008.

CUNHA, Luiz Antônio. **O ensino de ofícios artesanais e manufatureiros no Brasil escravocrata**. São Paulo: UNESP, Brasília, DF: Flacso, 2000.

DENIS, Rafael Cardoso. Design, cultura material e o fetichismo dos objetos. **Arcos**. Rio de Janeiro, volume 1, 1988. p. 14-39.

EDELKOORT, Lidewij. When design & craft meet. In: **Trend Tablet**. Available at: <a href="http://www.trendtablet.com/10019-when-design-craft-meet/">http://www.trendtablet.com/10019-when-design-craft-meet/</a>>. Access on: 5 set. 2013.

EDELKOORT EXHIBITIONS documento de divulgação. Available at: <a href="http://www.trendtablet.com/wp-content/uploads/2011/04/press-release.zip">http://www.trendtablet.com/wp-content/uploads/2011/04/press-release.zip</a>. Access on: 26 abr. 2013.

FLETCHER, K; GROSE, L. **Moda e sustentabilidade**: design para mudança. São Paulo: Senac São Paulo, 2011.

FUNARTE; MAIA, Isa. **Artesanato brasileiro**: Rendas. Rio de Janeiro: FUNARTE, 1981.

GARCIA, Marcolina Martins. A tecelagem artesanal: estudo etnográfico em Hidrolândia – Goiás. Goiânia: Editora da Universidade Federal de Goiás, 1981.

GIRÃO, Valderice Carneiro. **Renda de Bilros**. Fortaleza: Edições UFC, 1984.

MAGALHÃES, Aloísio. **E Triunfo?**: a questão dos bens culturais no Brasil. Rio de Janeiro: Nova Fronteira; Fundação Roberto Marinho, 1997.

\_\_\_\_\_\_. O que o desenho industrial pode fazer pelo país? **Arcos**, Rio de Janeiro, v. 1, p. 9-12, out. 1998.

MENDONÇA, Maria Luiza Pinto de. Algumas considerações sobre rendas e rendeiras no Nordeste. **Boletim de Antropologia da Universidade do Ceará**, Fortaleza, v. 3, n. 1, p. 39-76, dez. 1959.

RIBEIRO, Darcy. **O povo brasileiro**: a formação e o sentido do Brasil. São Paulo: Companhia das Letras,

2006.

SANTOS, Maria Cecilia Loschiavo dos. **Artesãos do Brasil** - O design para a vida. In: Santana, Pedro Ariel (Ed.). Artesãos do Brasil. São Paulo: Abril, 2002.

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### LOEWE, DESIGN BETWEEN MODERNITY AND TRADITION

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### INTRODUCTION

The German craftsman Enrique Loewe Rossberg arrived to Madrid in 1872. Spain was expanding commercially, so Loewe took this opportunity to settle in the capital and begin an ambitious commercial project in his specialty leather craftsmanship (Hernández Cava 1995, p. 57).

The high society to which the brand was directed, forced Enrique to continuously redesign his stores and product. In 1939 -coinciding with the end of the Civil War-Loewe opened the store located at Madrid's Gran Vía number 8. This commercial space was designed by architect Francisco Ferrer Bartolome (Ferrer Bartolomé 1940/41, pp. 19-22). He was also responsible the layout store project located on the Paseo de Gracia (Hernández Cava 1995, p. 109), city of Barcelona, a year later.

However, from 1956 the essence of the company changed to a more modern style. For this task Loewe collaborated with other professionals such as architect Javier Carvajal and artist Vicente Vela. These artists were key players to designing a project for the new modern image of the Spanish brand.

### **LOEWE & CARVAJAL**

Furthermore, in order to differentiate themselves from other foreign companies that were part of the brand's competition, Loewe needed to create a modern brand that kept its prestige and exclusivity associated with the image of Spain. At this time, Carvajal was able to understand Loewe's needs and provided the company with a push towards modernity, through the design and renovation of stores according to the brand's new product.

In 1959, Loewe opened a store on Serrano Street that completely changed the stereotype of other luxury fashion establishments (Carvajal 1960, pp. 32-36). Carvajal designed a completely different store to those created by Ferrer Bartolomé. Carvajal's store was influenced by a simplistic organized Scandinavian design (Losada 2012, p.471), and was built with white painted brick and complimented by the use of walnut wood.

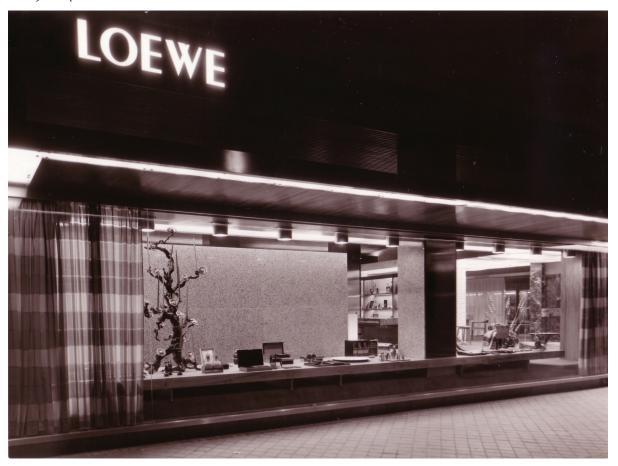
Carvajal, also continued the legacy of Ferrer by featuring windows as an important design in the store. In the first picture, we can see how Ferrer used round arches to hide the wooden interior, defined by its decorative elements. On the other hand, Carvajal designed transparent exhibition spaces, allowing the viewer to see the interior of the store from the street. During this process, Carvajal realised the importance that the exterior and interior spaces have in establishing relationships with potential customers.

In a short time, between 1958 and 1964, LOEWE opened stores in Granada, Bilbao, Valencia, Palma de Mallorca and Seville; all designed by Javier Carvajal (Hernández Cava 1995, pp. 138-139).

Figure 1 –Loewe store designed by Francisco Ferrer Bartolomé in Madrid. Nuevas Formas 1940/1941.



Figure 2 –Loewe store in Serrano 26, Madrid. Designed by Javier Carvajal. Arquitectura 1960.



### LOEWE PRODUCTS

However, in this project the architect was not alone; when he joined the brand, Carvajal invited Vicente Vela to be part of his team. He was a young painter who had just completed his studies in Fine Arts. Together, they formed a dynamic team that completely changed the brand: they were able to give personality to Loewe, and helped the Spanish modernize.

Vicente Vela's work was essential to the design of the modern product, and also in the creation of the renewed image of the brand. In 1970, Vela designed the current Loewe anagram, which proved to be the driving force for the fame and worldwide recognition of the brand. Until then, Loewe had been identified by an English "L", that Vela replaced by another "L" more "warm and personal" with which he made a stamp to engrave the logo onto the leather (Interview: Vicente Vela 2013). On canvas, he mirrored the "L" and created the famous anagram that is widely recognised today.

Until the sixties, bags were hard and rigid. Loewe was the first company to design a flexible bag, made in suede. This was called the Amazona, which expanded the freedom of movement for women, subtracting gravity and taking years off a customer's outfit.

The Amazona was introduced as part of one of Loewe's most important collections, the Ante Oro collection of 1974, created by Dario Rossi and Vicente Vela, who engraved the famous logo of the brand on leather, emulating the traditional marking of livestock using

Soon after, Loewe began manufacturing silk scarves that had their own branding. These textiles, as Vela said, had to be unequivocally Spanish and should be obviously different from Italian or French styles (Interview: Vicente Vela 2013). In 1980 Vicente Vela and Julia León travelled through Spain to gather inspiration to design the new silk collection. They travelled to Barcelona, where they found inspiration in the catalan colors, and Gaudí's architecture; which also led them to the dramatic Atlantic coast; then

they travelled to the south, Andalucia, where they visited the Alhambra.

### THE MOST RECENT STAGE: Jonathan Anderson

By the end of 2013 Jonathan Anderson arrived at Loewe, as the new Creative Director, he gave a fresh take on the brand based on its history, by returning it to its origins. The renovation started with the change of the logo, the packaging of the products and the identity of the brand (Modaes.es 2014). These changes were intended to give a push towards

modernity to the Loewe brand and create cultural awareness worldwide.

Jonathan is inspired by the most brilliant period of Loewe, which he considers the 50's, 60's and 70's. He therefore, has redesigned the Amazona with the exact size and form of the original from the 70's, and also done the same with the Flamenco bag (Funes 2014). The new Amazona bag has been given the unique appeal of the original trapezoidal silhouette and the simplified version of Flamenco bag, creating a simple, yet elegant look (Revista de Arte 2014).

It is the first time the stores now look



Figure 3 –Amazona bag, 'Ante Oro' Collection.
Image taken from the documentation of Vicente Vela in his studio.



Figure 4 – Chair designed by Javier Carvajal in 1959, Serrano store.

back to Carvajal's modern 60's style. The furniture also reminds us of the first shop on Serrano, toast upholstery, chairs, counters and the legendary leather woven chair by architect Javier Carvajal (Funes, M. L. 2014), created in 1959 specifically for the Serrano store. Built in walnut with leather woven straps, this furniture exemplified the essence of the brand.

### **CONCLUSIONS**

Based on these observations, we can now draw conclusions to recognize and give value to the role tradition plays in the modernization of the Loewe brand.

- » Recognizing the value of reinvention of tradition in order to create a successful brand. Enrique Loewe Knappe was a visionary of his time. Loewe trusted in other visionaries, such as Javier Carvajal and Vicente Vela. Together, they reinvented the business and embarked on a rebranding journey that changed the face of Loewe.
- » Secondly, it is essential to emphasize the value of the work carried out by these professionals. They worked for the modernization of the brand through creative fields such as architecture and art.
- » This reimaging manifested in the design of products linked to the image of Spain. This was possible through the study of tradition.

Carvajal contributed a modern vision that started from a deep admiration for Spanish tradition and Vela created a Spanish image.

At the same time, this image left a legacy of creative designs related to national culture inspired by ceramics from Manises and Sevilla, paintings by Velázquez and Goya, the wedding of the kings of Spain, and bullfighter's jackets, among many others.

- » However, this particular case of Loewe is unique, because of the importance it has had not only in the creation of the Spanish image of this brand, but also in the representation of the image of Spain globally.
- » In this way the arrival of Jonathan Anderson to Loewe is a return to its origin. Thanks to the study of the brand original DNA and inspiration in the 50's, 60's and 70's, Anderson is carrying out a modification of the image based on the roots of Loewe. The figure of Carvajal has been the main source of inspiration for Jonathan Anderson, and like Carvajal wanted in the past, he wants to take Loewe into the future.
- » It's evident how important Javier Carvajal was for Loewe, someone who knew how to change the image, with his legacy continuing today. However, the work of Jonathan Anderson is promoting a new change, reinventing a legacy of 168 years of craftsmanship and innovation. This new change will be a before and after for the brand.

### REFERENCES

CARVAJAL, J. Instalación y decoración de una tienda en Madrid. Arquitectura, Vol. 16, pp. 32-36, 1960.

FERRER BARTOLOMÉ, F. Tienda de artículos de cuero en una avenida principal de Madrid. LOEWE. Nuevas Formas, pp. 19-22, 1940/41.

FUNES, M. L. Jonathan Anderson: Me voy a quedar hasta que Loewe funcione y se posicione mundialmente. In: ABC, 2014. Available from: http://www.abc.es/estilo/gente/20140629/abci-jonathan-anderson-loewe-201406282139.html, Accessed: 29 junio 2014.

HERNÁNDEZ CAVA, F. Tiempos de Loewe, en Loewe 1846-1996. Madrid: Loewe, 1995.

LOSADA, J. Realidad e ilusión. Tesis Doctoral. Pamplona: Universidad de Navarra, 2012.

Interview: Vicente Vela, (C/ Dr. Esquerdo 163) 19 december 2013.

Modaes.es. Loewe cambia su imagen corporativa nueve meses después de fichar a Jonathan Anderson. In: Modaes.es, 2014. Available from: http://www.modaes.es/empresa/20140604/loewe-cambia-su-imagen-corporativa-nueve-meses-despues-de-fichar-a-jonathan-anderson.html Accessed: 4 junio 2014.

Revista de Arte. Reapertura de la Galería LOEWE en Barcelona con una exposición dedicada a Javier Carvajal. In: Revista de Arte,2014. Available from: http://www.revistadearte.com/2014/07/23/repertura-de-la-galeria-loewe-en-barcelona-con-una-exposicion-dedicada-a-javier-carvajal/ Accessed: 23 julio 2014.

## A DIALOGUE BETWEEN THE LOCAL CULTURE AND FASHION DESIGN

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### INTRODUCTION

There is no doubt about the influence and the role of fashion in the economy, politics and culture of the Brazil. Considered to be one of the most important activities for the development of society, it attracts large investments and requires professionalization of its creative cycle as a whole. The sector directly employs 1,7 million of people, being the second biggest employer in the manufacturing industry as well as the second largest first job generator<sup>1</sup>. Brazil is also reference to countries considered fashion centers, as it is able to develop trends which combine technology and manufacturing without losing its own characteristics. "The country should function as cultural heritage and DNA, not as folklore or traditional dress", states Erika Palomino (2003, p. 92). Given this scenario, there is a need to structure the sector in order to meet the demands of an exigent, dynamic and, above all, a diverse market. It is established, therefore, a closer relationship between fashion and design.

However, to better understand this connection it is necessary to define "fashion" and "design". Fashion is the use, habit or style that varies with time and results of particular taste, idea and influences of the environment. To Renata Pitombo Cidreira (2010, p.124), fashion is all or any act of dressing up, way of composing one's look as such an expressive vector. Despite its seasonal feature, the

<sup>1</sup> Information The Union of Fashion (Sindivestuário).

concept of fashion goes beyond transient. Through fashion, we can recognize the positions of individuals in society. To Roland Barthes (2009, p.378), the accumulation of small psychological essences, often contrary to each other, is just one of the ways in which fashion gives double positing to the human: it means to give them individuation or multiplicity, as it has considered the set of characteristics or, on the contrary, in one's being the freedom of masking behind one or other of these units. To Gabriel da Tarde quoted by Lipovetsky (1989, p.266), fashion is essentially a way of relation between people, a social bond characterized by imitation of their contemporary and love for foreign novelties. The fashion before being which is explained by the society, is a stage and a structure of collective life. Therefore, fashion is a great system of meaning that, above all, rebuilds itself constantly, monitoring the evolution of the individual inserted in the culture. When one thinks of the cultural nature of fashion, it is appropriate to use Raymond Williams's ideas (1992, pg.13):

It can be seen today a "system of meanings" well defined not only as essential but as essentially involved in all forms of social activity [...] so as to include not only the arts and traditional forms of intellectual production but also all "significant practices" - from language, through the arts and philosophy, to journalism, fashion and advertising - that now make up this

complex field and necessarily extensive.

The German sociologist Georg Simmel also presents relevant thoughts on the concepts of "culture" and "fashion" through the dualism between spontaneity and standardization. Fashion, to Simmel (2008, p.24), is nothing more than a particular form of many forms of life, thanks to which the trend towards social equalization joins the trend for the difference and individual diversity in an egalitarian act. And these formations, in their turn, are never closed, finite. The author criticizes the modern society for believing that the modern man is not driven to creativity, but to the passive consumption and superficiality - "the tragedy of culture." There is not, thus, a balance between subject and object. On the other hand, the author recognizes that this context is irreversible and can be favorable to the individual's autonomy.

With regard to the design, there is still no consensus opinion concerning its definition. According to Alexandre Wollner, one of the leading names in the formation of modern Brazilian design, the design is not concerned with aesthetics, but with the function, with materials, visual ergonomics. To Monica Moura (2008, p.71), the design is a creative and innovative process provider of solutions to problems of the productive technological, economic, social, environmental and cultural spheres. On the other hand, Dijon De Moraes (1977, p.52) sees design as a linguistic act, "Today, I see the design as a cultural gesture in the anthropological sense more than a

rationalistic and technological gesture." These elements make the design a potentiating tool for designers. Especially because the two practices (fashion and design) have creativity and innovation, the symbolic and artificial universe, material and immaterial, as inherent characteristics. To Monica Moura (2008, p.71), "create and produce fashion, through the design, is the creation of a material universe, symbolic and artificial. So, fashion is also design. "

According to Dijon De Moraes (2008, p.156), nowadays, it is necessary (as ever) to constantly stimulate sales through differentiation by design, by advertising, communication and promotion. This is due to the drastic change in the scenery, which has become unpredictable and full of codes. However, how is the incorporation of characteristic elements in regional productions before inserting concepts, shapes and overall values so characteristic of the design system and required by the fashion system? It is noticed that there is a dispute between the intrinsic symbolic values of culture with the demands of the market. This polarity seals, in its turn, all the contemporary thought and its constant transit between the traditions and current forms of sense reached from the countless cultural exchanges made possible by a global society.

### BAHIA AS A SCENARIO

These questions are the reason to this research that seeks to study the relationship

Some studies on design confirm the importance as a theoretical framework of cultural studies. In consensus with Hall, Andre Villas-Boas (2009, p.65) states that cultural

incessant, varied processes of hybridization

are lead to relativize the notion of identity.

between fashion and design in order to understand how contemporary fashion creation fits the paradoxical movements of return to tradition (search for "local") and major cultural flows in the current scenario characterized by an increasingly "global" environment. And through these new forms of direction, to ensure a stand out regional fashion design product in order to assure sustainable growth for the sector of clothing and textiles. Given this fact, it is necessary a constant evaluation by the designers, other industry agents and the consumer society to see how the regional cultural elements are driven to fashion object without leaving aside the timeless functionality and its input power in different socioeconomic contexts. Enabling, thus, the maintenance of the business. Because of this, the design appears as one of the paths that is capable of providing profit without cluttering up the significant need and the representative function of the designers during the conception of the product.

The case "Bahia brand" is an example of the importance of the discussion of ways to keep the industry competitive. Through Competitive Fashion Design Structuring Project, the government of the state of Bahia held in partnership with the Brazilian Institute of Fashion (IBModa) studies in 2004 to meet the possibilities of leveraging the fashion industry in the state, identifying its main problems. The results published in the Journal Bahia Industry (2009) pointed out three main lines of action: investing in the design as a means of product differentiation;

opt for white label faction (production of parts with the label for other companies); or mass production to compensate for the cost. According to the coordinator of APL Clothing, Tatiana Torres, the choice for the design took into account the Bahian potential to create a brand that would "translate" the local culture. The above studies only reinforce the importance of broadening the knowledge of the interference and the function of the design to the conception of fashion products, and especially to the survival of the activity in the current context.

### THEORETICAL FRAMEWORKS IN STUDIES OF THE FASHION AND DESIGN

In Cultural Identity in Post Modernity (2006), Stuart Hall assesses the issue of cultural identity in late modernity, examining the possible existence of an "identity crisis." According to Hall, identity is formed in the "interaction" between the self and the society. To him, what produces the postmodern subject is the individual fragmentation, composed not of a single, but multiple identities, sometimes contradictory. The route is intensified in his thoughts gathered in The Diaspora: Identities and Cultural Mediations (2009, p. 36):

> *It is important to see this diasporic* perspective of culture as a subversion of traditional cultural models oriented to the nation. Like other globalizing processes, cultural globalization is

deterritorializing in its effects. Their spatiotemporal understanding, driven by new technologies, loosen the ties between culture and the "place" [...] cultures, of course, have their "local". However, it is not so easy to tell from where they originate themselves.

means crisis (order / disorder / order) and deconstruction, or rather, would be a reflection of 'modernity'." Canclini takes the term "cultural hybridity" in explanatory model of identity. In the Latin American atmosphere, cultural scenarios and symbolic systems are in constant and radical changes and, therefore, the regularities and distinctions that could facilitate its analysis are unsustainable. Canclini (2013 p.XXII) points out that from the hybridization process, it is possible to "reconvert" an asset (a factory, a professional training, a set of knowledge and techniques) to reinsert it into new conditions of production and market. Thus, in fashion, this "reconversion", in particular, would be required to adapt it to contemporary lifestyles and the new economic logic. Consequently, as the author points out (2013, p.XXII), these

It is important not to refrain from

resorting to Néstor García Canclini. To

him (1998, p.18), "the 'postmodernity'

identities are not stable. It is necessary, according to him, to build them. Using the words of Ana Carolina D. Escosteguy (2010, p.147), two traits highlight the development of this process: the revaluation of movements for regional and national autonomy, precisely taken over by groups who had their identities gagged by strong national states; and the growth of a defensive relation among those cultures that have become threatened by their own periphery.

In this scenario, there is Bahia which is considered the motherland where the discourse of "Brazilianness" began. Bahia was born rooted in its rich socio-cultural diversity and foundational myth - in its natural beauty, its faith; supported by culturally embedded syncretism for peaceful purposes of the elite, and the authoritarian state. Under the approaches of the authors mentioned above, in the present scenario, the concept of "identity" (of what is personal / single) has been experiencing severe disruptions in the world. Thus, it is increasingly difficult, especially in the Latin American panorama and more specifically in Bahia, to demand the recovery of a culture considered "pure." The situation, as advocates Canclini, is that there is a hybrid reality where the conflict to keep the roots and incorporate universal elements is constant.

To Cidreira (2013, p.33), in this oscillatory dynamic between the standardization and the differentiation, fashion and its 'acts of dressing' will play a key role in the formation and duration of the contemporary life. The

dynamics of fashion, according to Monica Moura (2008), allow one to reflect, create, participate, interact and disseminate these customs. According to Gilles Lipovetsky (1989, p.175), the fashion empire means universalization of modern standards. but for the benefit of emancipation and an unprecedented nonuniformity of the subjective sphere. Barthes (2009, p.181), on the other hand, points out that the preference for the genuine tends to weaken. The game is now responsible for most device ratings, either when the power to vary the personality is given, and thus to display its virtual wealth, or when it assembles a modest alibi for the clothing economy.

Among the authors who support the research there is also Dorothea Baduy Pires. To the author (2008, p.269):

Compared to other cultures, the Brazilian product of design has the opportunity to reveal some of its qualities and potentials, which enshrines the national fashion design as a process of cultural identity construction and competitive differential.

### FINAL CONSIDERATIONS

The above reflections are the starting point for further apprehension among the fashion made in Bahia and the design. Identifying how local designers build new

expressions on their creations through a suggested identity in an increasingly transnationalized society. The first stage of the research is being devoted to the mapping of the bibliography. A theoretical deepening about the design area will be necessary. In this regard, professionals, academic and educational institutions operating in the sector will be selected for scheduling directed interviews in order to understand how the research, creation and reception for the conception of a product from the techniques design come about. In the specific case of the fashion industry in the state of Bahia, a preview screening of brands and designers has been held to compose the study. It was prioritized in this survey: brands emerged in Bahia, created by designers from Bahia; history; insertion, growth and stability in the market; brands / designers that meet the conceptual and business demands; and the importance of including the main segments (apparel, accessories, shoe store and printing).

From these initial criteria designers and brands have been pre-selected: clothing (Marcia Ganem, Elementais, Vitorino Campos, Aládio Marques), printing (Goya Lopes, Juliana Rabinovitz), accessories (Carlos Rodeiro, Algaszarra, will Salles) and Shoe (Aládio Marques). After a more thorough evaluation, Elementais was chosen to be the central object of this analysis. With 23 years of market, Elementals is one of the local brands with the highest growth in recent years. There are 25 stores, including its own units and franchises. Besides Bahia, there are stores in four states:

Pernambuco, Piauí, Rondônia and Sergipe. To achieve assertive results in the survey it will be included in the methodology: analysis of "objective" elements (raw material, color chart, modeling, way of production, target audience, distribution, marketing); and "subjective" ones (history, the brand's DNA / designer, concept / theme of the collections selected for the study, economic and social environment, as well as aspects of tradition that make up a suggested local identity).

The observation will also be extended to governmental projects to encourage the market, which arises with the intention of ensuring profitability demonstrating commitment to the relation between design and fashion, supported in the differential of regional elements. These include: Structuring Project Fashion Design Bahia, designed to enable entrepreneurs of APLs (Local Productive Arrangements) Clothing Industry from Salvador and Feira de Santana should have access to specialized training and a Centre of Fashion Design; and Industrial Polo of Sewing Uruguay Street and Surroundings, corporate social responsibility action Shopping Bahia Outlet Center aimed at the competitiveness of micro and small businesses.

### REFERENCES

BARTHES, Roland. Fashion System. Translation Ivone Castilho Benedetti. São Paulo: Editora WMF Martins Fontes, 2009. - (Collection Roland Barthes).

CANCLINI, Nestor Garcia. Hybrid Cultures: Strategies for entering and leaving modernity. SP: EDUSP 1998.

\_\_\_\_\_, \_\_\_\_\_. Hybrid Cultures: Strategies for entering and leaving modernity. Translation Heloísa Pezza Cintrão, Ana Regina Lessa, translation introducing Genesis Andrade. - 4th ed. - São Paulo: EDUSP. 2013.

CIDREIRA, Renata Pitombo. The forms of fashion: behavior, style and artistry. 1st ed. São Paulo, Annablume, 2013.

\_\_\_\_\_, \_\_\_\_\_. Between Design and Style: The search for formativeness. In: MARQUES, Adair Son; DE Mendonca, Costa Manso Miriam Moreira (Org.). Ways of seeing fashion. Goiânia: Publisher PUC Goiás, 2010, V. 1.

DE MORAES, Dijon. Fashion, design and complexity. In: Fashion Design: various looks. PIRES, Dorothea Baduy (ed.). Barueri, SP: Estação das Letras e Cores Editora, 2008.

ESCOSTEGUY, Ana Carolina D.. Cartography of Cultural Studies - A Latin American version. - Ed Online - Belo Horizonte: Authentic 2010.

HALL, Stuart. Diaspora: Identities Cultural Mediations. Sovik, Liv (Eds.); Translation Adelaine La Guardia Resende; 1st updated edition - Belo Horizonte: UFMG, 2009.

\_\_\_\_\_, \_\_\_\_. Cultural Identity in Post Modernity. Translation Tomaz Tadeu da Silva - Rio de Janeiro: DP & A, 2006.

LIPOVETSKY, Gilles. The Empire of the Ephemeral: Fashion and destiny in modern societies. Translation Maria Lúcia Machado - Sao Paulo: Companhia das Letras, 1989.

MOURA, Mônica. The fashion between art and design. In: Fashion Design: various looks. PIRES, Dorothea Baduy (ed.). Barueri, SP: Estação das Letras e Cores Editora, 2008.

PALOMINO, Erika. The Fashion. São Paulo: Publifolha, 2003. – Folha Explica.

PIRES, Dorotéia. The traveler and the city: the look of

fashion designer in other territories. In: Fashion Design: various looks. PIRES, Dorothea Baduy (ed.). Barueri, SP: Estação das Letras e Cores Editora, 2008.

REVISTA BAHIA INDÚSTRIA, publication FIEB - Federation of Industries of the State of Bahia. Design makes the difference. December, 2009.

SIMMEL, Georg. Philosophy of Fashion: and other writings. Translation, introduction and notes Artur Morão. 1st edition, Lisbon: Edições Texto & Grafia, 2008.

SINDIVESTUÁRIO: Available in: < http://sindivestuario.org.br/2014/08/setor-textil-e-de-confeccao-no-brasil-busca-competitividade-internacional/>. Access: 30 may 2015.

VILLAS-BOAS, André. Identity and Culture: Graphic Design. - Teresopolis (RJ): 2AB, 2009.

WILLIAMS, Raymond. Culture. Trad. Lólio Lourenço de Oliveira, Rio de Janeiro, Paz e Terra, 1992.

WOLLNER, Alexandre. Available in: <a href="http://designices.com/o-que-e-design/">http://designices.com/o-que-e-design/</a>>. Access em: 24 july 2010.

# FASHION ENVIRONMENT

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# PRODUCT-SERVICE SYSTEMS IN THE CLOTHING INDUSTRY: a conceptual business model and dynamic capabilities approach

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### INTRODUCTION

Many companies have embarked upon a path towards sustainability through approaches of corporate social responsibility, philanthropy and the development of sustainable technologies. However, these approaches are considered insufficient to create the indispensable sustainable transformation of organizations and societies (Schaltegger et al., 2015). Instead, sustainable business models (e.g. Boons and Lüdeke-Freund, 2013) have been determined as key components of corporate sustainability (Schaltegger et al., 2015).

In this context, product-service systems (PSS) as sustainable business models have gained a lot of attention in the past decade among both researchers and practitioners (e.g. Baines et al., 2007).

PSS shift the focus on fulfilling final customer needs through offering complementary service elements instead of selling solely tangible products (e.g. Tukker, 2004).

When deciding upon this approach, different alternative options within the spectrum of sole product sale and pure service offerings arise (Van Ostaeyen et al., 2013). These alternatives are defined by the degree to which products and services are proportionately combined. Given Tukker's (2004) widely adopted definition, PSS comprise solutions that are product-oriented (products are sold in a traditional manner but supplemented by additional services), use-

oriented (the use of a product is sold while the respective product still remains property of the company) and result-oriented (results, capabilities or competencies are sold that underlie a product). These concepts entail economic dematerialization as fewer products are manufactured and, hence, fewer resource and material input for corporate value creation are required (Baines et al., 2007).

While PSS have evoked a considerable number of theoretical and empirical contributions, research on PSS is still in its infancy (Choi et al., 2015) and actual implemented models are limited to a modest number across different industries (Armstrong et al., 2015).

In clothing, few ambitious pioneers already conceptualize and experiment with a multitude of alternative sustainable solutions that go far beyond novel business models of major clothing retailers (Armstrong et al. 2015). However, as empirical data on the dissemination of PSS in the clothing industry are still missing, our research intents to investigate, if incumbent clothing firms consider PSS implementation and which clothing PSS have already been put into practice. Furthermore, it will be examined, which factors enable PSS implementations and if already implemented PSS have impacted companies' success.

### **PRODUCT-SERVICE SYSTEMS (PSS)**

What are PSS?

According to Goedkoop's (1999) seminal

definition that was presented in a report for the Dutch government, PSS combine marketable products and services to satisfy customer needs. Given this definition, PSS comprise three key components: products, services and satisfaction (Choi et al., 2015). Furthermore, systems are constituted of elements (products and services) that interact through relationships (Baines et al., 2007). From a PSS view, the major challenge for companies consequently is how products and services should be combined to create satisfaction for customers. Hence, the concept of PSS underlies the ultimate fulfillment of specific client demands and thus is inherently customer oriented. More specifically, integrated products and services serve in the context of PSS as vehicle to address specific, so far unmet or even unknown customer needs. The expedient configuration of products and services then implies to determine the values that underlie and shape those needs in order to provide a specific value proposition to the costumer.

At this point, the concept of PSS intersects the research stream of "Service Dominant Logic" (S-D logic; Vargo and Lusch, 2004) that evokes plenty contributions in marketing literature in the past decade. S-D Logic departs from the central idea that customers individually determine and attribute value to an offering during its consumption. From this perspective value is always contextual and meaning laden (Vargo and Akaka, 2009). Hence, companies cannot deliver value, but only offer value propositions (Vargo and

Akaka, 2009) which are assembled by the customer with his own competencies to create an individual "value-in-use" (Reynolds and Ng, 2015). This idea consequently implies that value is always co-created through integration and participation of the customer in different ways and to varying extents (Grönroos, 2011). The process of value co-creation then is inevitably shaped through mutual relationships and entails a shift from a transaction to a relationship based business model that, in a favorable case, results in long-term relationships (Meier et al., 2010).

When companies move in this direction, different alternative options between the sole sale of products and pure service offerings arise and are defined by the degree to which products and services are proportionately combined (Van Ostaeyen et al. 2013).

Although a consistent division of PSS within this spectrum is yet to be achieved (Beuren et al., 2013), different approaches of classification mostly converge in three major type of PSS (e.g. Baines et al., 2009). The tripartite classification of PSS presented by Tukker (2004) is cited most often in literature and divides PSS into

» Product-oriented: Products are sold in a traditional manner but supplemented by extra services such as after-sales services that ensure long-term functionality (e. g. maintenance and repair services) or optimized application of the product (e. g. training and consulting). Customer satisfaction is still gained by ownership but enhanced by the convenient feeling of possessing an enriched product (Chou et al., 2015).

- » Use-oriented: The use or functionality of a product is sold while the ownership of the product remains at the company that offers it and does not become property of the customer (Aurich et al., 2010). Thus, customer satisfaction is achieved through appreciating the inherent function of a product rather than through its physical possession. Frequently cited examples are sharing or renting programs (e.g. Beuren et al., 2013;).
- » Result-oriented: The company sells a result, a capability or a competency that underlie a product while the respective product still remains the property of the company. Examples may be selling laundered clothes (instead of a washing machine), web services (instead of a dictionary) or transportation (instead of a bus; e.g. Baines et al., 2009).

### Benefits of PSS for companies

All different types of PSS are considered to entail environmental and economic benefits (e.g. Vezzoli et al., 2014). Customer relationships and customer loyalty are strengthened as customers become indispensable partners through integration in the process of value creation. Hence, they gain advanced knowledge and information on the final product which further increases their

trust in the provider (Vezzoli et al., 2014). Furthermore, providers can compete with increasing cost pressure, as PSS require fewer volumes of resources and materials which allow cost saving accompanied by maximized outcomes (e.g. Baines et al., 2007).

Especially in global and mature markets, PSS serve as strategic approach of differentiation. Enriching single products with added value offerings strengthens or improves companies' market positions (e.g. Tukker and Tischner, 2006). As service is more difficult to be replicated, PSS additionally mitigate the risk of falling victim to imitators (e.g. Oliva and Kallenberg, 2003).

Companies might turn information obtained from their customers into the development of innovative and marketable products (e.g. Tukker and Tischner, 2006). This enhances the companies' innovation potential, allows developing and seizing new market opportunities and secures them against disruption of new entrants (Christensen, 1997).

Finally, companies can employ PSS to shape a corporate identity that rests on sustainability, responsibility and transparency which increases awareness and reputation among employees, partners, customers and other stakeholders (Vezzoli et al., 2014).

### **BUSINESS MODEL (BM)**

Among various definitions, Teece's (2010) proposal of business models as "the organizational and financial architecture of

a business [that] defines how the enterprise creates and delivers value to customers, and then converts payments to profit" is chosen as a first departure point for this research. Even though his definition will be further enriched by other approaches (Casadesus-Masanell and Ricart, 2010), Teece's conceptual definition serves as appropriate base as it articulates a holistic view on business models which is shared among most strategy-oriented researchers (e.g. Zott et al., 2011). Those basically refer to business models as creating, delivering and capturing value (e.g. Zott and Amit, 2010).

To create value, the customer value proposition is positioned at the heart of any business model and may allow the firm to gain competitive advantage (e.g. Osterwalder and Pigneur, 2010). Here, this value proposition is created based on the firm's particular set of resources and capabilities. However, isolated resources by itself provide no single value (Chesbrough and Rosenbloom, 2002). To turn the latent value inherent to resources into profit, they must be exploited through transaction (e.g. DaSilva and Trkman, 2014). Given this assumption, value creation presupposes a specific combination of resources and transactions (DaSilva and Trkman, 2014). Hence, value can be captured, if the value proposition is derived from particular resources which are efficiently exploited through transactions (Morris et al., 2005). To provide an example, the value proposition of a car-sharing provider rests on its specific resources (e.g. fleet of cars) and

their exploitation through transactions (e. g. online booking).

This example illustrates that despite its holistic nature, business model are constituted of specific elements. Several frequently cited authors present four different components that form a business model (e.g. Ballon, 2007). Those are majorly in accordance with Osterwalder and Pigneur's (2010) business model concept which is considered as first robust and profound template (Lüdeke-Freund, 2010).

1. The **value proposition** describes the products and services a firm offers which are supposed to be valuable for the target customer and trigger his willingness to pay.

### 2. The **customer interface** encompasses:

- » target customers (in case of a complement business model that targets a different and customer group: compatibility with existing customers);
- » the relationship the company develop and maintains with the customer;
- » the channels through which it delivers its value proposition.

### 3. The **company infrastructure** comprising:

» tangible (e. g. technology) and

- intangible resources (e. g. brand, employees);
- » the network of partners necessary to create and deliver the value proposition and to develop fruitful customer relationships;
- » the key activities the company carries out in its core business.
- 4. The **financial aspects** which underlie the three former components: costs and revenue.

### TOWARD A DYNAMIC CAPABILITIES APPROACH OF PSS

Departing from Teece et al.'s (1997) seminal definition of dynamic capabilities as "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (p. 516), many researchers have presented own proposals (e.g. Eisenhardt and Martin, 2000).

Our research is based on Teece et al.'s (1997) conceptualization, however, further explanations are subject to another paper.

### **CORPORATE SUSTAINABILITY**

Finally, PSS implementation and corporate sustainability are assumed to be related as both underlie similar sets of resources and capabilities (Pedersen et al., 2016). Hence, it is assumed that companies with a high degree

of corporate sustainability are more like to implement PSS.

### THE PSS IMPLEMENTATION FRAMEWORK

To sum up the argumentation of this article, it is assumed that business model elements (namely company aspect, customer aspect, financial aspect and the value proposition), the firm's degree of overall corporate sustainability and a specific set of sensing, seizing and reconfiguring capabilities affect PSS implementation. Furthermore it is assumed that PSS implementation entails increased corporate performance in terms of competitiveness, enhanced customer relationships and improved corporate/brand awareness. These assumptions are illustrated in figure 1.

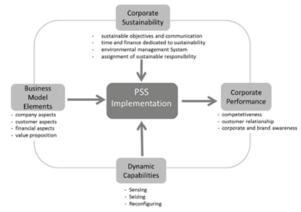


Figure 1 - The model of PSS implementation.

### **CONCLUSION AND FURTHER RESEARCH**

This article has presented the concept

of PSS as a sustainable business model for the clothing industry in greater detail. Major attention was paid to its advantages for companies and its enablers. It has been shown that a PSS business model may allow incumbent firms to respond to changes of the current business environment and thus obtain or maintain competitive advantage. This requires certain specific dynamic capabilities. Therefore, a preliminary set of dynamic capabilities has been presented that underlies PSS implementation.

This conceptual framework serves as departure point for our future research.

First of all, the current dissemination of PSS in the clothing industry is examined, which has not been done yet. This study will also investigate, if PSS play a role for incumbent firms when considering business model innovation. Furthermore it will be shown which of the different types of clothing PSS (as presented in this article) are put in practice and which type of companies (based on size, scope of business, experience) preferentially consider PSS implementation.

Secondly, based on the four pillars of the business model presented in this article, the major enablers for PSS implementation are determined. Furthermore, it is investigated if corporate sustainability affects PSS implementation and if PSS implementation has created success for the companies.

In a next step, qualitative interviews will serve to determine the major obstacles for PSS implementation.

Further research on PSS dynamic

capabilities is supposed to verify the presented framework of PSS dynamic capabilities by comparing companies who have implemented PSS with firms that have not.

Moreover, case study design could be used to find out other dynamic capabilities that promote PSS implementation. This could also be done on a broader base by including companies from other industries.

### REFERENCES

ARMSTRONG, C. M., NIINIMÄKI, K., KUJALA, S., KARELL, E., AND LANG, C. Sustainable product-service systems for clothing: exploring consumer perceptions of consumption alternatives in Finland. Journal of Cleaner production, 97, p. 30-39, 2015.

BAINES, T. S. et al. State-of-the-art in product-service systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 221(10), p. 1543-1552, 2007.

BALLON, P. Business modelling revisited: the configuration of control and value. info, 9(5), p. 6-19, 2007.

BEUREN, F. H., FERREIRA, M. G. G., AND MIGUEL, P. A. C. Product-service systems: a literature review on integrated products and services. Journal of Cleaner Production, 47, p. 222-231, 2013.

BOONS, F., AND LÜDEKE-FREUND, F. Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. Journal of Cleaner Production, 45, p. 9-19, 2013.

CASADESUS-MASANELL, R., AND RICART, J. E. From strategy to business models and onto tactics. Long range planning, 43(2), p.195-215, 2010.

CHESBROUGH, H., AND ROSENBLOOM, R. S. The role of

the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. Industrial and corporate change, 11(3), p. 529-555, 2002.

DASILVA, C. M., AND TRKMAN, P. Business model: what it is and what it is not. Long Range Planning, 47(6), p. 379-389, 2014.

EISENHARDT, K. M., AND MARTIN, J. A. Dynamic capabilities: what are they?. Strategic management journal, 21(10-11), p. 1105-1121, 2000.

GOEDKOOP, M. J., VAN HALEN, C. J. G., TE RIELE, H. R. M., AND ROMMENS, P. J. M. Product service systems, ecological and economic basics: Ministry of Housing. Spatial Planning and the Environment Communications Directorate, The Hague, The Netherlands, 1999.

GRÖNROOS, C. Value co-creation in service logic: A critical analysis. Marketing theory, 11(3), p. 279-301, 2011.

LÜDEKE-FREUND, F. Towards a Conceptual Framework of Business Models for Sustainability'. KNOWLEDGE COLLABORATION and LEARNING FOR SUSTAINABLE INNOVATION, R. Wever, J. Quist, A. Tukker, J. Woudstra, F. Boons, N. Beute, eds., Delft, 2010.

MARTINEZ, V., BASTL, M., KINGSTON, J., AND EVANS, S. Challenges in transforming manufacturing organisations into product-service providers. Journal of manufacturing technology management, 21(4), p. 449-469, 2010.

MEIER, H., ROY, R., AND SELIGER, G. Industrial productservice systems—IPS 2. CIRP Annals-Manufacturing Technology, 59(2), p. 607-627, 2010.

MORRIS, M., SCHINDEHUTTE, M., AND ALLEN, J. The entrepreneur's business model: toward a unified perspective. Journal of business research, 58(6), p. 726-735, 2005.

OSTERWALDER, A., AND PIGNEUR, Y. Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley and Sons, 2010.

REYNOLDS, D., AND NG, I. C. Four axiomatic

SCHALTEGGER, S., HANSEN, E. G., AND LÜDEKE-FREUND, F. Business Models for Sustainability Origins, Present Research, and Future Avenues. Organization and Environment, 2015.

TEECE, D. J., et al. Dynamic capabilities and strategic management. Strategic management journal, 18, 7, p. 509-533, 1997.

TUKKER, A. Eight types of product–service system: eight ways to sustainability? Experiences from SusProNet. Business strategy and the environment, 13(4), p. 246-260, 2004.

VAN HALEN, C., VEZZOLI, C., AND WIMMER, R. Methodology for product service system innovation: how to develop clean, clever and competitive strategies in companies. Uitgeverij Van Gorcum, 2005.

VAN OSTAEYEN, J., VAN HORENBEEK, A., PINTELON, L., AND DUFLOU, J. R. A refined typology of product–service systems based on functional hierarchy modeling. Journal of Cleaner Production, 51, p. 261-276, 2013.

VARGO, S. L., AND AKAKA, M. A. Service-dominant logic as a foundation for service science: clarifications. Service Science, 1(1), p. 32-41, 2009.

VARGO, S. L., AND LUSCH, R. F. Evolving to a new dominant logic for marketing. Journal of marketing, 68(1), p. 1-17, 2004.

VEZZOLI, C., KOHTALA, C., SRINIVASAN, A., XIN, L., FUSAKUL, M., SATEESH, D., AND DIEHL, J. C. Product-service system design for sustainability. Greenleaf Publishing, 2014.

ZOTT, C., AND AMIT, R. Business model design: an activity system perspective. Long range planning, 43(2), p. 216-226, 2010.

ZOTT, C., AMIT, R., AND MASSA, L. The business model: recent developments and future research. Journal of management, 37(4), p. 1019-1042, 2011.

## SUSTAINABILITY AND SOCIAL RESPONSIBILITY IN THE BRAZILIAN FASHION CHAIN

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### INTRODUCTION

The negative consequences of the global economic model have taken significant place in the media and constitutes a source of intense concern for the society. For some companies and organizations, the effects of excessive consumption and the indiscriminate use of natural resources, are increasingly being imposed on the daily lives of people and companies which want to maintain their longevity must be attentive to their consumers' desire.

The new technologies and social networks enabled the access to information. This new condition favored the transformation of individuals into protagonists, who have begun to opine, supervise, boycott and have demonstrated a greater awareness in relation to the companies' positions and actions. This new consumer exerts a greater pressure on the high-profile industries with significant environmental impact and the fashion industry is among them. The textile industry ranks number four in the world as the most polluting industry (ENVIROMENTAL PROTECTION AGENCY - EPA, 2013) and has been in the consumers' spotlight for its ethical issue involving the labor force, particularly in the clothing industry.

Based on this context and on the information that the clothing industry is the largest employer of all in the the Brazilian fashion chain, this article aims to propose a project to incorporate sustainability and social responsibility in the clothing manufacturing

company. Business models based on values are what the most innovative approach in contemporary marketing. Marketing 3.0 brings sophisticated focus on the consumer and has as premise more collaborative approaches, cultural and spiritual needs of each individual (KOTLER, 2010). This aspect has guided this proposal for using fabric leftovers in companies which do not have the values of sustainability associated with their brand image without being considered mere promotional action or opportunism. In order to justify the relevance of this study and support the suggestion, an exploratory research was made and divided into three sections in which the introduction explains the importance of the topic and the research objectives. The second part consists in the sustainability literature, the fashion chain in Brazil and the project of using the fabric leftover in the apparel manufacturing industry by applying the product design methodology proposed by Bomfim (1995). The third part presents the conclusions of the study.

### SUSTAINABILITY AND BRAZILIAN FASHION INDUSTRY

Sustainability has been intensely debated since the sixties. According to Zulauf (2000), the concept of sustainability was developed in three stages. At first, people became aware of the finiteness of natural resources and the necessity to change attitudes towards nature and social life, but the actions were delegated to the states, non-governmental organizations and activists. In the second phase this concern

with environmental issues has evolved into a political movement and then for organized parties. The market response to these new demands of society came in the third stage with the adequacy of companies and organizations that have supported academic studies and certifications in technology institutes.

The sustainability agenda is based on the tripod of equally valued pillars: social justice, economic viability and environmental preservation (ELKINGTON, 2011). According to Sachs (2009) it is necessary to go through a path of eight essential aspects to establish the Eco Development: the satisfaction of basic needs, the solidarity to the future generations, the participation of the population, the preservation of natural resources and the environment; the guarantee of employment and social security; the respect for other cultures and the promotion of education programs. It applies mainly to underdeveloped regions.

The establishment of sustainable development is inevitable (Smeraldi, 2015) and urges all businesses to innovation. These new models will hereafter be a production system based on a collaborative network of people establishing new relationships between the local and the global, outlining a society where it will be possible to live better by consuming less. Such scenario, which can manifest within few decades, will require the activation of a transparent process with shared objectives (MANZINI; VEZZOLI, 2008). "Only collaborative experiences would lead to a significant

reduction in consumption and there would be the future of design" (MANZINI, 2010, p.10).

The transition to sustainability considers the Life Cycle Design and Design for Sustainability, the foundations for the emergence of a new generation of more sustainable products and services. The first is related to the stages of the product life cycle (pre-production, production, distribution, use and discard) and the second, a strategic way that coordinately moderate the products, services and communications to respond to the social search for well-being.

The Brazilian clothing industry is the largest employer of all in the fashion chain activities. It is very pulverized, intense in labor force, characterized by the predominance of small companies (INSTITUTO DE ESTUDOS E MARKETING INDUSTRIAL - IEMI, 2011). The major competition strategy is the price as it has resorted to costs reduction through outsourcing production and/or subcontracting. This condition contributes to a disorganized and short-termed relationship between companies, favoring the non-compliance with labor laws (UNIETHOS, 2013). However, this sector also has a significant number of medium-sized well-structured companies. some of which supply major brands in the textile retail. The proposal to reuse the fabric leftovers is within this scope.

### Methodology

Bomfim (1995) considers the project methodology as being the study of methods

and tools applied to defining actions. organization and solving theoretical and practical problems. The method is the process used to reach the solution and involves evaluation of all features and steps in which a product or service must pass to meet the established functions. According to the variety of business models that characterize the Brazilian clothing industry and the context in which they are inserted, a proposition for the implementation of the leftover reuse project contemplates a detailed plan, through a descriptive methodology. Considering all circumstances and exposed challenges involved in this industry, it was concluded that the hybridization of methods 2 and 4 proposed by Bonfim (1995) would be most appropriate for the development of this proposal. Method 4 of branches will support the project since it has independent steps which can be performed in parallel, enabling the work flow in activities that can be fulfilled simultaneously. However, as some feedback will be essential to track the progress of the project more precisely, method 2 will also be used, as it has the possibility of reassessment in some stages of the production process.

### PROJECT: UNDERSTANDING NEEDS

Assuming that companies do not develop practical and sustainable products, this study suggests the introduction of sustainable development through the reuse of fabric leftovers resulted from its production processes. This proposal will also include

social work with the local people in order to train and develop women lacking professional qualification and who are also out of the labor market. The project includes partnerships with local companies for the required inputs considering the tripod of sustainability: reducing solid waste, environmental education of consumers, stakeholders and community, social responsibility in training and rehabilitation of people who are marginalised. This application will result in a product with high added-value that will be offered as a gift to customers, integrating the portfolio of company communication strategies.

### **DESCRIPTION OF PROCESSES SOLUTIONS**

Several products possibilities were searched to be developed from the fabric leftovers. Considering the fact that there are various types and sizes of fabrics in the manufacture, the best application measured was a cosmetic bag in a patchwork pattern. In this case, the solution was the creation of two models and a pendant. The two cosmetic bags were developed to hold dental products and make-up, both with appropriate size to be carried inside of a feminine bag.

**Evaluation Procedures: waste** 

The textile waste is every part of material which is not included in the garment (LIDÓRIO, 2008). The waste can happen for several reasons as the result of failure to

trace onto fabric or failure to cut the lines (ARAÚJO, 1996). However, during the waste discard process, the fabrics leftovers will be directed to the development of two models of cosmetics bags in different sizes, based on cutting scraps.

### **Subprocesses Description**

The leftovers of the manufacturing process will be separated by types and sizes of fabrics and directed to the square-shaped cutting presses in two different sizes and then sewn to form the patchwork to be applied on the outside of the toiletry bags. The medium-sized polyester surplus will be directed to add lining to the necessaries. The smaller leftovers of the entire process will be cut to produce a pendant.

Products System Description and Evaluation

A pressing machine makes the cuts on the fabrics in standard sizes, 5x5cm square-shaped for the small cosmetic bag and 8x8cm for the medium ones. The surplus of fabric leftovers are separated in different parts and directed to the respective sewing cell. The remaining scraps, which do not fit the presses, will be directed to create pendants, which will be cut in fringes, joined at the top by a metallic ring and embedded in the cosmetic bags zippers. The method applied is considered appropriate by the fact that it

contemplates all discard of raw materials used for manufacturing the main products.

## ASSESSMENT OF PRODUCTS TO THE SYSTEM

The inputs required for the toiletry bags manufacturing will be fabric leftovers, zippers, metal steel rings for closing pendants, threads and cutting machines.

## **EVALUATION OF ALTERNATIVE PRODUCT**

The creation of alternative products was considered in the early stages of the troubleshooting process through brainstorms with members of style teams and product development. It was considerated the cost-effective on each option and the engagement of participants in the project teams.

## REPRESENTATION METHODS FOR THE MANUFACTURING PROCESS AND VERIFICATION TEST FOR THE PROTOTYPE

After selecting women who will participate in this project from the community in which the company operates, a training (estimated at 60h) in sewing will be given in order to develop the product prototypes.

The product launch

After a 100 approved cosmetic bags, a launch event for promoting the initiative will

be organized. It will be attended by the project members and their families, other employees, shareholders, suppliers and community members.

## COMUNICATION

The company will combine the three dimensions related to the communication of the sustainability, which are based on information, changes and process (CONSELHO EMPRESARIAL BRASILEIRO PARA O DESENVOLVIMENTO SUSTENTÁVEL-CEBDS, 2014). These dimensions happen when companies make the sustainability communication, the communication for sustainability and simultaneously the sustainability in the communication, carried out through the process that seeks to balance the economic, social and environmental pillars, in order to be as sustainable as possible. The sustainability communication refers to what the company does, how and why, to create empathy to the internal and external stakeholders. The communication for sustainability aims to engage, mobilize and educate these stakeholders. The sustainability in the communication incorporates sustainability in processes and corporate communication practices.

One of the pillars of the integrated communication, the corporate communication, fulfills the articulation of internal and external communication, establishing a favorable image with stakeholders. For that, it brings together activities such as corporate advertising,

press relations, internal communications and investor relations, governments and interest groups. Through a consistent message, the company makes the mission, values, vision and business strategy understood, respected and admired by the external and internal stakeholders.

In addition to the public relations adopted to announce the initiative, dialogue, engagement and participation will be the educational tools for sustainability initially worked by the company. In Marketing 3.0, social challenges are not just a public relations tool, in contrast, social problems are placed at the heart of business models through the collaborative power, which helps to reduce costs and generate greater impact (KOTLER, 2010). The evaluations of personal skills, the understanding of process and the outcome expectations are assumptions for establishing dialogue and exchanges. It depicts the system, which acts on the human behavioral development, whose result produces a propitious environment to the sustainable model. The engagement reconciles mutual identities and is the interaction that actively involves the subject despite the differences. The participation is on the sustainability agenda as it included diversity, and as its meaning involves the acceptance of others and their differences, providing conditions to establish dialogue and engagement.

## CONCLUSION

Currently a greater qualification of the

understanding and the knowledge about sustainable practices in the industries become necessary, in particular the production of textiles considering that nowadays, the Brazilian fashion chain is the largest employer of all but is also one of the industries that presents more challenges to be overcome in the environmental aspect. The biggest challenge remains to introduce the concepts of sustainability in companies that do not use environmentally friendly raw materials and do not develop products or actions with these principles. Consumers are not only looking for products and services that meet their latent needs, but also aspire for experiences and business models that touch their emotional side. It was found that, through Bomfim methodology (1995), a corporation can benefit broadly through sustainable and socially responsible practices, considering the financial aspects, marketing, corporate and the company's image to their customers. The key point is that organizations need to change their values and priorities to suit the current economic and social scenarios, always considering the impact of their actions on the planet.

## REFERENCES

ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA TÊXTIL. Agenda de Prioridades Têxtil e Confecção, 2015/2018. Disponível em: <a href="http://www.abit.org.br/Publicacao">http://www.abit.org.br/Publicacao</a>. aspx#22>. Acesso em: 10 Nov. 2015.

ANDRADE, Cláudio. Construindo Sustentabilidade. Revista da ESPM. v.17, .p. 70-71, 2010.

ARAÚJO, M. Tecnologia do Vestuário. 1.ed. Lisboa: Fundação Calouste Gulbenkian, 1996

BOMFIM, G. A. Metodologia para desenvolvimento de projetos. João Pessoa: Editora Universitária/UFPB, 1995.

CONSELHO EMPRESARIAL BRASILEIRO PARA O DESENVOLVIMENTO SUSTENTÁVEL (CEBDS). Guia de Comunicação e Sustentabilidade, 2008. Disponível em: <a href="http://cebds.org/wp-content/uploads/2014/02/Guia-de-Comunica%C3%A7%C3%A3o-e-Sustentabilidade">http://cebds.org/wp-content/uploads/2014/02/Guia-de-Comunica%C3%A7%C3%A3o-e-Sustentabilidade</a>. pdf>. Acesso em: 17 Nov. 2015.

ELKINGTON, John. Canibais com Garfo e Faca. São Paulo: Makron Books, 2011.

ENVIROMENTAL PROTECTION AGENCY (EPA), 2013. Dísponível em <a href="http://www.3.epa.gov">http://www.3.epa.gov</a>>. Acesso em 10 nov. 2015.

INSTITUTO DE ESTUDOS E MARKETING INDUSTRIAL (IEMI), 2011.

KOTLER, Philip. Marketing 3.0. Rio de Janeiro: Elsevier. 2010.

LIDÓRIO, Cristiane Ferreira. Tecnologia da confecção. Araranguá: Instituto Federal de Educação, Ciência e Tecnologia de Santa Catarina, 2008. Apostila. Disponível em: < http://wiki.ifsc.edu.br> Acesso em: Nov. 2015.

MANZINI, Ezio. Prefácio. In: MORAES, Dijon. Metaprojeto, o design do design. São Paulo: Edgard Blücher. 2010. P10.

MANZINI, Ezio; VEZZOLI Carlo. O Desenvolvimento de Produtos Sustentáveis. São Paulo: Edusp. 2008.

SACHS, Ignacy. Caminhos para o desenvolvimento sustentável. Rio de Janeiro: Garamond, 2009.

SMERALDI, Roberto. Não há inovação sem sustentabilidade no mundo dos negócios. Disponível em: <a href="http://www.sustentabilidade.sebrae.com.br/">http://www.sustentabilidade.sebrae.com.br/</a> Sustentabilidade-sem-sustentabilidade-no-mundo-dosnegócios>. Acesso em: 10 Nov. 2015.

TOLEDO, Marcelo V. P. Os golfinhos da comunicação. Revista da ESPM. v.19, p. 57-59, 2012. Comunicação Integrada.

UNIETHOS. Sustentabilidade e Competitividade na Cadeia de Moda. Estudos Setoriais. São Paulo: Uniethos, 2013.

ZULAUF, Werner E. O meio ambiente e o futuro. Disponível em:<a href="http://dx.doi.org/10.1590/S0103-4014200000200009">http://dx.doi.org/10.1590/S0103-40142000000200009</a>>. Acesso em 09 Nov.2015.

# CRADLE-TO-CRADLE IN THE MANUFACTURE OF FASHION APPAREL: the design as generation management tool and textile waste disposal

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## INTRODUCTION

It is of great convenience to research, study and disseminate knowledge of the Cradle-to-Cradle system using design as a tool for reducing the generation and disposal of textile waste in the cutting step of the Fashion Garment Manufacturing - FGM process, respecting principles of sustainability. The study of fashion in the textile chain is multi and interdisciplinary, involving the arts, design, engineering and the society for the creation, development of fashion product and the production process of FGM. This paper has the purpose of presenting part of the research conducted by the SUSTEXMODA Project inserted in the "Fashion in the Textile Chain" group registered at CNPq, National Council for Scientific and Technological Development, Ministry of Science, Technology and Innovation, which involves studies on the textile chain's production processes and its social and environmental issues. The research's object of study is concentrated only in studying the disposal of textile solid waste generated by cutting departments, its impact on the city of São Paulo and possible solutions through design.

The implementation of increasingly restrictive environmental laws and regulations, the rising numbers of sensible fashion consumers and the creation of more competitive markets, are demanding the network of companies in the textile sector to be more efficient from the productive point of view, respecting and integrating the economy,

society and the environment. The increase in industrial production should in the future be associated with a lower cost of inputs and reduce the generation of polluting waste.

There are countless types of waste generated in the textile chain today, mostly being discarded without great concern for the impacts to the environment. The main end product of this chain is in the fashion industry, clothing. The manufacture of fashion apparel is the Textile Chain's most sensitive link to planned obsolescence, resulting in an acceleration of the development process and production of short life cycle items. The main raw materials of this product are fabrics and the different types use, as a starting material, threads with pure composition or mixtures of natural fibers, synthetic and artificial (MENDES 2010).

FGM's production process involves a network of industries that develop and produce different types of products, a high consumption of various materials and products and a large number of multiple production steps. As a result, there is the generation of a wide variety of different solid waste and high impact on the environment after its inappropriate disposal.

The Cradle-to-Cradle system is being researched and studied as a tool that could provide viable solutions aimed at reducing and possibly eliminating the waste in question.

The evolution of the global production system "fast fashion", faster production, enabled the Fashion Garment Manufacturing - FGM a great increase in the volume of produced pieces of diversified products of high added value. It results in an increase in the generation of different types of textile waste and labour casualisation for sewing machines operators. It is important that the increase of the industrial production to be associated with a lower expenditure of inputs, waste reduction of textile residue, without leaving aside labour development and the high value it adds to the product.

The figures involving the sector are significant in Brazil's economic scenario. In terms of financial value represents US\$126.4 billion equivalent to 5.6% of the total production of the Brazilian manufacturing industry. It is striking the prominent position of the FGM segment, also known as garment making, represented by 29.942 companies in a total of 33,006 companies in the textile sector. This segment employs 81.66% of the total formal labor employed in the Brazilian manufacturing industry (IEMI 2015).

According to Bastian & Rocco (2012), the textile industry produces, on average, 1.878 million tons of end product. These are products that take added value from the weaving and knitting sectors, generating per year, 170.000 tons of unutilized textile waste. More than 90% of which are discarded incorrectly.

The issues related to the environment have recently started to be of great global importance and of brand identity, resulting in a business concern with the proper disposal of solid waste. The National Law establishing the Policy of Solid Waste - PNRS No. 12,350 / 10 2010 regard residue generating companies responsible to give proper destination to their waste. (CN 2016).

In this research there are methodology theoretical sources of different authors, including Yin (2008) and Lakatos & Marconi (2007), which showed no single theory to present a set of actions in way to enable the execution of scientific research, data and information collection of a subject that is inserted in an empirical setting little studied and documented. The case study and research action started from a qualitative research in which questions "how", "why" and "what" form the basis of the study.

The research involves experiments using homeless craftsmen, who are living on the streets, as labor in the production of functional products. The expected result, besides the reduction of a large amount of disposed waste, should be a high number of people involved in the process of social reintegration, providing mainly self-esteem raising opportunities, valuing the principles of citizenship and social life, generating income.

## THEORETICAL BASES

The Fashion and Textile Chain involve a wide and diverse network of companies that develop and produce fashion products with specific characteristics provided by the design which gives, by way of creation, styles for consumers avid for diversified products in their shapes, unique in their visual and

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produced in small quantities (MENDES 2006).

Textile Chain and Fashion Garment Manufacturing - FGM

The textile chain and fashion, according to Mendes (2010a) comprise a set of consecutive steps along which the various inputs transform itselves into the establishment of final products and their market placement. The sequence of operations of the production processes suffer greater or lesser influence of the fashion cycle in each link in the textile chain.

As observed in Figure 1, the main axis consists of the production of fibers, spinning, weaving, knitting and nonwoven fabric, manufacturing and retail. Finishing, supplies and support industries work around this main axis.

In each new season the fashion industry, influenced by information from style and textile design bureaus, presents a great variety and novelties of products in their shapes, colors, materials and textures, making it possible for clothing brands to target different markets. The goal is to satisfy the desires of a conservative audience, who consumes a more measured fashion and of another, bold and innovative, who follows fashion vanguard.

For this it is necessary to develop products based on trend research disclosed by the bureaus in a product mix that provides a wide range of use combinations. The life cycle of fashion clothing is rather short due to consumer demands for innovative products in

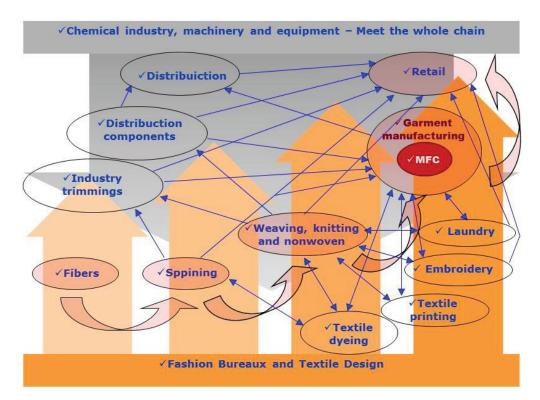


Figure 1 - Textile Chain in Brazil - Source: Mendes (2010a)



Figure 2 – Product mix collection. Source: IFM (2005)

increasingly shorter times (Figure 2).

The cutting department has an important feature from an environmental point of view due to its large solid waste generation: paper, cardboard, plastic and mainly textiles fragments generated in the cutting process.

One of the stages of the cutting process is the marker making by fitting patterns along the width of the fabric, which aims to make better use of fabrics, preparing it for the cutting of pieces (Figure 3). The spaces outside the contour of the pattern parts are waste to be discarded. It is very difficult for a marker making to result in zero residues. Most cases, in FGM, the percentage of utilization of the fabric reaches 80-90% at best. Thus, a satisfactory production will discard at least 10% of its fabric as textile waste.

The pattern refers to the planning of the created product. It is the reproduction of parts of the clothing in a two-dimensional space which can be represented on paper or computer screen. Marker making should also aim at reducing the amount of solid waste in the fabrication.

The marker is placed on a number of layered fabrics to be cut in a single step. The process of overlapping the layers of fabric is referred as fabric spreading. The number of layers depends on the number of pieces to be cut.

FGM's main raw material is the fabric produced from yarns made of various types of fibers which are difficult to identify after the cutting step. This constitutes serious problems when reusing these fabrics as raw materials

for new products.

Case studies show that FGM's cutting departments are responsible for most of the generated textile waste and, once discarded haphazardly, result in an impractical identification for later use. (MENDES & SANTOS 2015)

According to Salcedo (2014), due to the sector's size, its singularities and fashion trends, launching collections at an increasingly rapid pace, the textile industry, which involves fibers, yarns, fabrics and finishing enterprises are a major contributor to the damage of the system's sustainability. The most disastrous effects on the environment and social wellbeing of the planet are the intensive use of chemicals in the production of fibers and fabrics and clothing manufacturing and maintenance, resulting in a serious threat to health.

## Design

The origin of the word design is in Latin designare, a verb which covers both senses, to appoint and to draw. It is noticed that, from the etymological point of view, the term already contains, in its origins, an ambiguity, a dynamic tension between an abstract aspect as to conceive, to design, to assign and another concrete one, to register, to configure, to form (DENIS, 1996).

Most definitions agree that the design operates the combination of these two levels, giving material form to intellectual concepts. It is, therefore, an activity that generates projects towards objective plans, models or outlines. Historically, however, the passage from one type of manufacturing, wherein the same individual conceives and executes the artifact, to another, where there is a clear separation

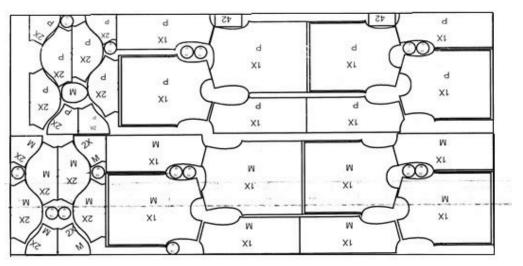


Figure 3 - Marker of a T-shirt with circular patterns utilizing the empty spaces. Source: Authors

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between design and manufacture, constitutes a key landmark that characterizes the term. According to the traditional concept, the difference between design and craftsmanship lies in the fact that the designer designs the object to be manufactured by other hands or preferably by mechanical means. Artisans both design and execute (MENDES, 2006).

Design is little used by fashion companies as a strategic tool in waste management generated by FGM's cutting department. It can, however, assist in the Cradle-to-Cradle system minimizing the disposal or even eliminating the improper disposal in some cases.

## Ecoproduct

An ecoproduct must respect the environment and optimize the interactions that occur during all stages of its life cycle, that

is, from product development to the extraction of raw materials and energy. The concept considers its production and marketing, its consumption and use to a determined end, maintenance during its life cycle and disposal, as represented in Figure 4 (OLIVEIRA, 2006).

There is bibliography citing studies that were successful in solutions related to textile waste management. Many theories are in its implementation stages from the reduction, reuse and recycling processes of textile materials.

## Ecodesign

ECO-DESIGN An international concept, developed by the World Business Council for Sustainable Development (WBCSD) at the Rio summit, ecodesign is the culmination of a holistic, conscious and proactive approach. It

**ENVIRONMENT EXTRACTION** FINAL DESTINATION Minimum consumption Minimization of byof natural resources products or emissions **APPRECIATION** (especially nonthat affect the quality of renewable) the environment DEVELOPMENT MAINTENANCE Longevity or durability of Reuse, recovery and or upgrading the product or the product and its components some of its components (appreciation of waste) Figure 4 – Life cycle of ecoproduct. DISTRIBUCTION Source: (CARVALHO, 2015)

consists in designing a product -or service- so as to minimize its impacts on the environment. Ecodesign applies at every stage in a product's life: raw material extraction, production, packaging, distribution, use, recovery, recycling, incineration, etc. (UNEP 2016)

Ecodesign proposes products thought to minimize environmental impacts and reduce the debt that society has established with the environment to meet the satisfaction of needs and desires of consumers. With the purpose of designing a product, companies need special knowledge of consumer's needs, priorities and values. The market may be evolving and customers cannot articulate what they want. The scientific and engineering know-how is necessary to achieve certain projects and the adaptation between the various operating subsystems should produce the required levels of volume and quality to meet audiences. The author explains that the principles and practices of ecological conception have much to contribute to the urgent need for rapid and tangible progress towards sustainable human economy. (HOFFMANN 2012)

One of the tools that contribute with the C2C system is ecodesign. Ecodesign emerged in the early 20th century as an expression of a sustainable world that seeks to integrate human development with sustainable resource management, emphasizing the damage to natural ecosystems and monitoring within the viable limits. The integrity of human economy and natural ecosystems can compete for the existence of a balanced

situation. As such, ecodesign is a broad concept (XUE et al, 2004).

Cradle-to-Cradle - C2C

MacDonough and Braungart (2014), the creators of the Cradle-to-Cradle theory, or C2C, present a conception of use for materials in a circular production system, or circular economy, as opposed to linear understanding, through which the system comes down to extract, manufacture, use and dispose of, or in other words, one-way, from cradle to grave, resulting in zero waste. The authors popularized the terms upcycling and downcycling, these concepts distinguish the recycling that creates a more valuable material (upcycling) from one that presents a quality loss (downcycling).

C2C addresses, rigorously, the elimination of the concept of waste and, as a new paradigm, does not accept the waste of byproducts, adopting their complete extinction (SALCEDO, 2014).

The production cycle, in this view, is configured as a closed loop as described by Macdounough et all (2003). In this system, the biological and technical nutrient flows depend on the existence of robust recycling and composting infrastructure, with strong participation of the municipal government.

It is possible in Brazil to obtain a certification in the Cradle-to-Cradle program through the Continuous Improvement Program, which engages the product and its manufacturing into five themes:

healthful materials; reusable materials; renewable energy; water management; social responsibility.

Cradle-to-Cradle principles – C2C, in summary, they are:

- » Waste will always be considered a resource;
- » The use of solar energy is essential for the circular economy;
- » Diversity should be celebrated as a source of alternatives for sustainability;
- » Eco-effectiveness follows the design principles of nature.

C2C advocates that all components and raw materials used or constituent of the production process are fully reused in the same or new process after its useful life. This is not recycling. C2C determines that the materials should necessarily generate new products of equal or higher quality in relation to the first, even if not for the same application or for the same market. It is concerned that the production process and raw materials are ecologically efficient, not just effective.

When the system operates, a productive circle, production – disposal – production, reveals itself, contributing to increase the added value without damage to the ecosystem and to the available resources for living beings. A classic example of this concept is to transform organic waste into fertilizer, feeding back the chain in the generation of agricultural products.

The authors Macdounough & Braungart

in 2003 illustrate the system with some examples. Smart biodegradable fibers or fibers that allow full reprocessing in the textile industry, materials designed as biological nutrients, such as textiles and packaging made from natural fibers, which can biodegrade safely and restore nutrients to depleted soil. (McDOUNOYGH et al 2003)

The C2C concept is innovative, but it depends on a referral to the new technological awareness accompanied by the evolution of the human consciousness to the values of ethics, transparency, responsibility and desire to correct decades of environmental shifts. It depends also of the high values of education, the principles of coexistence and community participation for the change to be positive, prosperous and effective.

The theory of Cyclability described by Dr. Kate Goldsworthy (2012) describes three items aimed towards "Zero Waste Future" in a closed cycle systems includes the C2C system.

Cyclability

Rebecca Early (Earley, 2012), editor of Material Futures, highlights Cyclability and presents several researchers who have written about it and defends their theories. System thinking is also encouraging a growing number of designers to challenge wasteful manufacturing systems that dump valuable materials into landfill, particularly in light of the finite quantities of the earth's resources.

Dr. Kate Goldsworthy (2012) describes three items in the Towards Zero Waste

Figure 5 –Creating Closed Loop Systenms by Dr. Goldsworthy. Source: (Earley, 2012)

Now Upcycling by Design Near Design for Cradle -2-Cradle Future
Design
for Material
Ecologies

Future and Creating Closed Loop Systems: -Now upcycling by design, - Near Design for Cradle-2-Cradle, - Future Design for Material Ecologies, as shown in Figure 5.

- » Now Upcycling by Design: Limited materials with limited life cycles. Although return journeys can be designed at the end-of-life, this approach only postpones the end of the discarded material at landfill, where it may never biodegrade, it may degrade very slowly or may add harmful materials to the environment as it degrades.
- » Near Design for Cradle -2- Cradle: Limited materials with unlimited life cycles. By considering the barriers to recycling as part of the design brief, connected loops can be built into the material's future life from the outset. In

- a closed-loop, materials would not lose their value and would be designed to be recycled indefinitely.
- » Future Design for Material Ecologies: Unlimited materials with unlimited cycles. A genuinely sustainable future depends on creating interconnected loops, or cycles, for all industrial commodities. These cycles would be part of a scaled up system of material exchange which is open and dynamic, including all material resources in an infinite industrial ecology.

## **CASE STUDY**

For greater understanding of the problem and possible solution testing, it was carried out a case study and research-action in a uniform manufacturing company and a in a NGO's project that uses textile waste as raw material.

The uniform company provides, on demand, uniform items for companies. The items are t-shirts, pants and shirts. The main raw materials are woven and knitted fabric. Ten thousand uniforms are produced per month generating around 80kg of waste per month. The company dismisses this waste paying to collectors who charge US \$ 1.00 per kg and unaware of the fate of these discarded waste.

The Caninde unit of the NGO welcomes about 1,000 homeless people. The UBUNTU project, implemented in this NGO, stimulates the training of artisans by producing rugs using textile waste discarded in the Bom Retiro area in São Paulo as raw material. 68 individuals participate in this project. They are people living in extreme social and emotional









Figure 6 – Rugs. Source: Pictures by the author

vulnerability. The rugs are made out of patches cut into  $8 \times 3$  cm which are introduced into the orifices of a rug canvas. The result is a fringed carpet.

A partnership was established with the uniform company that began to cut, along with its own marker making, the exact size of the patch used by the artisans. The areas where there was no possibility of insertion of the rectangle were occupied by a circle. Both rectangles and circles patches are collected by the NGO.

The standardization of the carpet's measures was accomplished together with the NGO, aimed at the better use of rug canvases. A label was also created, containing the presentation of the project, the artisan's name, the name of the company that provided the material and the amount of utilized textile residue. Small rugs absorb 1.1Kg of waste.

## CONCLUSION

The uniform company began to cooperate with the NGO and the residents no longer needed to cut the fabrics. The circles are used for production of fuxico<sup>1</sup>. There was a reduction of 50% of the discarded residue. The discarded waste is sent to a company that reprocesses the remaining fabrics. This material is then directed to automobile and acoustic lining panel's production.

The NGO started receiving the fabrics

<sup>1</sup> Fuxico is a traditional Brazilian technique which consists of bundles of cloths, made by sewing circles of scraps of fabric together.

already cut, the rug canvas is better utilized and the project image has been valued by the label.

As a result of the case study and researchaction, there was an increase in the quality of rugs and a reduction in discarded waste.

Thus, the clothing companies achieve zero disposal of their waste. The NGO receives material for the production of articles and activities for the residents and the remaining material of this production is destined to the fiber processing company.

It can be seen that it is possible application of C2C system. It is worth noting only that the action of the company came from a request aimed meets the experiments of SUSTEXMODA and UBUNTU project and not as a consciousness of company

This conscience will be a consequence only when the company is penalized by not follow the correct disposal of the waste generated in their production. This is the second step of SUSTEXMODA research project.

## REFERENCES

BASTIAN, E.Y.O; ROCCO, J.L.S. **Guia Técnico Ambiental da Indústria Têxtil**. São Paulo: CETESB: SINDITEXTIL, 2009. Disponível em: <a href="http://www.inovacao.usp.br/APL/pdf/docs/guia\_textil.pdf">http://www.inovacao.usp.br/APL/pdf/docs/guia\_textil.pdf</a> access: 10/12/2012.

BRAUNGART, M., McDONOUGH, W. **Cradle to Cradle: criar e reciclar ilimitadamente**, Barcelona, Editora Gustavo Gil, 2014

CONGRESSO NACIONAL, **Lei № 12350 de 20/12/2010** acesso http://www.planalto.gov.br/ccivil\_03/\_ato2007-2010/2010/Lei/L12350.htm 10 de janeiro de 2016

DENIS, R. C. **Uma introdução à história do design**. São Paulo: Edgard Blücher, 1996.

DONAIRE, D. A utilização do estudo de casos como método de pesquisa na área de administração. Revista do Instituto Municipal de Ensino Superior de São Caetano do Sul, n.40, p. 9-19, mai/ago/1997.

DOUGHERTY, D., TOBOOM, J. N.,: The Case of Sustained Product Innovation, Handbook Creative Organizing to Enable Organizational Creativity, 2008.

EARLEY R., COLLET, C, Material Futures 01 -Textile Futures Research Centre, UAL –University of the Arts London, London, 2012.

IEMI, Instituto de Estudos e Marketing Industrial. **Relatório Setorial da Cadeia Têxtil Brasileira**. São Paulo: Free Press. 2015.

IFM, Institut Français de La Mode, **catálogo de formandos**, 2005

HOFFMANN, E, User integration in sustainable product development: organisational learning through boundary-spanning processes, Sheffield, UK: Greenleaf Pub., 2012

LAKATOS. E.M & MARCONI, M.A.; **Metodologia Científica**, São Paulo, Atlas, 2007.

MCDONIUGH, W.,BRAUNGART, M., ANASTAS, P. T., ZIMMERMAN, J. B., **Applying the Principles Engineering of Green to Cradle-to-Cradle Design**, 2003.

MENDES, F D., SACOMANO, J. B., ALVES FILHO, J. P., Rede de empresas A Cadeia Têxtil e as estratégias de manufatura na indústria brasileira do vestuário de moda. Arte & Ciência São Paulo 2010.

MENDES, F.D. **Cadeia Têxtil e as Estratégias de Manufatura na Industria do Vestuário de Moda**.
Dissertação (Mestrado em Engenharia de Produção)
Universidade Paulista – UNIP, São Paulo, 2006.

MENDES, F.D. **Um Estudo Comparativo entre as Manufaturas do Vestuário de Moda do Brasil e da Índia**. Tese (Doutorado em Engenharia de Producão)

Universidade Paulista – UNIP, São Paulo, 2010a.

MENDES, F. D. **O Design como Redução dos Impactos Ambientais da Manufatura do Vestuário de Moda**, Designa 2015 Identidade\Identity org by Paiva & Moura, UBI Universidade da Beira Interiror, UBI editor, Covilhã, 2015

OLIVEIRA, J. F. S. Ecoprodutos. In: \_\_\_\_\_Gestão Ambiental. Lisboa: Lidel, 2005. cap. 7, p. 91-116

SALCEDO, E. **Moda ética para um futuro sustentável**. Editora: Gustavo Gili- Barcelona – 2014.

THOMPSON, R., THOMPSON, M. The Manufactoring Guides – Sustainable Materials Processes and Production, Ed. Thames & Hudson: London, United Kingdom, 2013. UNEP-United Nations Environment Programme ECO-DESIGN production without destruction, <a href="http://www.unep.fr/shared/publications/other/webx0008xpa/ecodesign.pdf">http://www.unep.fr/shared/publications/other/webx0008xpa/ecodesign.pdf</a> access: 20/03/2016

UNEP-United Nations Environment Programme, **ECO-DESIGN production without destruction**, <a href="http://www.unep.fr/shared/publications/other/webx0008xpa/ecodesign.pdf">http://www.unep.fr/shared/publications/other/webx0008xpa/ecodesign.pdf</a> access: 20/03/2016

XUE, H. Y., ZHANG X. J., WANG, Y. Q., Research on the Disposal Strategy of Waste Textiles, Applied Mechanics and Materials, Vols. 522-524, pp. 817-820, 2014

YIN, R K. **Case Study Research: Design and Methods** (Applied Social Research Methods). 4a.ed. USA: Sage Publications In 2008

# THE PROBLEMS OF WASTE MANAGEMENT OF THE CLOTHING INDUSTRY AT MARINGA- PR

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## INTRODUCTION

Thinking the question of sustainable development in a capitalist society it is not easy, especially regarding the clothing industry that makes part if the fashion industry. This industry causes several impacts at the environment because of the wastes of productive process.

Amid complexity this theme I bring the following question: How to do the management of solid wastes to minimize environmental impact? Therefore, this paper aims to point possible solutions and problems that exist in the management wastes of the clothing industry in the city of Maringa-PR.

To account to this theme I divide this paper in four parts beyond this introduction and the final considerations. I present initially the concept of sustainable development then the management of wastes also the city of Maringá. At the third part I bring the methodology and finally the data analysis.

## SUSTAINABLE DEVELOPMENT

The concept of sustainable development it appears to be quite broad in your conception and raises a number of indignations about how achieve it, mainly when we look to fashion industry that surviving consumption. André Viana Custódio (2011) says that the sustainable development:

[...] cam be understood as one set

of instruments aimed to realization of welfare al the society and inside this conjuncture must throw hand tools, politic structures, economic and educational, as normative structures. It should be noted that the principle of the sustainable development from the merger between two big principles: the right to development and the preservation of the environment (CUSTÓDIO, 2011, p. 154).

The Custódio's definition brings one of the conflict points about the concept: the right to development and the preservation of the environment. These two ideas are equidistant apparently for the actual production and consumption system exhausted the environment, not just as source of funds, but as welfare.

Selene Herculano published in 1992 the paper entitled "Development (In) sustainable to happy society". On that paper the author presents the problematic about the concept, the researcher in favor and against it, as the problematic around the concept constitution, questioning the development idea and if the same can be sustainable, seeing that for our society development is synonymous of economic growth.

The author points out the problems of sustainable development to conceptualize development as

[...] a new garb to the progress idea that is present in to Enlightenment

ethnocentric of Turgot e Condorcet, on the XVIII century that was adopted by Positivism of Conte on the XIX century. Such as the "progress" expression (and the expression "evolution" brought by the biology), the development predominant idea suppose a path to go, one ordained change, predetermined, universal, according the unique and se same civilizing process. One belief that the humanity moves in one desires direction and for the best. This linear route people amounted, gradually or burning steps, underdevelopment stage and glad tidings, reach the stage of "developed" it is in the First World had as an exemplary model. Capitalist development implies, in short, a linear process of upward growth and infinite natural and uneven resignedly (HERCULANO, 1992, p. 21).

Development seen as progress synonymous, as say the author, shoe the economic growth direction that take us to consumer products and the acceleration of production that makes part of capitalist system. The question is how to associate two different conceptions, sustainability and development? The author continues stating that:

[...] the sustainable development question, it being achieved through one new international economic order, it is something dubious,

vague and therefore It lends itself to numerous controversy, the the most central of them revolving around the reconciliation of nature conservation and ensure the maintenance of economic growth (HERCULANO, 1992, p. 11).

Such as presented in the Ciustódio's definition, Herculano (1991) question and ask how promote the sustainable development and stresses as this development happens inside capitalist society. Twenty tree years after the publication of the paper organized by Mirian Goldemberg, entitled "Ecology, science and politic", the problem carry on and the same questions ether.

Reflect on the current pattern of production leads us to think about how provide sustainable development inside economic rationality, of capitalist system that encourages consumption or in this case, in one search object that speaks about the fashion industry, one industry survived consumptions and discard objects.

## **WASTE MANAGEMENT**

Thinking the solids wastes in the current society it proves to be a challenge. First of all because of the life style actual, based on the products consumption, something with programed obsolescence and second because play down the waste production require play down the consumptions and production of goods, proposal incompatible with capitalism

system (GONÇALVES-DIAS, 2015).

This problematic becomes more complex when it comes the clothing industry which supplies the fashion market, responsible for accelerated consumptions the clothing goods.

The law 12.305, august 2010 that establishing the National Solid Waste Policy brought many advances, however this law does not bring tools that allows obtain the established targets and even clarifies how must be done the waste management plans, what difficult the implementation thereof.

The law brings conceptions that help on the understood about some concepts as tailings and wastes. Important concepts for moment of the management. Para Afonso Del Val, the waste in any its presentation forms and composition, are a kind of product that "oscillates between a contaminant and dangerous nature of raw materials more or less transformed, useful and necessary, for its scarcity, energy content, strategic economic and ecological value " (DEL VAL, 1998 s.p).

Tailings are one specific kind of product, in other words, it is one a material whose reuse capacity or recycling was exhausted, and there is no other solution for the same except forwarding to the landfill (DEL VAL, 1998).

This distinction between tailings and wastes it's important, and because through this differentiation that this materials are forwarded to their destinations, recycling or reuse for waste and landfills for tailings. However, it is worth mention that mostly wastes are sent to landfills, because not always

exist how to reuse then or recycling. This things happens in the clothing sector because there is no place to send the fabric scraps they go to landfills.

One of the cities that present his reality is Maringá. It is funded at 1947, the city today with 68 years and 367.410 population, is located in in the State of Paraná Northwest region, near the city of Londrina. Besides the production of clothing Maringa and neighboring municipalities have the entire textile production chain, from the cotton planting, spinning, weaving and garment making, as well as companies specialized in the finishing of clothing details such as laundry, printing and industrial embroidery (PMSB, 2011)

Although to present al textile chain that exercise one important role in economic as the largest employer and generator of money to the city, I note that the clothing sector over 1570 companies as one production around 5 million pieces per month whereas on average 25% of which are waste (PMSB, 2011)

Because of this amount waste produced and the problems generated by them, the city developed the online waste management plan (PGRS Online) from 2014, that requiring the registration of companies and the proper disposal of waste (Alencar et al, 2015). The SWMP company requires the segregation of waste, storage location and proper disposal, recycling, reuse or industrial landfill.

According to this plan the proper disposal would be recycling the waste and the landfill

for waste. However, many of the waste generated in the manufacturing process are going to landfills.

## **METHODOLOGY**

To develop this research used qualitative methodology with semi-structured interviews, document analysis and field notebook.

The data collection was carried out in three phases. The first knowledge in loco manufacturing sector in Maringá. At this stage the participating companies were also selected: EF company (midrange - maternity fashion), company T (micro - fashion fitness) and now TM (small business - plus size fashion). The companies were selected taking into consideration the size, the waste management process and market segment.

The second phase relates to data collection, through the application of semi-structured interviews, field notes and documentation concerning the management of the company. Finally, the third phase of data collection extends to the disposal of waste.

## DATA ANALYSIS

The three companies studied EF, TN and TM are the solid waste management and already have the SWMP Online or are under implementation.

Agree to emphasize that the greatest amount of waste generated refers to the cutting sector as plastic coming from the

pipes in which come rolled tissue, packaging involving tissue rolls, paper used at the time of cutting and fabric scraps. These residues are common to each of the three companies that manage them differently.

The company EF is a medium-sized company with production of 20,000 pieces per month. Throughout the production industry for containers to store the waste generated each container to a waste. The company also has a suitable site for waste storage, with room for each of them. The separated wastes are as follows: paper, plastic, woven and non-recyclable. The tissue is sent to a factory comforters and mattresses as well as a small factory producing tow. But the plastic, paper and cardboard are sent for recycling and non-recyclable to an industrial landfill.

The company T works with fitness fashion and produces about 4000 pieces per month, with a small business. This company also separates waste, each with its container. The company internally stores only scraps of fabric, since the rest of waste are paper, plastic and cardboard are placed in a separate collection container. In the case of fabric scraps she can not send your fabric scraps for factory as raw material, because it works with synthetic fabrics, which does not allow the manufacture of mattresses or rags. Without a more appropriate target, the company sends the fabric scraps to an industrial landfill.

The company TM produces an average of 4000 pieces month and makes a series of internal exploitations such as paper, fabrics and notions, however, his hand management

process is very appropriate, since there is no separation of waste and they are sent to an industrial landfill, regardless of whether recyclable or not.

EF and TM companies do not have a control on the amount of waste produced in kilograms monthly, but only an estimate on the basis of the submissions of the same to landfills. Already the T company has more precise control, it is implementing the SWMP.

The waste from the manufacturing sector are: line of cones, thread scraps, tissue shavings, scraps of fabric, paper, plastic, cardboard, broken needles, notions and machine oil (SENAI, 2007). However, more numerous retail fabric, paper and plastic. The fabric scraps is the most problematic, as there are few options in recycling. On average, the margin tissue waste is between 15% and 30% by volume.

Such residues have different degrees of dangerousness. According to the ABNT NBR 10004: 2004 textile waste are seen as non-hazardous, posing risks only when contaminated with engine oil, for example, and for the flaps, to possess self flammability, belonging to the class grades II - non inert, non-hazardous waste and class I - dangerous when contaminated with glue or machine oil, for example. (ABNT, 2004 LINKE, 2014).

The danger is an important factor, but the destination continues to show a problem. The company's production manager EF stressed a fact of utmost importance.

Has to do with the waste, send it

to a landfill is not right, but what can we do? Why, for example, we send the fabric to make mats, but eventually this mat goes to waste, this is an unsolved problem, everything goes to waste one time or another (interview with manager of production- company EF -March 2015).

At another time the same manager said that several consultants sought to help the company in reducing waste, but gave no viable alternative for recovery of waste. The same reported the company's production manager T.

The consultants bring several examples of what is done in the Northeast and even what makes a can of soda. They say everything can be recycled, but I do not want to know the tin or the Northeast, I wonder what I can do here, here in Maringa (interview with manager of production-company T- March 2015).

These two lines show the difficulty of those responsible for production to find viable alternative and that in fact minimize damage to the environment, especially when it comes to fabric scraps.

## FINAL CONSIDERATIONS

First, I ask that the concept of sustainable development does not apply to a society where the prevailing economic rationality. I

consider important reflections on the subject and not decry the importance of the concept, but do not see how we become a sustainable society by means of a concept to define first the market (Acselrad, 1999; HERCULANO, 1992). Especially when it comes to a sector such as the making surviving consumption.

In the case of solid waste management the three companies are in accordance with the law, even the TM company not making the separation of waste and sending all the material to a landfill, it is within that stipulates the law 12.305, as comes to give a suitable destination to waste. However, the biggest problem of waste is to incorporate them into new cycles and the lack of options able to absorb their waste correctly, as shown by the managers and production of EF and TM companies.

Again comes to my question, how to think sustainable development is our society can not incorporate new materials cycles with productive potential. It is not just to minimize the production of waste, but to incorporate them into new cycles.

Although there is a strong work due to legislation forward the waste to a landfill does not solve the problem, although the impacts on the environment are minimized. It is necessary to invest in ways to reuse, especially in the case of tissue flaps in order to minimize the generation of waste and viable alternatives, incorporating them to other production cycles.

## REFERENCES

ABNT, NBR 10.004, Resíduos sólidos: classificação. Associação Brasileira de Normas

Técnicas, Rio de Janeiro, 2004. Disnponível em: http://www.aslaa.com.br/legislacoes/NBR%20n%2010004-2004.pdf. Acesso em: 03/09/2012.

ACSELRAD, Henri; Discursos da Sustentabilidade Urbana. Revista Brasileira de Estudos Regionais e Urbanos, Rio de Janeiro, v. 1, n.1, p. 79-90, 1999.

ALENCAR, José. et al. Os efeitos socioambientais causados pelos resíduos sólidos das indústrias de confecções do polo moda de Maringá-PR. Revista Eletrônica em Gestão, Educação e Tecnologia Ambiental Santa Maria. Revista do Centro de Ciências Naturais e Exatas – UFSM. v. 19, n. 3 (2015).p. 01-26. Disponível em: http://cascavel.ufsm.br/revistas/ojs-2.2.2/index.php/reget.

CUSTÓDIO. André Viana. Meio ambiente, constituição e políticas públicas. Curitiba: Multideia, 2011.

DEL VAL, Alfonso. Livro del reciclaje: manual para la recuperacion y el aprovechamiento de lãs basuras. 3º ed, São Paulo. Editora Actual, 1998.

GONÇALVES-DIAS, S.L.F. Consumo & resíduos: duas faces da mesma moeda. GV Executivo, v. 14, p. 38-41, 2015.

HERCULANO, Selene. Do desenvolvimento (in) suportável à sociedade feliz. In: GOLDENBERG, Miriam. (Org.). Ecologia, Ciência e Política. Rio de Janeiro: REVAN, 1992, v., p. 09-48.

Lei nº 12.305/2010, Política Nacional de Resíduos Sólidos. Disponível em: http://www.justicaeleitoral.jus.br/arquivos/lei-12-305-2010-pnrs/view. Acesso em: Ago. 2013.

LINKE, Paula Piva; ZANIRATO, Sílvia Helena. Danos Ambientais causados por resíduos da confecção no meio urbano em Maringá, PR.. In: VI CIETA, 2014, São Paulo. Anais VI Cieta, 2014. SENAI. Produção mais Limpa em Confecções. SENAI - Departamento Regional do Rio Grande do Sul. – Porto Alegre, 2007. Disponível em: http://wwwapp.sistemafiergs.org.br/portal/page/portal/sfiergs\_senai\_uos/senairs\_ uo697/proximos\_cursos/Produ%E7%E3o%20mais%20 Limpa%20em%20Confec%E7%F5es.pdf. Acesso em: 25/09/2012.

## 100 YEARS PLAN FOR A SUSTAINABLE MODEL OF GROWTH IN THE FASHION INDUSTRY

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"Building a brand today is a little like building a cathedral during the Renaissance. It took hundreds of craftsmen scores of years, even generations, to complete a major edifice. Each craftsman added his own piece to the project -a carving, a window, a fresco, a dome - always keeping an eye on the total effect. Like yesterday's cathedral, many of today's' brands are too large and too complex to be managed by one person or one department. They require teams of specialists, sharing ideas and coordinating the efforts across a creative network."1

Starting September 2015, the dutch Future Makers Center of expertise<sup>2</sup> organized a sustainability focused project. Under the title 'closing the loop' and with the collaboration of ArtEZ Master in Fashion Strategy, it challenged us students with the practicalities of becoming a sustainable business within the fashion industry. The contradictory nature of the daily operations and business model opposed the sustainable ethics the company wished to project. Making it difficult to create a strategy that could be implemented immediately which is not only sustainable but also practical.

As strategists we realised that this struggle goes hand in hand with every small

<sup>1</sup> Neumeier, Marty: "The Brand Gap", published by New Riders in Berkeley (2006), p.52

 $<sup>2\ \ \</sup>textit{Future Makers official website.http://future makers.artez.nl}\ , \\ (\textit{Accessed Mar 30 2016})$ 

company in pursuit of creating a sustainable fashion business. Companies who think about themselves only would have a small effect upon the fashion industry as a whole. To truly create change, small scale brands must acknowledge big companies and how they impact the industry.

The fashion system looks into the past instead of aiming at the future therefore it failed. This defeated attempt thus nourished in us the ideas of a new strategy, embracing big companies instead of competing against them. The resources we acquire while fainting at our task is therefore the basis for this discussion and strategy on a sustainable future for sustainable fashion.

We thus decided to question the actual image, production and manufacturing of so-called sustainable products as well as the future problems they will generate. And to do so, we will be grounded by behavioural economic theories, Cathedral strategic thinking and the potential high technology offers. We will therefore present a plan for sustainable model of growth in the fashion industry led by the following questions: To which extent can true sustainability be pursued in the fashion industry? While thinking about social legacy, which impact do companies want to leave behind? How to predict the fashion panorama of the future? How to make of sustainability the new profit making solution? How to develop a 20/50/100 years business plan radically ground-breaking for the 2016 fashion industry? And how to operate small changes simultaneously in big or small companies, while maintaining them profitable both in short and long term?

## A SYSTEM CALLED FASHION

The image, production and manufacturing of sustainable fashion products as operated nowadays do not give way to a brilliant future for this business. As young generations, this problem is a concerning one and therefore inspired this discussion by believing that these actual places of failure contain new opportunities and potential that our skills and desire for innovation can discover. The present fashion system is driven by an always growing consumerism prospect. No matter how or where companies are required to produce better, faster and cheaper in order to survive on the market. This fact, combined with consumers constant hunger for novelty and the lack of communication in between retailers and designers is resulting in a worrying overproduction, pollution, harvest of resources and products lack of quality. Coming from diverse sources these problems are all linked.

Let's begin with the overproduction issue. As asserted by Susie Lau - founder of fashion blog Style Bubble 'This general assumption that there's this blanket consumer, who is voraciously consuming all this content and product and clothes, is not the case. We're overproducing<sup>3</sup>.' At the root of the problem is

a lack of communication cope with a constant hunger for newness coming from consumers. Big fashion houses switch from two collections a year to minimum six collections and twelve collections for fast fashion retailers. This impacts on the lack of coordinated inventory management as well as on the constant decrease of quality in products.

Nowadays it is cheaper buying new apparel than to repair it – or even in some cases to wash it! Overproduction does not only prevail for clothes production, but for brands creation too. Fashion design graduates inflation results in a market flooding with new fashion houses. The consumer is overdosed with possibilities which leads him to lack consumerism loyalty. Designers are thus facing an enormous pressure. There is no time left for an innovative design thinking process or the attention lasting products require.

Another problem we are facing is a fashion period characterized mostly by brands indistinguishability. How can a brand expect the loyalty of its consumers when all designs look alike? The lines between fashion market segments become blurry. Pricing policies often overlap in-between the luxury, mid and mass-market. With an ever growing irrational replication of each other, luxury brands have lost their identity, selling products to wide audience while mid and mass market produce generic items of luxury brands.

Campaigns become alike while

Fashion, 08.02.,http://www.businessoffashion.com/articles/ opinion/the-roundtable-fixing-the-fashion-system, (Accessed Mar 05 2016)

<sup>3</sup> Blanks T., 2016. How to Fix the Fashion System, Business of

advertising is done in the same form. The reality is that both luxury and fast fashion brands commissioned the same models and photographers. As explained by Daniel Mark, director of The Communication Store 'The reality is we have built enormous bricks-and-mortar stores. We have made every high street look exactly the same and that's not exciting anymore. We need to think about individual experience- the person coming into a store and saying, "I want to buy that bag because I love it.4" Branding strategies are therefore sinking and need an invigorating shot of novelty to add value to their brands and keep their consumer loyalty.

The third issue is one of the most worrying one. The fashion industry is the world's second most polluting industry, second only to oil<sup>5</sup>. 25% of chemicals produced worldwide are used for textile as testified by cotton which is the world's single largest pesticide-consuming crop, using 24% of all insecticides and 11% of all pesticides globally<sup>6</sup>. Plastic microfibers shed from our

synthetic clothing into the water supply accounts for 85% of the human-made material found along ocean shores, threatening marine wildlife and ending up in our food supply<sup>7</sup>. Most dyes are directly dumped into rivers which turned Citarum into one of the dirtiest river on earth<sup>8</sup>. Fashion industry contributes as well to climate change with its apparel industry that accounts for 10% of global carbon emissions<sup>9</sup>. Indeed, the climate impact of one cotton t-shirt is roughly equal to the carbon footprint of driving a car for 10 miles<sup>10</sup>! Beside its pollution impact, the fashion industry contributes as well in the harvesting of our resources. Over 70 million trees are logged every year to be turned into fabrics<sup>11</sup> while 1 kg of cotton demands no less than

20'000 litres of water<sup>12</sup>.

Not only does the fashion industry exploits resources, it exploits its workers. The majority of garments is still produced in sweatshops. As embodied by the collapsing Rana Plaza building in which 400 people lost their lives, fashion workers rights are being violated through long working hours, unsafe working conditions, humiliation and violence. Contrary to labels sayings, only one percent of the overall one trillion dollars global fashion industry is produced ethically, revealing how corrupted the system is and which future it offers to its worker, its world and actors.

## **FUTURE PROBLEMS**

The current difficulties this industry is dealing with will not disappear with the years to come. Rather they will increase. The need is persistent to find responses to help corporate responsibility, sustainability issues, human rights and fair labour, economic empowerment of third world countries as well as the lost of craft and cultural heritage.

Often shut down, the loss of labour in the fashion industry is consequent. Over the past two decades, the apparel manufacturing industry has suffered a decline of 80%, from 900,000 to 150,000 jobs<sup>13</sup>. This employment

<sup>4</sup> Blanks T., 2016. How to Fix the Fashion System, Business of Fashion, 08.02.,http://www.businessoffashion.com/articles/opinion/the-roundtable-fixing-the-fashion-system, (Accessed Mar 05 2016)

<sup>5</sup> Ditty S., 2015, Europe in the World: The garment, textiles & fashion industry, European Year of Development, 01.09., https://europa.eu/eyd2015/en/fashion-revolution/posts/europe-world-garment-textiles-and-fashion-industry (Accessed Mar 05 2016)

<sup>6</sup> Conca J., 2015, Making Climate Change Fashionable - The Garment Industry Takes On Global Warming, Forbes Online, 03.12, https://europa.eu/eyd2015/en/fashion-revolution/posts/europe-world-garment-textiles-and-fashion-industry (Accessed Mar 05 2016)

<sup>7</sup> Conca J., 2015, Making Climate Change Fashionable - The Garment Industry Takes On Global Warming, Forbes Online, 03.12., https://europa.eu/eyd2015/en/fashion-revolution/posts/europe-world-garment-textiles-and-fashion-industry (Accessed Mar 05 2016)

<sup>8</sup> Greenpeace, 2013, Detox our Nature; Toxic Threads: Water Polluting Paradise 17.04., http://www.greenpeace.org/international/en/campaigns/detox/water/polluting-paradise/(Accessed Mar 05 2016)

<sup>9</sup> Conca J., 2015, Making Climate Change Fashionable - The Garment Industry Takes On Global Warming, Forbes Online, 03.12., https://europa.eu/eyd2015/en/fashion-revolution/posts/ europe-world-garment-textiles-and-fashion-industry (Accessed Mar 05 2016)

<sup>10</sup> WGSN Insider, 2015, Fashion can help tackle climate change – and these projects prove it, WGSN, 04.11., http://www.wgsn.com/blogs/fashion-can-help-tackle-climate-change-and-these-projects-prove-it/ (Accessed Mar 05 2016)

<sup>11</sup> Anonymous, 2014, Forests into Fashion, http://www.canopystyle.org/forests/ (Accessed Mar 05 2016)

<sup>12</sup> Soth J., 1999, WWF Report: The Impact of Cotton on Freshwater Resources and Ecosystems http://wwf.panda.org/about\_our\_earth/about\_freshwater/freshwater\_problems/thirsty\_crops/cotton/ (Accessed Mar 05 2016)

<sup>13</sup> Global fashion industry statistics, 2011, FashionUnited https://www.fashionunited.com/global-fashion-industry-

could hint at a loss of manufacturing, vet the numbers indicate the total opposite. Productivity, a key measure of efficiency more than doubled in the US from 1987 to 2010<sup>14</sup>. This increase can be explained through technology that easily and productively replaces human labour. Indeed, in the U.S. the number of sewing machine operators is expected to decline by 25.8% or 42,100 jobs from 2010 to 2020<sup>15</sup>. The disappearing of professions and with them the knowledge gain, should alert us. More than protecting a craft, we should protect the working class. Could everything be made by a computer in the future? Sure. Will the job loss help us in a way or form? Surely not.

As responsible for this job decrease, technology appears at the forefront. And mainly 3D printing. Adidas Futurecraft 3D footwear<sup>16</sup> embodies the matter with its custom-made shoes that fits the consumers need while using the most up to date running technology. Going further into that perspective, 3D home printing might be the future of products for which the brands will provide design and pattern only. The cost of

statistics-international-apparel (Accessed Nov 09 2015)

3D printed objects is expected to drop 50% by 2018<sup>17</sup>, thus enabling every consumer to own a 3D printed objects and each company to own the devices. According to PwC, already 67% of the manufactures use 3D printing<sup>18</sup>. A number that will only increase with time.

After a fruitful talk with Pamela Golbin. chief curator of fashion and textiles at Les Arts Décoratifs we discovered that the lack of time is a problem consistently encountered by fashion designers since decades. What should have been a comforting remark left us with more concern. If the loss of time is not a 20th century problem but one inherited from generation to generation, the way we analyse the fashion system might be wrong. With the departure of Raf Simons from Dior and Alber Elbaz from Lanvin, fashion professionals began to accuse fast fashion companies of killing the industry<sup>19</sup>. Yet, the time issue was not one that belonged to 2015. It always existed in fashion. Looking through their supply chain, fashion brands, big or small, no matter their audience, operate in the same way. They buy their fabrics in Asia and sew their garments in India. With one common goal: creating great profit.

Yet, this long run is endangered. As explained by Steven Kolb, CEO at council of Fashion Designers of America in Vestoj last issue on failure 'You know, it's easier to take your business from zero to ten million in a relatively short time span, but once you hit ten million it becomes much harder to grow. You need an influx of capital to really start investing in expansion, in distribution and stores, in control of inventory and wholesale - all those things are expensive. 20 While Adrian Joffe, president of japanese brand Comme des Garçons states a more depressing statement that 'we simply cannot change the world with fashion 21.

Instead of watching the future display from a passive backseat, we decided to approach those problematic issues. With the help of different theories and strategies we embrace the freedom of thought, horizon and speech given by our student status and investigate a sustainable future for fashion.

## CATHEDRAL THINKING

The concept of Cathedral Thinking stretches back through the centuries to medieval times, when architects, stonemasons and artisans laid plans and began construction of the soaring, cavernous structures that

<sup>14</sup> B.L.S Spotlight On Statistics, 2013, Fashion U.S Bureau Of Labor Statistics http://wwf.panda.org/about\_our\_earth/about\_ freshwater/freshwater\_problems/thirsty\_crops/cotton/ (Accessed Nov 09 2015)

<sup>15</sup> Ibid

<sup>16 2015,</sup> Adidas Futurecraft: The Ultimate 3D-Printed Personalized Shoe, Materialise, http://www.materialise.com/ cases/adidas-futurecraft-the-ultimate-3d-printed-personalizedshoe (Accessed Mar 05 2016)

<sup>17</sup> Columbus, L., 2015, 2015 Roundup Of 3D Printing Market Forecasts And Estimates, Forbes Online, 31.03., http://www.forbes.com/sites/louiscolumbus/2015/03/31/2015-roundup-of-3d-printing-market-forecasts-and-estimates/#2094f0fe1dc6 (Accessed Mar 05 2016)

<sup>18</sup> Ibid

<sup>19</sup> Menkes, S., 2015, Why Fashion Is Crashing, UK Vogue Online, 23.10., http://www.vogue.co.uk/suzy-menkes/2015/10/raf-simons-why-fashion-is-crashing (Accessed Mar 05 2016)

<sup>20</sup> Aronowsky Cronberg, A., 'What's wrong with the fashion industry?', On Failure, Issue n.6; Vestoj; The journal of sartorial matters, published by UAL, London College of Fashion (2015), p.169

<sup>21</sup> See endnote 20 above, Vestoj; The journal of sartorial matters (2015)

served as places of worship, community gathering spaces and safe havens. Since then, the concept has been applied to space exploration, city planning and other longterm goals that require decades of foresight and planning so future generations can enjoy their full realization. Although there are many instances to which Cathedral Thinking can be applied, they all require the same foundation: a far-reaching vision, a well thought-out blueprint, and a shared commitment to longterm implementation. Notre Dame de Paris took 182 years to build. No less than 140 years of construction passed before the Duomo in Florence was finally complete. Accordingly, Cathedral Thinking refers to deep dedication to a complex endeavour that outlive its architects.

Force to show immediate result and numbers, business strategies nowadays aim at quick fix and instant gratification. Such strategies are obtained through short-term thinking and business strategies not seeing farther than five years – and it is already a long term plan! Led by marketing, fast fashion brands excel in communication but omit the future. Cathedral Thinking reflects the other way around. It is not about instant reward, it is about giving future generations opportunities. The North American Indian tribe Iroquois is a model of Cathedral thinking. They were the first to apply a 175 years strategy into their community. Every one of their decision were based upon the interests of their descendants future generations. Although inspiring, we should not forget that a 100 year strategy can

only, be developed if there is a good short term strategy that exists next to it.

Indeed, as emphasized by Amin Malouf in Le Déreglement du Monde<sup>22</sup>, we live in a world in which changes never happened so fast and so unpredictably. None can predict how society will evolve in 50 or even 20 years, when we today look back at 1990 as the Middle Age of technology and communication. Therefore, each company should have the ability to adapt to changing environments. Unstable short-term companies will not last on the long run. That is exactly why short and long term need to coexist simultaneously within a company for it to stand the test of time. And given that big companies are finally recovering from the financial crisis of 2008, now it is the best time to apply a 100 years strategy.

## **BEHAVIOURAL ECONOMICS**

In recent years, behavioural economics starred in the bestseller lists as well as on most powerful countries administration.
Obama in the United States as well as David Cameron in the UK both embraced the idea that small 'boosts' can make a change.
Being a mix of psychology, neuroscience and microeconomic theory, behavioural economics by its interdisciplinary approach connects all parts together. By doing so, it can work on consequences for market prices, returns and

resources allocation. It links economics on a human level, thus understanding its agents to better direct them and therefore their future. As phrased by Prof. Dan Ariely 'The goal is not to change human behaviour, but to influence the environment in which we live... Behavioural Economics is a broad field busy with small light interventions that can dramatically change our society.<sup>23'</sup>

As asserted by Uri Gneezy<sup>24</sup>, Professor of Economics and Strategy and the University of California, people respond to incentives in a certain way that needs understanding. An interesting case is the predominant passive one. While people are conscious that they should act, they do not. Their act could appear senseless but they actually are not irrational. This can be applied to pension saving as well as to the field of fashion.

Companies, just like people, are motivated by incentives. Therefore, a Cathedral Thinking strategy is most likely to be disregarded. Indeed, one cannot collect its fruits in a year, not even in five years, but in 50 to 100 years! In Fashion, where trends and time passed faster than a Formule one, such structure, whose apogee its initiator will not witness is seen as unhinged. Yet, we believe that this field that is always last to adopt what other fields

<sup>22</sup> Amin Maalouf, Le Déreglement du Monde, Paris, Grasset, 2008.

<sup>23</sup> Heruti Sover, T., 2015, What would have happened if we had self-discipline? A Conversation with Professor Dan Ariely, Haaretz Online, 13.09., http://www.themarker.com/news/1.2730351 (Accessed Mar 05 2016)

<sup>24</sup> Paikin, S., 2014, Uri Gneezy: The Economics of Everyday Life, The Agenda with Steve Paikin , 25.08., https://www.youtube.com/ watch?v=lb8hrJSgoRw (Accessed Mar 05 2016)

create should outshine for once and embrace this futuristic theory.

## **DESIGN & TECHNOLOGY**

The technology field has more to offer than just a well thought manufacturing system. As embodied by 3D printing opportunities, technology can be implemented and can improve the fashion industry. High-Tech companies and design thinking combined together form a successful combination that can work as a model for fashion. Being such an integrated element in our life, technology is still struggling to take over the Fashion field. Indeed, a gap preexist in between technology and design. Hardly any Fashion design features technology besides fibre technology. A clear division appears therefore between all areas of design and Fashion in which technology is disregarded instead of being embraced. Instead of fighting against it, fashion should embrace design thinking into the its process.

In her 'Anti\_Fashion' manifesto, trend forecaster Lidewij Edelkoort asserted that this industry is 'old fashioned<sup>25</sup>', thus leading fashion to be an isolated field. Edelkoort focused on the comparison to other disciplines stating that design, music and art are all working towards collectives and collaborations while fashion does not seem to understand the importance of togetherness.

25 Edelkoort, L., 'Anti\_Fashion: A manifesto for the next decade.', published by Trend Union (2015)

While technology today allows nonwoven material and 3D printing garments to cite few, most garments are still knitted. weaved, stitched and seamed. Compared to other industries such as health industry, renewable energies, agriculture and food industry, fashion is standing still. And the main reason for it is that most main components of fashion industry operate on different tracks. Textile technology, textile designs, garment manufacturing, finishers, fashion designers and scientific researchers work separately, without a common platform that would enable them to build bridges between these different processes. Such a process narrow the path to a revolutionary generation of garments. Yet, as explained by Bradley Quinn 'Technology and fashion are a perfect match. The fastpaced progress of technology complements fashion<sup>26</sup>. Ever-evolving aesthetic, and each gives the other a wider frame of reference and more scope to explore new horizons: when associated with garments, which are by nature portable, wireless technology becomes even more mobile, and as technologized fashions wirelessly connect garments to remote systems, they extend both their own functionality and technology's reach. Together, the two are finding new uses for traditional materials and techniques, while also inspiring new types of tailoring and high-tech fashion fabrics.27'

Yet, if fashion is not moving, its actors

are. They are moving from it. Angela Ahrendts former CEO of British luxury retailer Burberry, Paul Deneve former CEO of Yves Saint Laurent, Patrick Pruniaux from Hermes and Chester Chipperfield from Louis Vuitton to cite few all joined the American multinational technology company Apple. This matter is a central one given that it is reshaping the entire fashion creative process and explains as well why fashion is so late to embrace new technologies and implement them into their supply chain. Technologies are therefore a core point of our strategy.

## **100 YEARS STRATEGY**

At the base of our strategy is an honest feeling of 'urgency'. Soon we will be searching our fashion careers around the globe. Therefore, a wish not to take a deterministic look at our profession is inherent in the foundations of our personal. With our 'fresh' perspective we wish to explore each facet our collective knowledge can bring together. We thus decided to outspeak our active voice. Our mission is to combine ethical and economics from our new formed vocabulary that we hope will replace the pre existing and outdated one. Our new dialect addresses the now through future lenses. Unfortunately, unlike other design field, the overlapping of knowledge and doctrines is new to the fashion industry. This stagnation is influencing every aspect and will dramatically determine the future of this business.

Cathedral Thinking brought about the

<sup>26</sup> Quinn, B., 'Fashion Futures.', published by Merrell (2012), p.12

<sup>27</sup> See endnote 26 above, Fashion Futures. (2012)

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assumption that short term strategies will no longer be sustainable on their own. They need a long term one alongside their existing one. 'The future of your organization is not your organization.<sup>28</sup>' As such, we would like to change company's state of mind by making them understand that they are not the puzzle, but a small part of it. The perception a company holds on itself for being complete is not suitable for the future. A company is permanently 'under construction' and should formate strategies as such by seeing 100 years from now as the ultimate goal to reach. Hermes and its long term strategies, consist of using their manufacturers as the company's main asset, is a good example for a cathedral thinking statement.

We can already see companies thinking ahead when opening new departments based on new knowledge, assuming they can afford it. Those departments will therefore outshine the ones before them and do what fashion does best; One day you are in, the next you are out. A 100 year plan would change the game. It would insure a strategy longevity not easily affected by new scenarios.

2016 marks the five years anniversary of the western recovery from the financial crisis. Now that the economic world filtered the companies panorama, only the strongest ones are still standing. Which make of our current times the perfect one to apply a Cathedral Thinking business plan. Such an approach is built upon strong foundations represented by the legacy brands will leave behind them, it is bigger than profit, bigger than money. Indeed we should expect a growing gap between how businesses were conceived previously, currently and in the future.

Tom Ford's preach that 'You only need to move fashion forward when there is a reason to move fashion forward<sup>29</sup>' is revealing of the generational gap between previous and forward generations. Indeed, as Jean-Jacques Picart asserts 'Every structure and habit has its limit: the system as we know it has worked for 20 years and now it needs to change, If I were 30, I would be terribly excited about it, It would inspire me. It's a period of rupture, challenge, daring, courage, work<sup>30</sup>'.

With an increase of data and information share and reach for and by everybody, companies would be no longer able to discard consumers questions. Educated consumers will ask for numbers, facts and honesty. As a matter of fact, consumer will not even have to ask anymore. Transparency will become the norm. Luxury brands knowing it, are implementing green initiatives, focusing on transparency and sustainability as all suggest

millennials care about. As asserted last year by Harriet Quick from Wallpaper magazine: 'As our demands for transparency increase, sustainability - what used to be seen as a dry, technical issue involving complex studies of biodiversity and supply chain - is even becoming sexy.<sup>31</sup>'

Marie-Claire Daveu from the French Ministry of Ecology adds that 'Prioritisation and focus are essential. You have to be able to identify weaknesses and strengths and make a strategy for investment and implementation of the most efficient methods.<sup>32</sup>' However, with millennials becoming spending consumers set to overtake baby boomers as top spenders by 2017<sup>33</sup> one can tell that luxury brands are adapting to this upcoming marketplace. They are increasingly turning their focus to things that supposedly matter to millennials. They are implementing green initiatives, focusing on transparency and sustainability. highlighting local manufacturing efforts. While the Great Recession heightened CSR - corporate social responsibility trend - by forcing companies to clearly identify themselves as responsible and trustworthy. fashion is something of a late adopter. In fact, only this past month Prada roll out a website

<sup>28</sup> Hinssen, Peter: "What happens when the rules of the market change",(online) available on

http://www.forbes.com/sites/peterhinssen/2016/02/25/what-happens-when-the-rules-of-the-market-change/2/#1f22e377d255 (Accessed 10 March 2016)

<sup>29</sup> Visionaries: Inside the Creative Mind; Tom Ford, Season 1, Episode 2, (2011) documentary TV series. Directed by- Michael Bonfiglio [DVD] U.S.A: Radical Media

<sup>30</sup> SAAC-GOIZÉ, T.I.G. (2015) "As He Steps Away From Fashion, Consultant Jean-Jacques Picart Dispenses His Best Career Advice". Vogue. Available from: http://www.vogue.com/13371195/jean-jacques-picart-fashion-advice/ (Accessed Dec 05 2015)

<sup>31</sup> Quick, H., 2015, Planet fashion: on how consumers demand ethics to match their aesthetics, Wallpaper Online, 28.07.,http://www.wallpaper.com/fashion/planet-fashion-on-how-consumers-demand-ethics-to-match-their-aesthetics (Accessed Mar 05 2016)

<sup>32</sup> Ibid

<sup>33</sup> Doherty, J., 2013, On the Rise, Barron's Online, 29.04., http://www.barrons.com/articles/SB500014240527487038894045784 40972842742076 (Accessed Mar 05 2016)

to allow the public to observe its CSR efforts, and it is one of the earliest brands to do so. Kering, parent company to Gucci, Balenciaga and YSL, has been one of the staunchest sustainability focused conglomerates, but even Kering has been relatively shy to report the majority of its efforts.

'Millennials are expecting more than ever from brands, and they're increasingly starting to lead in the luxury space, causing a need for luxury to pivot to appeal to them.<sup>34</sup>,' says Lucie Greene, worldwide director of JWTIntelligence in New York. 'They expect hyper-transparency, ethical behaviour, sustainability and values from the brands they consume. Luxury brands going forward will have to adjust to this. Consider the rise of Warby Parker and Everlane, which combine luxury with responsibility and transparent sourcing<sup>35</sup>.'

As a result companies will have to become more customer-centered with the help of technology. We forecast that in the future every company will be a software company, which demands other competencies from companies to meet and stay ahead of everchanging customer needs. Technology has matured so exponentially that it has reshaped people's behaviour, and with it, entire markets.

Digital has also transformed our environment into a network. Networks follow very different rules than traditional markets; they are faster, less predictable and much more ruthless. This shift changed customer's power and now they are in the driver's seat. An interaction with one's favourite brand is 'therefore dictating the shape of highend fashion market<sup>36</sup>' as suggested by the online platform Fashionunited. As a result organizations need to be reverse, completely redesigned from scratch. The question is therefore how to redesign in order to remain relevant in the coming years?

Being customer-driven is not about business culture only. It is about reversing the process so that instead of an inside out structure, the structure offered is outside-in driven. Being customer-centric also mean being fast. So fast that an organization needs to be able to move together with the customer on a gradual individual level. This kind of intelligent speed can only be attained through digital power. Data, predictive analytics, robots, artificial intelligence and augmented reality are the keys to success. Not only does technology encourage a behavioural change within society, it challenges the fashion supply chain towards a more sustainable and responsible manner. Technology advances can transform manufacturing processes by making them perfectly coordinated and by involving the consumer in the decisionmaking process as well. Yet, what prevails as a main assumption is that 'No single institution can address global problems on their own.

Right now I am speaking about problems within the fast fashion supply chain affection both people and our environment. Those problems are becoming increasingly complex. To solve them, the only way to do this, is to collaborate with users, professionals from other disciplines/industries, and networks of like-minded individuals.<sup>37</sup>

## **FUTURE SCENARIO**

One working day in a fashion company. Time: A few decades from now. <sup>38</sup>

'I guess the only thing that have not changed is me struggling to wake up in the morning. Before I start with work I still need to print my black coffee but I was so smart buying another printer. That way I print my brown bio shugar simultaneously to the coffee.

Sure. it's a headache. I need to wait until the printer would cool down so I can print a new tie for work otherwise it would smell like my espresso. Although It made me think about a new line of working button up shirts name 'americano'. Nice ah? You know that is exactly what I look for in our new real-time 3-D designers<sup>39</sup>: innovatively spontaneous mind!

<sup>34</sup> See endnote 30 above, Wallpaper Online (2015)

<sup>35</sup> Ibid

<sup>36 2013,</sup> Fashion brands should listen to and engage with customers, Fashion United Online, 09.05., https://www.fashionunited.co.uk/fashion-news/fashion/fashion-brands-should-listen-toengage-with-customers-2013050917589 (Accessed Mar 05 2016)

<sup>37 &</sup>quot;Design Transitions" (2013) by Joyce Lee, Emma Jefferies, Lauren Tan, p.233

<sup>38</sup> based on the opening of Lipson. H and Kurman. M, (2013) Fabricated: The new world of 3D printing. Indianapolis: John Wiley & Sons, Inc.

<sup>39</sup> Labarre, S., 2016, The Most Important Design Jobs Of The Future, Co Design Online, 01.04., http://www.fastcodesign.com/3054433/design-moves/the-most-important-design-jobs-of-the-future (Accessed Apr 01 2016)

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Things have changed since I was working as a designer. I had to reconsider my role and evolve my practice many times, which is fantastic and exciting. Of course, time management is still a problem. I am running from one meeting to another each day. And the market is also very competitive and fast moving. As a result we need to innovate all the time. But the way I work with my team is totally different compared to the past and I must say it works!

I look after the whole design team and I am responsible for attracting and hiring the right talent. Moreover, I have to ensure that our expertise is constantly deepened in the right ways, and also that we are growing into new areas in a responsive way. We moved away from focusing only on the design of products and into the design of services and experiences. We wanted to expand our professional responsibility to include leadership, policy, strategy and the shaping of positive social change.

The most interesting creative challenge for me nowadays is to rethink and redesign the very nature of design itself. I would describe the way we work as very networked, collaborative and multidisciplinary. The climate change and the scarcity of global resources are serious problems and we address them actively. We aim to become 100% sustainable in some decades and I think we are on the right good track but there is still more to do. We are aware that no single corporation or institution will achieve a breakthrough on their own. This is why we

bring people from several industries together. Today for example, I will meet with engineers, scientists and textile technologists to discuss how we can minimize our waste production through the supply chain while generating new innovative designs.

After lunch, a meeting with a sociologist, a social psychologist and two environmentalists is scheduled to speak about the latest researches on social and environmental issues.

Since our latest collection we mainly create beautiful products and services for a large audience that facilitate behaviour change and encourage the public to do positive things.

In the late afternoon I will do what I enjoy the most: I will listen and speak to our customers in the online platform. This is the future of our business since they are the key to our global success!

Then finally, the day winds down and I am going home.

In the late evening I would tell my son his bedtime story. It is about the old days, one of those 'when I was your age' tales. He listens skeptically. He has a hard time believing that when I was young there were no 3D-printers and I had to order something online which took at least 24 hours until delivered to the door.

'Wow', he says. 'Life must have been hard.'
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This paper was trying to draft a future picture on the fashion industry or rather: where it would find itself if the path taken would change or worst: if it would perpetuate stagnation.

The problem is bigger then we assume. If we to use the words of former United States Secretary of Defense Donald Rumsfeld, the only 'known known' at this present time is that this industry is struggling. Numbers are not giving any hope nor does corporation future strategies. We are simply years late. The only chance for change and a brighter future lies within getting more radical. Offering only frightening solutions, one's that are not playing a safe game.

We would face papers and companies forecasting our lives with 3D home printing of garments and products but this 'future' is already our present. Again, we are late. We should stop measuring ideas, solutions and strategies by the vocabulary we have in this industry and work towards a new set of tools. A good start would be stating that there is no end product, there is no end company.

A fashion house that knows clearly what it is, not taken under consideration that it might change or not wishing to exist in 50+ years time, would not live to see its fifth year. The times are a changing but most of all: they are changing fast. Faster and bigger than we can ever grasp. In the case of this industry the generational gap have dramatic repercussions. Old corporates that relies on older generation of C.E.Os and strategies are not considering their lack of ability to change as fast as the times.

100 Years strategy for a sustainable model of growth step number one is acknowledgment. The understanding that in terms of a future plan us, the millennial

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generation, we already belong in the past. A strategy should imagine the life of future generations. Adopting data from other fields, moving flexibly, embracing change instead of mourning it.

This year the FutureEverything, an award-winning innovation lab, opened its annual conference in Manchester with a multi disciplinary designer who worked on the NASA international space orchestra<sup>40</sup>. An image of flexibility and innovation in design disciplines. Their program closed with a poem by Lemn Sissay, a poet and playwright. His poem calls upon us to stop, reflect and admit; we need to press the 'refresh' button:

'A lost number in the equation

A simple, understandable miscalculation

And what if on the basis of that

The world as we know it changed its matter of fact

Let me get it right. What if we got it wrong?

What if we weakened ourselves getting strong?

What if we found in the ground a file of proof?

What if the foundations missed a vital truth?

What if the industrial dream sold us out from within?

What if our unpunishable defense sealed us in?

What if our wanted more was making less?

And what if all of this wasn't progress?

Let me get it right. What if we got it wrong?

What if we weakened ourselves getting strong?

What if our wanting more was making less?

And what if all of this wasn't progress?

What if the disappearing rivers of Eritrea,

the rising tides and encroaching fear

What if the tear inside the protective skin

of Earth was trying to tell us something?

Let me get it right. What if we got it wrong?

What if we weakened ourselves getting strong?

What if the message carried in the wind was saying something?

From butterfly wings to the hurricane

It's the small things that make great change

In the question towards the end of the leases

no longer the origin but the end of species

Let me get it right. What if we got it

wrong?

What if the message carried in the wind was saying something?'

<sup>40</sup> Wainwright, O., 2013, International Space Orchestra: the designer taking music into space, The Guardian Online, 03.06., http://www.theguardian.com/artanddesign/architecture-design-blog/2013/jun/03/international-space-orchestra-nasa (Accessed Apr 01 2016)

## REVERSE LOGISTICS: actions related to the reuse and textile recycling in Brazil

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## INTRODUCTION

Brazilian textile industry is relevant with regard to the generation of wealth and employment. This industrial activity has established itself strongly, making the country a major world producer of textiles - the 5th largest producer, with a production of about 1.8 million tons of articles (IEMI, 2015) and also the 5th largest producer of cotton in the world (ABIT, 2011), one of the most used natural fiber, which is made 60% of the garments made in the country (ABIT, 2011; MELLO et al, 2007). The country still ranks 7th in the production of yarns and woven fabrics and 3rd in the production of knitted fabrics (FINKLER et al., 2005), and generate 8 million direct and indirect jobs (NEULS, 2012).

However, this activity creates various environmental problems, such as the generation of solid wastes from industrial processes, clothing manufacturers, retailers and also from post-consumer. According to *Sinditêxtil-SP* - Union of Spinning and Weaving Industries of the São Paulo State (2012), 175,000 tons of textile trimmings that come only from disposal of clothing in Brazil are produced annually. From those, it is estimated that over 80% are destined for landfills or environmentally incorrect disposal (SEBRAE MERCADOS, 2015) and only from the remainder is taken advantage of by recycling textile companies (SINDITÊXTIL-SP, 2012).

Through of the National Solid Waste Policy (NSWP) - Federal Law 12305 - Aug. 02, 2010 (MINISTÉRIO DO MEIO AMBIENTE,

2015; BRASIL, 2010), *ABIT* - Brazilian Association of Textile and Apparel (2015) published "Agenda of Priorities Textile and Garment - from 2015 to 2018", which contains a number of actions related to sustainability of the textile-clothing manufacturer sector. The main one relates to stimulating the use of raw materials for reuse or recycled through the exemption of taxes.

According Niinimäki (2011), public authorities contribute to the creation of value of the raw material for reuse or recycled through regulations, legislation and taxes. In addition, companies that take into account a more sustainable production could make improvements in profitability and contribute to protecting the environment (PAEHIKE, 2000). Munasinghe (2000) proposes that producers, through public procedures of authority and law, must study the entire value chain - from raw materials to the various production stages, and also focus on the management of disposal of the product by redefining its value of a completely new way. in economic, social and environmental terms.

Specifically, for the textile sector, there is a Law Project (PL) 657/2013, still in progress, authoring Deputy Chico Sardelli (PV), coordinator of the Parliamentary Front in Defense of the Textile Industry in São Paulo State. According to this PL, textile manufacturers who use recycled materials in their production have tax incentives. Still, the manufacturer that promote output of textile products produced from the use of textile waste in general, recyclable scraps of

fabric or materials derived from milling or grinding of recyclable waste plastics, including PET bottles, could promote presumed credit equivalent amount 80 % of the *ICMS* ("Tax on Circulation of Goods and Services") levied on their domestic output operation. The benefit would be carried out without prejudice to other credits in the legislation (SINDITÊXTIL-SP, 2014).

However, the lack of labor, skilled labor, information, research and tax incentives hamper the development of reuse and recycling textile sector. The PL 657/2013 highlights the importance of state government to prioritize and encourage Reverse Logistics applicable to the textile and clothing manufacturer sector, to recycling materials and creating an alternative to virgin raw materials, fostering sustainability, preserving natural resources and thus reducing environmental and social impacts, reducing the amount of textile waste in landfills (SINDITÊXTIL-SP, 2014).

The term Logistics is usually defined as the management of the direct distribution of the product flows from producer to consumer. Direct Logistics is the process of planning, implementation and efficient and effective control of the flow and storage of goods, services and related information from the point of origin to point of consumption in order to meet customer needs. However, based on the definition of Direct Logistics, Reverse is - by analogy, the reverse flow, from the consumer to the producer. In a more general sense, it means all operations related to the

reuse of products and materials (MATOS, 2009; DE BRITO, 2003; BOWERSOX; CLOSS, 2001; GUILTINAN; NWOKOYE, 1974).

Thus, depending on the concerns of bodies representing the textile and clothing manufacturer industry of the country, it is significant the volume of textile waste discharges and disposals and the importance to solve – even if occasionally, some current problems arising from industrial activities through legal incentives and actions related to the use and management of raw materials for reuse or recycling.

## NACIONAL POLICY OF SOLID WASTE (NPWS)

In 2010, Brazil approved the National Policy on Solid Waste - Law 12305 – Aug. 02, 2010 and the country had to regulate issues related to solid waste. The waste becomes separated from: i) residues, which have the potential of being reused through reuse or recycling; and ii) rejects, which are no longer able to reuse or recycle. Its content ranges from conceptualizations of solid waste, the instruments legal interference, its management company responsibilities and other issues that allow intervention in the matter of solid waste (BRASIL, 2010).

The Ministry of the Environment pointed out as objective of this federal law to nongeneration, reduction, reuse and solid waste treatment and environmentally correct disposal of waste. Also pointed out proposals to reduce the use of natural resources (water

and energy, for example) in the process of new product production, the intensification of environmental education activities, increased recycling in the country, promoting social inclusion and generation employment and income of collectors of recyclable material (BRASIL, 2010).

This should be done from the collective responsibility for the generation and maintenance of solid waste in society, inserting instruments that enable the reduction of resource use and disposal of this waste through change of consciousness brought about by environmental education and reuse and recycling of waste. Require joint action by civil society, government and business, as well as an inter-municipal joint since often the issue of solid waste is handled jointly by municipalities (BRASIL, 2010).

It is also important for the realization of proposing of the NPWS, clear plans and objectives for managing solid waste, as well as up and declare how much is generated also aiming to shared liability for goods, encouraging cooperatives, environmental monitoring and development technical and scientific knowledge from all sectors of society (BRASIL, 2010).

## "RETALHO FASHION" PROJECT: MANAGEMENT PLAN OF TEXTILE WASTE

Currently, the collection of textile waste in the "Bom Retiro" neighborhood – the largest polo of clothing manufacturer in Latin America, is carried out almost haphazardly

and without concern for environmental preservation. The large waste generators, which represent 60% of companies in the region, should hire companies specializing in waste collection to allocate the waste (SINDITÊXTIL-SP, 2013).

"Retalho Fashion" project aims to develop a solid waste management plan for organizing and facilitating the collection of textile waste from clothing industry installed in "Bom Retiro" neighborhood, seeking environmental preservation and income generation with skilled occupation, creating socially just conditions work for workers who depend on this means of subsistence and restoring the environmental conditions and cleanliness of the involved area (SINDITÊXTIL-SP, 2013).

Nowadays, the "Retalho Fashion" project is in the second step of execution, which is evaluating the minimum infrastructure needed for its consolidation as the rental price of physical space, quotation and purchase of machinery such as industrial forklifts, presses, balances and others (SINDITÊXTIL-SP, 2013).

After the implementation of "Retalho Fashion" project it is aimed to formalize the work of collectors - one of the focuses of the National Solid Waste Policy, and forward the collected waste, both by them and by the companies responsible for the collection of waste from large generators to a cooperative which will be responsible for managing workers, separating waste and preparing the raw material to be sold to recycling companies, avoiding that tons of textile residues are discarded in landfills or on the

streets, as well as avoiding the social and environmental impacts from this irregular disposal (SINDITÊXTIL-SP, 2013).

## REFERENCES

ABIT – ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA TÊXTIL E DE CONFECÇÃO. Guia Têxtil 2011. Available in: <a href="http://www.guiatextil.com/site/noticias/industria/abit\_esclarece\_principais\_duvidas\_das\_normas\_de\_vestibilidade">http://www.guiatextil.com/site/noticias/industria/abit\_esclarece\_principais\_duvidas\_das\_normas\_de\_vestibilidade</a>>. Accessed 08-09-2011.

ABIT – ASSOCIAÇÃO BRASILEIRA DA INDÚSTRIA TÊXTIL E DE CONFECÇÃO. Agenda de Prioridades Têxtil e Confecção – 2015/2018. São Paulo: ABIT, 2015. 35 p.

BOWERSOX, D. J.; CLOSS, D. J. Logística empresarial: o processo de integração da cadeia de suprimentos. São Paulo: Atlas, 2001.

BRASIL. Política Nacional de Resíduos Sólidos (2010). Lei nº 12.305, de 2 de agosto de 2010. Institui a Política Nacional de Resíduos Sólidos; altera a Lei no 9.605, de 12 de fevereiro de 1998; e dá outras providências.

DE BRITO, M. P. Managing reverse logistics or reversing logistics management? 2003. 327p. Thesis (PhD in Siences). Erasmus Research Institute of Rotterdam (ERIM), Erasmus University Rotterdam, 2003.

FINKLER, M.; SCAPINI, P.; FREIRE, E.; ZATTERA, A. J.; ZENI, M. Compósitos de HDPE com Resíduos de Fibras Têxteis. Parte I: Caracterização Mecânica. Polímeros: Ciência e Tecnologia, vol. 15, n. 3, p. 171-175, 2005.

GUILTINAN, J.; NWOKOYE, N. Reverse channels for recycling: an analysis for alternatives and public policy implications. In: Curhan, R. G., editor, New marketing for social and economic progress, Combined Proceedings. American Marketing Association, 1974.

IEMI - INSTITUTO DE ESTUDOS E MARKETING INDUSTRIAL. Relatório Setorial da Indústria Têxtil Brasileira - Brasil Têxtil 2015. 15ª edição. São Paulo, 2015.

## **Reverse Logistics**

MATOS, T. F. L. Avaliação da viabilidade de reintegração de resíduos de PET pós-consumo ao meio produtivo. 2009. 289p. Thesis (PhD in Environmental Engineering). School of Engineering of São Carlos, University of São Paulo. São Carlos /SP, 2009.

MELLO, M. B. C.; CAVALCANTI, G. A.; GONÇALVES, H. S.; DUARTE, S. T. V. G. Inovações Tecnológicas na Cadeia Produtiva Têxtil: Análise e estudo de caso em Indústria do Nordeste do Brasil. Revista Produção OnLine, v. 7, n. 2, p. 99-117, 2007.

MINISTÉRIO DO MEIO AMBIENTE. Relatório técnico de caracterização de resíduos sólidos. Available in: <a href="http://www.mma.gov.br/port/conama/processos/18018FE8/Relat\_LixiviacaoAmiantoFibrocimento\_Rel031E09.pdf">http://www.mma.gov.br/port/conama/processos/18018FE8/Relat\_LixiviacaoAmiantoFibrocimento\_Rel031E09.pdf</a>. Accessed 02-10 -2015.

MUNASINGHE, L. Wage Growth and the Theory of Turnover. Journal of Labor Economics, v. 18, 2000.

NEULS, G. Economia movida a CO2. Página22 (Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas), n. 68. São Paulo: Ed. Vox, 2012.

NIINIMÄKI, K. From Disposable to Sustainable - The Complex Interplay between Design and Consumption of Textiles and Clothing. 2011. 293 p. Thesis (PhD in Design). School of Art and Design of Aalto University. Helsinki, 2011.

PAEHIKE, R. C. Environmental values and public policy. In: N. J. Vig; M. E. Kraft (Eds.), Environmental Policy. 4th edition. Washington: CQ Press, p. 77–97, 2000.

SEBRAE MERCADOS. Retalhos de tecidos: no lugar do desperdício, negócios sustentáveis. Available in: <a href="http://www.sebraemercados.com.br/retalhos-de-tecidos-no-lugar-do-desperdicio-negocios-sustentaveis/">http://www.sebraemercados.com.br/retalhos-de-tecidos-no-lugar-do-desperdicio-negocios-sustentaveis/</a>>. Accessed 10-15-2015.

SINDITÊXTIL-SP – SINDICATO DAS INDÚSTRIAS DE FIAÇÃO E TECELAGEM DO ESTADO DE SÃO PAULO. Retalho Fashion – Projeto de reciclagem une meio ambiente e inclusão social. Ano VII, n. 25, Julho de 2012.

SINDITÊXTIL-SP – SINDICATO DAS INDÚSTRIAS DE FIAÇÃO E TECELAGEM DO ESTADO DE SÃO PAULO.

Retalho Fashion: Inclusão social e preservação ambiental por meio da reciclagem de resíduos têxteis. São Paulo / SP, 2013. 15 p.

SINDITÊXTIL-SP – SINDICATO DAS INDÚSTRIAS DE FIAÇÃO E TECELAGEM DO ESTADO DE SÃO PAULO. Projeto de Lei dá incentivo fiscal ao fabricante têxtil que usar reciclados. Available in: <a href="http://www.sinditextilsp.org.br/index.php/materias/item/1150-projeto-de-lei-d%C3%A1-incentivo-fiscal-ao-fabricante-t%C3%AAxtil-que-usar-reciclados">http://www.sinditextilsp.org.br/index.php/materias/item/1150-projeto-de-lei-d%C3%A1-incentivo-fiscal-ao-fabricante-t%C3%AAxtil-que-usar-reciclados</a>>. Accessed 11-29-2014.

# INDUSTRIAL SOLID WASTE MANAGEMENT IN THE FASHION CLOTHING MANUFACTURE ON THE FOCUS OF THE CLEANER PRODUCTION

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## INTRODUCTION

The textile industry generates a large volume of solid waste and wastewater, and use natural resources such as water and energy in its production process. Therefore it is essential, the use of environmental management tools in order to optimize the use of resources and minimize negative environmental impacts.

The tools used in environmental management should be applied continuously, and should provide economic, environmental and appropriate technology, integrated processes and products.

According to the Division of Technology, Industry and the United Nations Development Programme Economics for the Environment, Cleaner Production (CP) is the "continuous application of an integrated preventive environmental strategy to processes, products and services, to increase overall efficiency and reduce risks to people and the environment."

The P + L is regarded as a modern way of dealing with environmental issues in industrial processes. The P + L does not treat just the symptoms, but attempts to reach the problem of roots within this methodology question is where they are being generated waste and not only what to do with the waste generated, avoiding waste, making the process more efficient (HENRIQUES, QUELHAS, 2007).

In this context, CP can support the management of industrial solid waste, because it assumes four basic attitudes: the search for non-generation of waste by streamlining

of production techniques; minimizing the generation of waste; the reuse of waste in the production process itself; and recycling, with the use of the surplus or of the product itself for the generation of new materials (FERNANDES et al., 2001).

## THE ENVIRONMENTAL ISSUES OF TEXTILE INDUSTRY

The main environmental impacts of the textile sector are generating chemical effluents, Enzimage oil odor, waste generation, noise, vibration, use of toxic products and consumption of energy and water.

The National Center for Clean Technologies (CNTL, 2009), states that the fashion industries generate significant waste, especially of raw fabric, which is made into chips, scraps and discarded parts. Generally, these wastes consist of difficult to identify fibers for their subsequent destination, may be recycling, landfill, incineration, reuse and others.

## PAPER LAYOUT AND STYLES

One of the basic principles of environmental education in relation to waste, is the concept of "R's", cited as Barros (2012), they emerged from a principle related to the management of solid waste that was highlighted in the Rio-92 and is part of one of the chapters of agenda 21. (Berlin, 2012)

Currently there are several "R's" in the

areas of sustainable development, such as: back, rethink, reduce, reuse, repair, recycle, reintegrate, respect, be responsible, forward, etc.. Of course the relevance of all is indisputable, however this research will expose the most relevant based on the objectives of the National Policy on solid waste (PNRS, 2010), which are non-generation, reduction, reuse, recycling and solid waste treatment and disposal of environmentally sound waste.

- of non-solid waste generation: the concept of non-solid waste generation is closely linked to efficiency throughout the production chain and services with the use of modern and innovative technologies. The generation of solid waste takes place in all sectors of society, whether in the productive sector, service or consumption, and cannot be eliminated completely.
- » reduce: waste inputs mean waste when caused unnecessary and without control, thus reducing waste generation is extremely important. In the production system adopted by some companies apply remedial measures, as this only waste already generated and are insufficient to deal with environmental problems, this type of production system is called "end production system pipe" (end of pipe).
- » reuse: the reuse consists of a "recovery process of solid waste without their biological transformation, physical

- or physico-chemical, subject to the conditions and standards set by the competent bodies of SISNAMA and, if applicable, the SNVS and Suasa" ( PNRS, 2010), and brings benefit to the reduction of volumes and spaces of landfills.
- recycle: Recycling is the result of a series of activities in which the material that would become garbage or are in the trash, are diverted, collected, separated and processed to be used as raw material in new products manufacturing (GARDEN et al, 2000 cited in MILAN;. VITTORAZZI; REIS, 2010). As Moura (2008) for the recycling process to be sustainable it needs to be economically feasible, do not require the handling of toxic materials and there is no excessive consumption of water and energy.
- » disposal of industrial solid waste: the Law 12.305 defines as final disposal environmentally appropriate "the orderly distribution of waste in landfills, noting specific operational rules in order to prevent damage or risk to public health and safety and to minimize environmental impacts adverse "(PNRS, 2010).

## CLEANER PRODUCTION

The production techniques Cleaner (P + L) consist eliminate all waste, because the waste does not add value to the product or service. Environmental questions focused on clean

technologies such as, social responsibility, reuse, reduction and recycling in industrial processes involving all links in the production chain, increasing competitiveness, creating better working conditions and products with high added value (National Confederation of Industry; ABIT, 2012).

The CP program provides direct and indirect gains and, through an approach of prevention; reduces waste and emissions; reduces waste management costs; minimizes environmental liabilities; environmentally aware employees, in addition, the P + L, improves health and worker safety; improve the company's image with consumers, suppliers and government (Silva Filho et al., 2007).

According to UNIDO (2001, cited in Pozzebon, 2011), the main barriers to implementation of cleaner production in enterprises are not employee involvement; the decision of concentration of power in the company owner; the emphasis on production flaws in the company's documentation, lack of records and control of their spending, lack of culture in relation to best operating practices, changes in resistance, lack of leadership, lack of safety, lack of infrastructure, costs deployment, emphasis on the pipe end, limited or incorrect interpretation of the concept of cleaner production, among others

P + L and management of solid waste in the manufacture of fashion apparel

Brazil produces about 170 tons of waste

from the textile industry for years. The largest producer is the state of São Paulo, which accounts for 30% of the textile industry, where every day are disposed of 12 tons of waste per 1,200 only in the clothing located only in Bom Retiro. (SEBRAE, 2013)

Over 80% of waste is disposed of incorrectly, a portion of this volume is collected by illegal collectors, but most is thrown in the trash, ending up in dumps or landfills. Generally, these wastes consist of difficult to identify fibers for subsequent disposal it is noteworthy that the polyamide fabric takes 30 years and polyester needs more than 100 years to decompose in nature, causing great environmental impact, as well as a big waste, it could generate income and promote the establishment of more sustainable business. (SEBRAE, 2013)

The P + L program can be an important tool in reducing the generation of solid waste for the purpose of adaptation to the National Solid Waste Policy. It should be noted that the priority of the methodology P + L is based on the identification of non-generation options for waste generated in production processes, allowing to obtain solutions that contribute to the final solution of environmental problems.

For Rosenbloom (2010 apud RIBEIRO, BARCELOS 2012), Madeleine Vionnet, French designer known for his work with bias cut, still in the early twentieth century, suggested that the zero waste application would be something possible, now known as Zero Waste, also called residue Zero, the principle that seeks to eliminate the fabric disposal in

the production process.

The modeling Zero Waste promotes reduction of waste of raw material in the manufacturing industries, the technique is fit in all parts of the mold as a puzzle piece, then virtually no fabric is wasted.

The sequence of operation of P+L, divided into three levels, can be seen in Figure 1. Level 1 refers to the priority measures to be pursued. These are modified measures both the product and the production process aimed at waste reduction at source. The product changes seek to alter the composition, durability and product quality standards, and the use of substitute products. Modifications of processes help reduce the generation of waste by simplifying procedures.

You can then make use of good manufacturing practices with them, we seek to establish administrative and technical procedures that allow the minimization of waste. With regard to changes in raw materials, the P + L acts in the elimination or reduction of toxic or environmentally harmful materials in the purification process of the input material and preventing the generation of waste pollutants. As for the changes in technology, seeks to adapt equipment and processes, in order to reduce or eliminate the generation of waste. Those measures, most of the time can be put into practice easily and are more interesting from an economic aspect (SENAI, 2007).

The reduction of waste in the manufacturing sector can be achieved from improvements in manufacturing processes,

and environmental impacts must be considered in all stages of development of new products, the origin of the raw material to disposal by the final consumer. Prior knowledge of the widths of fabric rolls with strategic details modeling for better use in the dock, from the observation of engineering products, are actions that can ensure a better use of raw material (MILAN; VITTORAZZI; REIS, 2010).

Level 2 covers the reuse and internal recycling, with the reinstatement of the waste by the company, as raw materials for the purpose same, different or less than the original use, with partial recovery of the product components. The reuse and recycling external, which is Level 3, happens to reuse externally by the company, after having exhausted all of the above.

In the case of textile waste the main alternative reuse is the craftsmanship. However, the handicraft activity is not able to realize a significant amount of waste, as is typically done individually, pulverized and subjected to discontinuity. Thus, the organization of artisans in cooperatives could determine the increase in demand for tissue flaps as well as its continuity, in addition to generating income and social inclusion. But for the cooperative to be successful it is considered necessary to invest in the development of products designed with design for the generation of craft products with perceived value (MOTTA; ALMEIDA; LUCIDO, 2011).

The main purpose of the recycling of

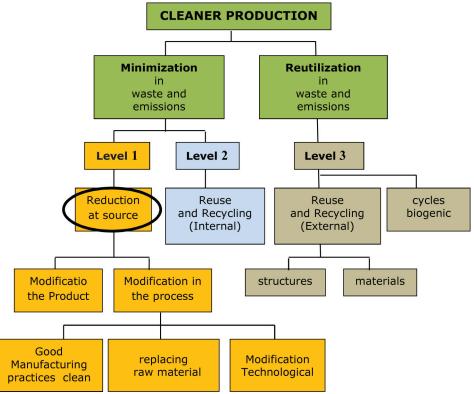


Figure 1 - Flowchart generation of Cleaner Production options Source: CNTL 2003 p.27 (Adapted by the authors)

textile is the reprocessing of waste, causing them to return to the original process or give rise to new textiles (MALUF; Kolbe 2003). thus the scraps of fabric coming from the clothing cutting industry through mechanical processes pulping become recycled fibers and these are raw materials for wire and recycled fabrics industries, non-woven, mattresses, furniture, automotive products, among others.

### **FINAL CONSIDERATIONS**

Due to the expansion of the activities in the textile industry, there is a considerable increase in the use of energy, water and raw materials and the consequent increase of waste throughout the production chain.

Current circumstances and current Brazilian legislation point to the need to adopt

business management and waste management in order to pursue the reduction, reuse, recycling and treatment of solid waste in the textile industry particularly in the clothing industry.

In this sense, this research sought by the literature on the management of industrial solid waste, and cleaner production demonstrate that it is possible to set up the initiative for the protection and preservation of the environment and society. However this occurs slowly due to the impact of the investment costs and processes which consequently are transferred to the product, with negative consequences for competitiveness.

Some factors can influence companies to adopt environmentally responsible positions through the P + L as improve the vision of the company with the company; the real cost reduction of its production processes; the adoption of effective management programs that generate eco-efficient results.

However it is very important to note the complexity of the textile chain, due to the presence of multiple actors, and which in turn have motivations, management concepts and capabilities to deal with different environmental issues. Another point to emphasize is the need for the involvement and commitment of industry managers, as well as employee training for the correct use of the waste generated in production.

The problem of solid waste management has to be analyzed in a systematic way that mere technological and fundamentally operational solution, concentrated generally in the final disposal stage, one must also see the amount of increasing production of waste, questioning the mechanisms that lead and impacts it, since the residue is a consequence rather than a cause.

Since the adoption of a Solid Waste Management Plan is the first step towards the implementation of the P + L tool, which in addition to worrying about all stages of the production process, the waste management can lead to a financial return, reducing costs, seeks the least negative impact on the environment.

### REFERENCES

BARROS, R. T. V. Elements of solid waste management. Belo Horizonte: Tessitura 2012.

BRAZIL. [Law n. 12,305, of August 2, 2010]. national solid waste policy [electronic resource]. - 2. ed. - Brasilia: House of Representatives, House Publishing, 2012. 73 p. - (Series legislation; n 81). Available in: http://fld.com.br/catadores/pdf/politica\_residuos\_solidos.pdf Accessed on: 22-Aug-2014

BERLIN, L. G. Fashion and sustainability: a necessary reflection. Sao Paulo: Letters of Station and Colors, 2012

CNTL SENAI. cleaner in clothing production. SENAI-RS. Porto Alegre: National Center for Clean Technologies SENAI, 2007. Available at: <a href="http://www.app.sistemafiergs.org.br/portal/page/portal/sfiergs\_senai\_uos/senairs\_uo697/proximos\_cursos/Produ%E7%E3o%20mais%20Limpa%20em%20Confec%E7%F5es.pdf">http://www.app.sistemafiergs.org.br/portal/page/portal/sfiergs\_senai\_uos/senairs\_uo697/proximos\_cursos/Produ%E7%E3o%20mais%20Limpa%20em%20Confec%E7%F5es.pdf</a>>. Accessed on: 15-Mar-2016.

FERNANDES, J. V. G.; GONÇALVES, E.; ANDRADE, J.C.S.; KIPERSTOK, A. Introducing cleaner production practices in certifiable environmental management

systems: a practical proposition. Magazine Sanitary and Environmental Engineering, vol. 06, no. 03, p.157-164, 2001.

HENRIQUES, L.P.; QUELHAS, O.L.G. Cleaner Production: An example for sustainability in organizations. 2007.

MALUF, E; KOLBE, W. Manual of technical data for the textile industry. 2. ed. to see. and ampl. Sao Paulo: IPT - Technological Research Institute of São Paulo State: ABIT - Brazilian Association of Textile and Clothing Industry, 2003

MILAN, G. S.; VITTORAZZI, C.; REIS, Z. C. of. Reduction of textile waste and environmental impacts: a study conducted in a clothing garment industry. In XIII SEMEAD. Admiration seminar. 2010 Available in: http://www.ead.fea.usp.br/Semead/13semead/resultado/trabalhosPDF/282.pdf Access: 8 marked. 2016

MOTTA, W. H.; ALMEIDA, L. N.; LUCIDO, G. L. A. reverse logistics of solid waste: a proposal applied to the clothing industry. In: XXXI INTERNATIONAL CONFERENCE ON PRODUCTION ENGINEERING. 2011. Belo Horizonte. Minas Gerais. Available at: <a href="http://www.abepro.org.br/biblioteca/enegep2011\_TN\_STO\_135\_857\_18143.pdf">http://www.abepro.org.br/biblioteca/enegep2011\_TN\_STO\_135\_857\_18143.pdf</a>>. Access: 2-Dec-2014.

PIMENTA, H.C.D.; Gouvinhas, R. P. Implementation of cleaner production in Christmas-RN baking industry. XXVII National Meeting of Production Engineering, Proceedings, ABEPRO, Foz do Iguaçu - PR: 2007.

POZZEBON, D. Proposal for cleaner production and solid waste management for plywood manufacturing branch company of Peel - RS. 2011. 76P. Monograph (Environmental Engineering) - University of Passo Fundo - Faculty of Engineering and Architecture - UPF. Deep step. Available at: <a href="http://usuarios.upf.br/~engeamb/TCCs/2011-2/Douglas%20Pozzebon.pdf">http://usuarios.upf.br/~engeamb/TCCs/2011-2/Douglas%20Pozzebon.pdf</a>>. Access: 6-Oct-2015

RIBEIRO, A. T.; BARCELOS, S. B. M. D.; zero waste concept modeling applied to slow. Colloquium of Fashion. Rio de Janeiro: 2012 Available in: http://www.coloquiomoda.com.br/anais/anais/8-Coloquio-de-Moda\_2012/GT10/COMUNICACAO-ORAL/102975\_

### Industrial Solid Waste Management in The Fashion Clothing Manufacture on The Focus of The Cleaner Production

 $Modelagem\_zero\_waste\_aplicada\_ao\_conceito\_slow.pdf\\ Access: 8-Sep-2015$ 

SEBRAE. Solid waste management. Sebrae, Cuiabá: Sebrae, 2012. Available em::<a href="http://www.biblioteca.sebrae.com.br/bds/BDS.nsf/5E98B08FE732528F832579D700530F1D/\$File/NT00047502.pdf">NT000530F1D/\$File/NT00047502.pdf</a>. Accessed on: 17-Jan-2015

SENAI - RS. Implementation of cleaner production programs. Porto Alegre, National Center for Clean Technologies SENAI-RS / UNIDO / INEP, 2003. 42 p. il. Available in: http://srvprod.sistemafiergs.org.br/portal/page/portal/sfiergs\_senai\_uos/senairs\_uo697/proximos\_cursos/implementa%E7%E3o%20PmaisL.pdf Accessed on: 15-Jun-2015

SILVA FILHO, J. C. L.; CALABRIA, F. A.; SILVA, G. C. S.; MEDEIROS, D. D. Cleaner Production Application in a company as a continuous improvement tool. Production, v.17, n.1, p.109-128, 2007

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### PRODUCT-SERVICE SYSTEMS: source for sustainability in textile industry?

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### INTRODUCTION

Since the beginning of the century, the development of fast fashion and thus higher clothing consumption has determined the fashion industry (Caro e Martínez-de-Albéniz 2015). Fast fashion deliver highly fashionable products in combination with low prices (Byun e Sternquist 2011). This attractive combination offers the consumer increased purchase incentives. Thus, they buy even more clothes and throw them away after having worn them a couple of time. A study in United Kingdom shows that the number of pieces of clothing per person rose over 50% between 2000 and 2012 (Caro e Martínez-de-Albéniz, 2015). The consequences are higher resource consumption. Thus, the trend to fast fashion conflicts with the effort for greater sustainability.

One way to stop the increasing consumption level of clothing through fast fashion is the development of product-service systems (PSS). According to Mont's (2002) definition a product-service system is "a system of products, services, supporting networks and infrastructure that is designed to be: competitive, satisfy customer needs and have a lower environmental impact than traditional business models".

The establishment of PSS with concepts like renting enlarge the consumption opportunities, which may have a lower environmental impact. For the establishing of PSS in the mass market, the increase of low consumer acceptance is one of the major

challenges. Although PSS has been the subject of research for almost 20 years, the concept is not widespread (Carlo Vezzoli e Fabrizio Ceschin 2012). The change of consumption pattern through radical innovations like PSS leads to high personal costs for the consumer (Stengel 2011). So the offer of PSS has to be alluring enough for the consumer to accept the personal costs of change. This paper addresses this issue.

For many types of PSS, the consumer willingness to accept used products is precondition. Many studies have already investigated consumer acceptance for specific PSS-types, but a more general focus on used products is missing. In order to close this lack of research, we conduct a content analysis of previous empirical studies about consumer acceptance of PSS-types related to used clothing. The purpose of the content analysis is to improve understanding which key factors determining consumer acceptance of PSS related to used clothing.

This paper is divided in two parts. The first part aims at showing why PSS could be a source for sustainability in textile industry. The second part presents the study about consumer acceptance of used clothing.

### **PSS IN THE CONTEXT OF SUSTAINABILITY**

An essential characteristic of PSS is its environmental benefit (Mont, 2002) which is primarily achieved by dematerialization. According to Baines et al. (2007) dematerialization refers "to the opportunity

that a PSS offers to break the link between value delivered to the customer/user and the amount of physical material needed to create that value". Corresponding to this definition, PSS can be classified as sufficiency strategy, which is related to decreasing consumption level (Hauff, 2014; Weller, 2015).

Especially for textile business, PSS as one type of sufficiency strategy could be a promising way to more sustainability. Efforts to promote sustainable development in textile business are currently focusing on efficiency strategies like using organic clothing material. But efficiency strategies are difficult to establish, because consumer acceptance of sustainable products is strongly related whether the product satisfies egoistic motives (Schöberl, 2012). Compared to the food sector where the benefit for health is the main purchasing motive for organic food, such egoistic motives apply only to some clothing categories (e.g. underwear). But because clothes are durable goods, the change of product usage can increase use intensity (Runkel, 2004). Use intensity can be defined as total output per item. In context of clothing, use intensity refers to the total wearing time per item. In a global view the increase of use intensity leads to dematerialization. In automobile sector with cars as durable goods PSS concepts like car sharing are already widespread.

The different types of PSS could contribute to the decrease of resource consumption in several ways; through increase of use intensity per owner and/or

through increase of number of owner per item. Use intensity per owner can be increased by use oriented and result oriented PSS. Use-oriented PSS means that products will be shared among several users, e.g. renting (Tukker, 2004). And result oriented PSS means that the provider is engaged to deliver a result without an agreement about product-related specifications (Tukker, 2004). Increasing the number of owner per items, re-use can prolong the lifespan of a product (Murakami, Oguchi, Tasaki, Daigo e Hashimoto, 2010). Re-use belongs to product-oriented PSS, which focuses on advice and consultancy as well as product-related services (Tukker, 2004). This paper considers only product-related services, which support re-use along with transfer of ownership. According to the scale of service and referring to the distribution, re-use can be distinguished in second-hand, refurbishing, remanufacturing and re-design/ upcycling (Thierry, Salomon, Van Nunen e Van Wassenhove, 1995; Gelbmann e Hammerl, 2015).

### CONSUMER ACCEPTANCE AND VALUE CREATION

The consumer acceptance of PSS depends on whether the consumer becomes better off with the use of PSS. Considering confirmation/disconfirmation paradigm (Woodruff, 1997) the question could also be whether the use of PSS could create more value for the consumer than the purchase of new clothes. To answer this question the understanding how value

will be created is important. Currently this is an intensively discussed topic in marketing research (Woodruff e Flint, 2006; Payne, Storbacka e Frow, 2008; Lemke, Clark e Wilson, 2011; Grönroos e Voima, 2013). Following, we give a brief overview over research approaches about the emergence and determination of value.

Vargo e Lusch's (2004) developed service-dominant logic offers an appropriate framework for investigation of value creation. According to the service-dominant logic value arises as result of resource application through the customer (Vargo, Maglio e Akaka,

2008; Lemke et al., 2011; Grönroos e Voima, 2013). Companies don't create or deliver value, but provide resources in terms of services and hence participate on the value creation of the customer (Grönroos e Voima, 2013; Vargo e Lusch, 2016). The companies "consider a promise that customers can extract some value from an offering" (Grönroos e Voima, 2013) by developing value propositions.

The operationalization of value creation is currently challenging research (Jacob, Bruns e Sievert, 2013; Kleinaltenkamp, 2013; Ranjan e Read, 2014). One approach is Holbrook's

		EXTRINSIC	INTRINSIC
Self-Oriented	Active	Efficiency	Play
	Reactive	Excellence	Aesthetics
Other-Orientes	Active	Status	Ehtics
	Reactive	Esteem	Spirituality

Table 1 - A Typology of Customer Value (Holbrook, 1996)

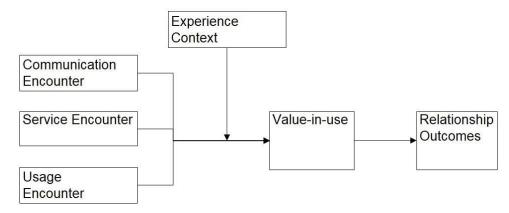


Figure 1 – Conceptual model of customer experience quality (Lemke et al., 2011)

(1996) model, which separates eight types of experiences through value creation relating on three dimensions: extrinsic versus intrinsic, self- versus other-oriented and active versus reactive (table 1).

Another approach, which considers the time dimension of the value creation, is the view of usage process as customer journey. The interactions and transactions between company and customer during this journey are defined as encounters, which can be divided in communication encounters, usage encounters and service encounters (Payne et al., 2008).

Following the model of Lemke et al. (2011) these three types of encounters as well as the experience context shape the value-inuse (Figure 1).

### **METHOD**

In order to get a multifaceted understanding which factors influence the consumer acceptance of used clothing, a systematic literature review is chosen as methodology. Conducting literature review by using the tool of content analysis allows evaluation of literature in a systematic and transparent way (Seuring e Müller, 2008). Mayring's (2015) four-step content analysis approach which is already proved to be capable (Seuring e Gold, 2012) and therefore will be adopted for this study.

Material collection was conducted through a structured keyword search and a reference analysis. 13 papers were selected

(Roux e Korchia, 2006; Hiller Connell, 2011; Duffy, Hewer e Wilson, 2012; Cervellon, Carey e Harms, 2012; Bolton e Alba, 2012; Na'amneh e Al Husban, 2012; Isla, 2013; Xu, Chen, Burman e Zhao, 2014; Turunen e Leipämaa-Leskinen, 2015; Yan, Bae e Xu, 2015; Bly, Gwozdz e Reisch, 2015; Pedersen e Netter, 2015; Armstrong, Niinimäki, Kujala, Karell e Lang, 2015).

For material evaluation all 13 papers were analyzed. Appropriate text passages, which point out influence factors of consumer acceptance for used products were coded and assigned to category system. Finally, a contingency analysis about all subcategories were conducted with the aim to detect not obviously dependencies between categories (Kache e Seuring, 2014).

### Results

Following, results of content analysis and contingency analysis will be presented. Table 2 shows key influence factors for second hand and renting in investigated papers. Key influence factors are ranged in encounter types and experience context defined by Lemke et al. (2011). Here the experience context is differentiated according to the intrinsic customer value types defined by Holbrook (1996) in play, aesthetic and ethics. Influence factors were defined as key influence factors if they were mentioned in at least half of all papers.

Contingency analysis has revealed two statistical significant dependencies between

subcategories. The first dependency between atmosphere and relationship to other customers is easily apparent because both factors have influence on agreeable purchasing experience. The second dependency appears between status and aesthetics. In-depth analysis between both categories show that used clothing extend variety of styles. Through these additional options consumer can better develop their individual styles which express their personal taste and serves them to create their distinctive image in public. This dependency is obviously related to the desire for uniqueness (Roux e Korchia, 2006).

### DISCUSSION AND CONCLUSION

Following, we discuss the results of the study and indicate approaches for further research. According to the research results the value for money and experience context can be defined as main drivers and perceived contamination of garment by previous owner as main barrier. Corresponding to these

results the low acceptance of used clothing is unexpected. But this could be explained by focus on the articles. The empirical studies investigated mainly consumers who are familiar to used products and thus do not represent the mass market. According to the results future research should investigate how reservations about used clothing can be decreased and how attraction through experience context of PSS offerings can be aroused.

For better understanding of dependencies additional research should attempt to clarify the role of institutions and possibilities to change institution because they play a significant role in relationship between provider and value creation of consumer (Geels, 2004; Scaraboto e Fischer, 2013; Vargo e Lusch, 2016). The key influence factor value for money shows that consumer see use of used clothing as a cost-effective alternative. Efficiency of usage processes should be optimized, e.g. through the support of the customer voyage by e-services to further

	RENTING CLOTHING	SECOND-HAND CLOTHING
Service encounter	» Value for money	<ul><li>» Value for money</li><li>» Product quality</li></ul>
Usage encounter	» Usage practice	» Social impact
Experience context	» Play » Ethics	<ul><li>» Aesthetic</li><li>» Play</li><li>» Ethics</li></ul>

Table 2 – Key factors which influence consumer acceptance of offering

In this conference paper we can show just a small selection of our current research and an abbreviated presentation of the results of the study. Limitations of this study results through the small size of 13 samples. This shows that additional research is necessary, especially in renting of clothing and types of re-use applying measures for recovering of used clothes. In this context socio-technical experiments like proposed by Ceschin (2014) can give further insides.

In all, this paper showed that implementation of PSS could lead to lower environmental impact. Afterwards a study about consumer acceptance related to used clothing were presented. Results indicate that a variety of possibilities exist to advance PSS offerings, and thus, may improve sustainability in textile business.

### REFERENCES

ARMSTRONG, C. M. et al. Sustainable product-service systems for clothing: exploring consumer perceptions of consumption alternatives in Finland. Journal of Cleaner Production, v. 97, p. 30–39, jun. 2015.

BAINES, T. S. et al. State-of-the-art in product-service systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, v. 221, n. 10, p. 1543–1552, 2007.

BLY, S.; GWOZDZ, W.; REISCH, L. A. Exit from the high street: an exploratory study of sustainable fashion consumption pioneers. International Journal of Consumer Studies, v. 39, n. 2, p. 125–135, 2015.

BOLTON, L. E.; ALBA, J. W. When less is more: Consumer aversion to unused utility. Journal of Consumer Psychology, v. 22, n. 3, p. 369–383, 2012.

CERVELLON, M.-C.; CAREY, L.; HARMS, T. Something old, something used: determinants of women's purchase of vintage fashion vs second-hand fashion. International journal of retail & distribution management, International journal of retail & distribution management. - Bradford: Emerald, ISSN 0959-0552, ZDB-ID 10268844. - Bd. 40.2012, 12, S. 956-974. v. 40, n. 12, 2012.

CESCHIN, F. Towards a New Way of Designing and Managing the Societal Embedding of Sustainable Product-Service System. In: CESCHIN, F. (Ed.). .
Sustainable Product-Service Systems. Cham: Springer International Publishing, 2014. p. 81–116.

DUFFY, K.; HEWER, P.; WILSON, J. "Granny would be proud": on the labours of doing vintage, practices and emergent socialities. Advances in Consumer Research, v. 40, p. 519–525, 2012.

GEELS, F. W. From sectoral systems of innovation to socio-technical systems. Research Policy, v. 33, n. 6–7, p. 897–920, 2004.

GELBMANN, U.; HAMMERL, B. Integrative re-use systems as innovative business models for devising sustainable product–service-systems. Journal of Cleaner Production, v. 97, p. 50–60, 2015.

GRÖNROOS, C.; VOIMA, P. Critical service logic: making sense of value creation and co-creation. Journal of the Academy of Marketing Science, v. 41, n. 2, p. 133–150, 2013.

HAUFF, M. VON. Nachhaltige Entwicklung: Grundlagen und Umsetzung. Walter de Gruyter GmbH & Co KG, 2014.

HILLER CONNELL, K. Y. Exploring consumers' perceptions of eco-conscious apparel acquisition behaviors. Social Responsibility Journal, v. 7, n. 1, p. 61–73, 2011.

HOLBROOK, M. B. Customer Value–A Framework For Analysis and Research. Advances in consumer research, v. 23, n. 1, 1996.

ISLA, V. L. Investigating second-hand fashion trade and consumption in the Philippines: Expanding existing discourses. Journal of Consumer Culture, v. 13, n. 3, p. 221–240, 2013.

JACOB, F.; BRUNS, K.; SIEVERT, J. Value in Context – Eine ressourcen-dynamische Perspektive. In: SCHMITZ, G. (Ed.). . Theorie und Praxis des Dienstleistungsmarketing. Fokus Dienstleistungsmarketing. Springer Fachmedien Wiesbaden, 2013. p. 27–50.

KACHE, F.; SEURING, S. Linking collaboration and integration to risk and performance in supply chains via a review of literature reviews. Supply Chain Management: An International Journal, v. 19, n. 5/6, p. 664–682, 2014.

KLEINALTENKAMP, M. Nutzungsprozesse – Die vernachlässigte Seite der Wertschöpfung. In: SCHMITZ, G. (Ed.). . Theorie und Praxis des Dienstleistungsmarketing. Fokus Dienstleistungsmarketing. Springer Fachmedien Wiesbaden, 2013. p. 1–25.

KOVÁCS, G.; SPENS, K. M. Abductive reasoning in logistics research. International Journal of Physical Distribution & Logistics Management, v. 35, n. 2, p. 132–144, 2005.

LEMKE, F.; CLARK, M.; WILSON, H. Customer experience quality: an exploration in business and consumer contexts using repertory grid technique. Journal of the Academy of Marketing Science, v. 39, n. 6, p. 846–869. 2011.

MAYRING, P. Qualitative Inhaltsanalyse. Weinheim; Basel: Beltz, 2015.

MONT, O. K. Clarifying the concept of product–service system. Journal of cleaner production, v. 10, n. 3, p. 237–245, 2002.

MURAKAMI, S. et al. Lifespan of Commodities, Part I: The Creation of a Database and Its Review. Journal of Industrial Ecology, v. 14, n. 4, p. 598–612, 2010.

NA'AMNEH, M. M.; AL HUSBAN, A. K. Identity in old clothes: the socio-cultural dynamics of second-hand

### **Product-Service Systems**

clothing in Irbid, Jordan. Social Identities, v. 18, n. 5, p. 609-621, 2012.

PAYNE, A. F.; STORBACKA, K.; FROW, P. Managing the cocreation of value. Journal of the Academy of Marketing Science, v. 36, n. 1, p. 83–96, 2008.

PEDERSEN, E. R. G.; NETTER, S. Collaborative consumption: business model opportunities and barriers for fashion libraries. Journal of Fashion Marketing and Management, 2015.

RANJAN, K. R.; READ, S. Value co-creation: concept and measurement. Journal of the Academy of Marketing Science, 2014.

ROUX, D.; KORCHIA, M. Am I What I Wear? An Exploratory Study of Symbolic Meanings Associated with Secondhand Clothing. Advances in Consumer Research, v. 33, n. 1, p. 29–35. 2006.

RUNKEL, M. Environmental and Resource Policy for Consumer Durables. Springer Science & Business Media, 2004.

SCARABOTO, D.; FISCHER, E. Frustrated Fatshionistas: An Institutional Theory Perspective on Consumer Quests for Greater Choice in Mainstream Markets. Journal of Consumer Research, v. 39, n. 6, p. 1234–1257, 2013.

SCHALLMO, D. R.; BRECHT, L. Prozessinnovation erfolgreich anwenden: Grundlagen und methodisches Vorgehen: Ein Management-und Lehrbuch mit Aufgaben und Fragen. Springer-Verlag, 2014.

SCHÖBERL, S. Verbraucherverhalten bei Bio-Lebensmitteln: Analyse des Zusammenhangs zwischen Einstellungen, moralischen Normen, Verhaltensabsichten und tatsächlichem Kaufverhalten. 2012.

SEURING, S.; GOLD, S. Conducting content-analysis based literature reviews in supply chain management. Supply Chain Management: An International Journal, v. 17, n. 5, p. 544–555. 2012.

SEURING, S.; MÜLLER, M. From a literature review to a conceptual framework for sustainable supply chain management. Journal of Cleaner Production,

Sustainability and Supply Chain Management. v. 16, n. 15, p. 1699–1710, 2008.

STEPHEN L. VARGO et al. Service-Dominant Logic. In: Review of Marketing Research. Review of Marketing Research. Emerald Group Publishing Limited, 2010. p. 125–167.

THIERRY, M. et al. Strategic issues in product recovery management. California management review, v. 37, n. 2, p. 114–135, 1995.

TUKKER, A. Eight types of product–service system: eight ways to sustainability? Experiences from SusProNet. Business Strategy and the Environment, v. 13, n. 4, p. 246–260, 2004.

TURUNEN, L. L. M.; LEIPÄMAA-LESKINEN, H. Pre-loved luxury: identifying the meanings of second-hand luxury possessions. Journal of Product & Brand Management, 2015.

VARGO, S. L.; LUSCH, R. F. Evolving to a New Dominant Logic for Marketing. 2004.

VARGO, S. L.; LUSCH, R. F. Institutions and axioms: an extension and update of service-dominant logic. Journal of the Academy of Marketing Science, v. 44, n. 1, p. 5–23, 2016.

VARGO, S. L.; MAGLIO, P. P.; AKAKA, M. A. On value and value co-creation: A service systems and service logic perspective. European Management Journal, v. 26, n. 3, p. 145–152, 2008.

WELLER, P. D. I. Freizeit und Lebensqualität in der Postkonsumgesellschaft. In: FREERICKS, R.; BRINKMANN, D. (Eds.). . Handbuch Freizeitsoziologie. Springer Fachmedien Wiesbaden, 2015. p. 255–275.

WOODRUFF, R. B. Customer value: the next source for competitive advantage. Journal of the academy of marketing science, v. 25, n. 2, p. 139–153, 1997.

WOODRUFF, R. B.; FLINT, D. J. Marketing's Service-Dominant Logic and Customer Value. Routledge, 2006.

XU, Y. et al. Second-hand clothing consumption: a crosscultural comparison between American and Chinese young consumers. International Journal of Consumer Studies, v. 38, n. 6, p. 670–677, 2014.

YAN, R.-N.; BAE, S. Y.; XU, H. Second-hand clothing shopping among college students: the role of psychographic characteristics. Young Consumers, 21.

### FASHION DESIGNERS' BALANCING ACT

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### INTRODUCTION

Worldwide, the cultural or creative industry, including fashion design, is recognized as a key driver of contemporary economic growth, and creativity and design have become key economic resources (Scott, 2001; Unesco and UNDP, 2013). Besides, in recent years an increasing and richly deserved coverage of Belgian fashion designers and their work is seen in international publications. To a large extent this increase is due to their promotion and visibility, the daring style of often young Belgian labels, the legacy of the Antwerp Six, but above all the sheer talent of Belgian designers today (Craik, 2014). The creative industry is fragmented and counts a large number of small enterprises and a small number of large enterprises (Bakhshi and Throsby, 2009). The fashion design sector shares this feature: it is made up of predominantly small businesses, with a high level of self-employment (Guiette et al., 2011). Likewise, in such small creative firms, the entrepreneur is the person who manages, in addition to being the founder of the business. He or she represents the firm's core resource and enjoys a high degree of decision-making authority (Camelo-Ordaz et al., 2012). However, Jeffcut and Pratt (2002) state that in existing research on the creative industry, much attention has focused on the macro-level, and they suggest the need for a better understanding of what occurs at the micro-level, especially looking into particular variables which influence the performance of

creative firms (Mellander, 2010).

Furthermore, previous research suggests a link between CEO's skills to balance artistic and economic considerations (cfr. ambidexterity) and firm performance (Jacobs et al., 2016a, 2016b; Kolsteeg, 2014; Rausch et al., 2009). The performance of organizations has also been a major vet complex issue in management and organization studies (Loots, 2015). Especially in SMEs, success and performance are multi-dimensional issues (Murphy et al., 1996), which can be measured both objectively and subjectively (Reijonen, 2008). Walker and Brown (2004) found that small business owners measure their success using both financial as non-financial factors. and that the non-financial lifestyle criteria are sometimes more important.

Given this knowledge, this study adopts a configurational approach to examine the combinatorial effects of exploration and exploitation, and a specific context variable, designers' fulltime or part-time dedication. on a designers' business growth and high perceived success. A configurational approach suggests that "organizations are best understood as clusters of interconnected structures and practices" (Fiss, 2007), that is, organizational fit and competitive advantage depend not on a single condition but instead on synergistic relationships between multiple attributes or conditions (Fiss, 2011). Hence, increased understanding of designers' growth and perceived success can be better achieved by identifying distinct configurations of conditions than by seeking

to uncover relationships that hold across all designers. Following this line of thought, we employ a set-theoretic method, that is, fuzzy-set qualitative comparative analysis (fsQCA), to analyse and identify configurations of conditions that explain why some designers achieve more growth and higher perceived success, based on a sample of 21 independent small-sized fashion designers located in Belgium. The conditions of interest in this study are the designers' strategy concerning exploration and exploitation (ambidexterity) in combination with their job rate, namely if they work as a fulltime or part-time designer.

We contribute to the literature and practice in several ways. First, by applying the fsQCA method we are able to provide empirical evidence on the complex interrelations between exploration, exploitation and job rate and how they jointly affect the business growth and perceived success of small-sized fashion designers. This approach is also a meaningful addition to the well-known approaches of qualitative studies and econometric modelling in creative industries research. Second, this study looks into two different measures of performance, growth and high perceived success, which is not common in creative industries research (Choi, 2012) and answers the call to research success as a multi-dimensional issue (Murphy et al., 1996; Walker and Brown, 2004). Third, when looking into ambidexterity, we measure and analyse this variable at the level of the designer. By taking into account the individual level, we respond to scholarly calls to shed

more light on exploration and exploitation at the manager level of analysis (Mom et al., 2007; Raisch and Birkinshaw, 2008). In addition, we also contribute on the practical level by providing designers and policymakers with a more tangible understanding of pathways for success in the fashion design industry.

### LITERATURE REVIEW

To target both commercial success and artistic expression to ensure long-run survival, designers need to balance artistic and economic considerations (Kolsteeg, 2014; Lampel et al., 2000). This tension, linked to the concept of ambidexterity, is a pull between 'exploration' and 'exploitation' (Andriopoulos and Lewis, 2009; March, 1991). This balance is also a recurring theme in a variety of organizational literatures, and successful organizations are then so called 'ambidextrous': aligned and efficient in their management of today's business demands, while also adaptive enough to changes in the environment that they will still be around tomorrow (Gibson and Birkinshaw, 2004).

In this research, contextual ambidexterity is taken into account: simultaneously balancing seemingly contradictory tensions (Earley and Gibson, 2002; Gibson and Birkinshaw, 2004). Following Raisch and Birkinshaw (2008) and Chang (2012) the best firms are increasingly those that can carefully balance explorative innovation with exploitative innovation in an ambidextrous

fashion. Contextual ambidexterity is especially important at the level of the individual: the capability of individuals to perform contradictory activities and switch between different mindsets and action sets (e.g., switching from unconstrained creativity to scrutinizing the usefulness of ideas). Individuals can switch between different mind and action sets in accordance with situational demands (Bledow et al., 2009).

Additionally, empirical evidence suggests that under conditions of market and technological uncertainty, ambidexterity has a positive effect on organizational performance (O'Reilly, 2013), and is also positively associated with subjective ratings of performance (Burton et al., 2012; Gibson and Birkinshaw, 2004; O'Reilly, 2013).

However, within the theory of ambidexterity, so far, almost all of the recommendations put forward by conceptual and empirical works are designed for large, multiunit firms (Chang, 2012). With few exceptions (e.g., Lubatkin et al., 2006), work on ambidexterity has failed to account for SMEs, which is actually the largest volume of companies within the creative industries (Bagwell, 2008), and accordingly the fashion design industry. They may operate differently and display different operating conditions and characteristics to large, multiunit firms such that generalizing current recommendations for ambidexterity into innovation strategies for these firms might prove incorrect (Chang, 2012). Also Andriopoulos and Lewis (2009) acquaint that SMEs face greater challenges

in managing tensions, contradictions, and tradeoffs associated with explorative and exploitative innovations than larger firms. In this study we look at the individual level (manager level) of exploration and exploitation in small-sized design firms.

Job rate concerns the rate of employment of the entrepreneur. Creative industries are typically characterized by a high rate of self-employment (Markusen et al., 2008). The study of Markusen (2006) shows that, in the US, self-employment among designers represents 32%. Additionally, in this group, 21% is a self-employed designer as a secondary occupation.

### **METHODOLOGY**

Fuzzy-set qualitative comparative analysis (fsQCA)

While an in-depth explanation of the fsQCA method is beyond the purpose of this study (see Fiss, 2007, 2011; Schneider and Wagemann, 2012 for more information), we briefly explain the central features of fsQCA that pertain to the current study in this section. First, applying fsQCA requires the mapping of firms in terms of their multiple memberships in sets of organizational attributes or conditions. This process requires the transformation (also referred to as calibration) of the conditions according to three qualitative thresholds: full membership, the crossover point, and full non-membership (Fiss, 2007). For a continuous variable, decisions about full membership and nonmembership involve an assessment of what values are generally considered high and low, respectively. The crossover point is the score that indicates maximum ambiguity, that is, a firm has a degree of membership 0.5 and also a degree of non-membership 0.5. Identifying the values of full membership, the crossover point, and full non-membership is unequivocal when measurement scales suggest clear cut-off points, such as seven-point Likert scales, with 1 being the lowest and 7 being the highest possible score (Ragin, 2008). Otherwise, identifying qualitative thresholds should be based on theoretical or substantive criteria external to the data (Ragin, 2008).

A second key feature of the fsOCA method is that it relies on Boolean algebra to compute a "truth table" which reports all the logically possible combinations of the conditions, including those that are empirically observed in our sample and those that are not (Greckhamer et al., 2008). Since we investigate k = 3 conditions, the truth table has 2k = 8 rows or combinations of conditions (i.e. configurations). The researcher is now required to (1) set a priori minimum thresholds for consistency and the frequency of cases per configuration in order to identify configurations that lead to higher family firm growth relative to competitors, and (2) specify the assumptions based on which difficult counterfactual analysis (see below) will be based (Greckhamer et al., 2008). Following Ragin (2006), we set the minimum acceptable frequency to one case per configuration, because of the intermediate size of cases on

this study. With respect to consistency, defined as the "degree to which the cases sharing a condition or combinations of conditions agree in displaying the outcome in question", we identified all configurations that have a minimum raw consistency of >0.72 (Ragin, 2008).

In line with prior studies (Fiss, 2011), we report the intermediate solution and denote the presence or absence of the conditions as follows: conditions are denoted by "black dot" (present) and (white dot" (absent). Blank spaces in a solution indicate a situation in which the condition may be either present

or absent (Fiss, 2011).

### Sample

No exhaustive list of independent fashion designers exist in Belgium to date. Therefore, this study uses the databases of Flanders Fashion Institute. An initial selection of 50 small-sized cases was made, following a most similar/most different strategy (Yin, 2003). From this group, 14 cases responded positively to a request for an interview, all of whom were subsequently interviewed by the authors. The semi-structured interviews

had a duration of 40 to 90 minutes, and are tape-recorded and transcribed. In addition to the formal interviews, the authors collected additional data about the cases from financial reports, press documentation and website information, and also survey data was collected. In a next step an online survey was sent to a group of 36 fashion designers which didn't respond to the request for an interview. Data on several indicators of business growth, perceived success, exploration, exploitation, and job rate were collected. This resulted in 7 additional responses. This brings the total sample for this study on 21 cases.

			Thresholds	
Condition	Question/measure	Full member- ship	Crossover	Full non- member- ship
Growth	Combination of 3 indicators: (1) growth in amount of employees; (2) growth in turnover; (3) growth in sold products / a score from 0 to 3 on 3	3	0,99	0
High perceived success	Indicate on a five-point Likers scale how you perceive your own success following your own definition of success / a score from 1 to 5	5	3,5	1
Exploration	Five-point Likert scale with items derived from Mom et al. (2007) / average score	5	3,01	1
Exploitation	Five-point Likert scale with items derived from Mom et al. (2007) / average score	5	3,01	1
Job rate	Do you work fulltime or part-time as a designer? / 1= fulltime; 0= part-time	1	0,5	0

Table 1: Original variables, measures and set calibration

Measures and calibrations of set membership

As mentioned earlier, the application of fsQCA as a set-theoretic method requires the calibration of our conditions according to three qualitative thresholds: full membership, the crossover point, and full non-membership (Fiss, 2007). Table 1 summarizes the underlying measures of each condition and the calibration thresholds for each fuzzy set.

### RESULTS

Configurations for (no) business growth

The results shown in table 2 represent the configurations of conditions found to be sufficient for fashion designer's business growth and no business growth. The solution for business growth shows that all three conditions need to be present in order to achieve designer's business growth. We find that fulltime designers achieve higher growth if they exhibit a balance between exploration and exploitation, both have to be present. This result confirms the idea of contextual ambidexterity (Early & Gibson, 2002; Gibson & Birkinshaw, 2004). No growth is achieved when the fashion designers is a part-time designer and has a high rate of exploitation.

Configurations for high and low perceived success

In table 3 we report the configurations of

	Solutions			
Condition	Business growth	No business growth		
	"Fulltime designers with a high rate of exploration and exploitation"	"Part-time designers with a high rate of exploitation"		
Exploration	•			
Exploitation	•	•		
Job rate	•	$\otimes$		
Consistency	0.73	0.80		
Raw coverage	0.75	0.24		
Unique coverage	0.75	0.24		

Table 2: Configuration for (no) business growth

	Solutions			
Condition	High perceived success	Low perceived success		
	"Fulltime designers with a high rate of exploration and	"Part-time designers with a high rate of exploitation"		
	exploitation"			
Exploration	•	$\otimes$		
Exploitation	•	•		
Job rate		$\otimes$		
Consistency	0.74	0.81		
Raw coverage	0.93	0.17		
Unique coverage	0.93	0.17		

*Table 3: Configuration for high and low perceived success* 

conditions for high and low perceived success. When there is a balance between exploration and exploitation, the fashion designers report a high perceived success. Contrary, an imbalance between exploration and exploitation in combination with being a part-time designer leads to low perceived success.

### DISCUSSION AND CONCLUSION

To shed more light on the interrelationships between exploration, exploitation and job rate and their effect on business growth and high perceived success, we applied the fsQCA methodology (Fiss, 2007, 2011; Ragin, 2006). Drawing from this comparative case study, all conditions play an important role, in different kind of configurations and with differences in being present or absent.

To achieve business growth, the fashion designer needs to obtain a balance between exploration and exploitation and work fulltime as a designer. This confirms the results from a previous study with furniture designers (Jacobs et al. 2016b), and the theory of contextual ambidexterity (Early & Gibson, 2002; Gibson & Birkinshaw, 2004). There is no business growth when a fashion designer works part-time and only focuses on exploitation.

Furthermore, to achieve high perceived success, the designer also need a balance between exploration and exploitation. However, job rate is not of importance here. Contrary, being a part-time designer

while focusing on exploitation and not on exploration leads to low perceived success. The importance of exploration in the solution is in line with the findings of Chaston (2008), who states that managers of most small creative firms are individuals who focus more on sustaining a lifestyle oriented toward involvement in creative output than on being financially successful.

In conclusion, combining a configurational way of thinking with fsOCA as method of analysis suggests that focusing on the joint and interdependent effects of multiple growth and perceived success predictors is particularly fruitful to develop an integrative model of designer's business growth and high perceived success that is broad in scope vet parsimonious in its solutions. The use of fsOCA enables further empirical exploration of configurations of conditions that explain more profoundly designer-level and firm-level outcomes (Fiss et al., 2013). In addition, the detection of causal asymmetry by fsOCA can contribute to a more accurate understanding of relationships between variables.

The findings of this study are also from importance for policy-makers and the designers themselves. In order to achieve business growth and high perceived success, designers must find stimuli and support to be powerful enough to be a designer as primary occupation. Looking back into the cases, most of the part-time designers have other jobs to secure their financial situation. To achieve business growth and high perceived success, both exploration and exploitation

are important. This advice may be of use for fashion and furniture designers when defining their strategy.

### REFERENCES

Andriopoulos, C., & Lewis, M. W. (2009). Exploitation–exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. Organization Science, 20(4), 696–717.

Bagwell, S. (2008). Creative clusters and city growth. Creative Industries Journal, 1(1), 31-46.

Bakhshi, H., & Throsby, D. (2009). Innovation in Arts and Cultural Organisations (Interim Research Report). Nesta. https://www.nesta.org.uk/sites/default/files/innovation\_in\_arts\_and\_cultural\_organisations.pdf. Accessed 23 March 2014.

Benmelech, E., & Frydman, C. (2015). Military CEOs. Journal of Financial Economics, 117(1), 43–59.

Bertrand, M., & Schoar, A. (2003). Managing with Style: The Effect of Managers on Firm Policies. Quarterly Journal of Economics, 118(4), 1169–1208.

Bledow, R., Frese, M., Anderson, N., Erez, M., Farr, J. (2009). A Dialectic Perspective on Innovation: Conflicting Demands, Multiple Pathways, and Ambidexterity. Industrial and Organizational Psychology, 2, 305–337.

Burton, M. D., O'Reilly, C. A., & Bidwell, M. (2012, August). Management systems for exploration and exploitation: The micro-foundations of organizational ambidexterity. Paper presented at the Annual meetings of the Academy of Management.

Camelo-Ordaz, C., Fernández-Alles, M., Ruiz-Navarro, J., & Sousa-Ginel, E. (2012). The intrapreneur and innovation in creative firms. International Small Business Journal, 30(5), 513–535.

Chang, Y., & Hughes, M. (2012). Drivers of innovation ambidexterity in small- to medium-sized firms. European Management Journal, 30, 1-17.

Chaston, I. (2008). Small creative industry firms: a development dilemma? Management Decision, 46(6), 819–831.

Choi, T.M. (2012). Fashion supply chain management: Industry and business analysis. http://www.igi-global.com/book/fashion-supply-chain-management/49569. Accessed 16 October 2014.

Craik, J. (2014). Fashion management in the age of globalization. In A. Schramme, T. Moerkerke, & K. Nobbs (Eds.), Fashion Management (pp. 6-11). Leuven: Lannoo Campus.

Earley, P. C., & Gibson, C. B. (2002). Multinational teams: A new perspective. Mahwah, NJ: Erlbaum.

Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. Academy of Management Review, 32(4), 1180-1198.

Fiss, P.C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. Academy of Management Journal, 54(2), 393-420.

Fiss, P.C., Marx, A., & Cambré, B. (2013). Configurational theory and methods in organizational research: Introduction. In P.C. Fiss, Cambré, B., & Marx, A. (Eds), Configurational Theory and Methods in Organizational Research (pp. 1-22). Bingley: Emerald Group Publishing Limited.

Gibson, C. B. & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. Academy of Management Journal, 47(2), 209–226.

Greckhamer, T., Misangyi, V.F., Elms, H., & Lacey, R. (2008). Using qualitative comparative analysis in strategy management research – An examination of combinations of industry, corporate, and business-unit effects. Organizational Research Methods, 11(4), 695-726.

Guiette, A., Jacobs, S., Schramme, A., & Vandenbempt, K. (2011). De Creatieve industrieën in Vlaanderen en hun drivers en drempels. Antwerp: Flanders DC-Antwerp Management School Kenniscentrum.

Jacobs, S., Cambré, B., Huysentruyt, M., & Schramme, A. (2016a). Unraveling Belgian fashion designers' high perceived success: A set-theoretic approach. Journal of Business Research, doi: 10.1016/j.jbusres.2015.10.116

Jacobs, S., Cambré, B., Huysentruyt, M., & Schramme, A. (2016b). Multiple pathways to success in small creative businesses: The case of Belgian furniture designers. Journal of Business Research, doi: 10.1016/j.jbusres.2016.04.156

Jeffcutt, P., & Pratt, A. c. (2002, December). Managing Creativity in the Cultural Industries. Creativity & Innovation Management, 225–233.

Kolsteeg, J. (2014). Shifting gear. The daily deliberation between arts and economics in cultural and creative organisations in Utrecht, 2010-2012. Utrecht: Eburon.

Lampel, J., Lant, T., & Shamsie, J. (2000). Balancing act: Learning from organizing practices in cultural industries. Organization Science, 11(3), 263-269.

Loots, E. (2015). Performance evaluations in the arts: evidence from the Netherlands and Flanders. Doctoral dissertation. University of Antwerp.

Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F. (2006). Ambidexterity and performance in small- to medium sized firms: The pivotal role of top management team behavioral integration. Journal of Management, 32(5), 646–672.

March, J. G. (1991). Exploration and exploitation in organizational learning. Organization Science, 2, 71-86.

Markusen, A., & Schrock, G. (2006). The artistic dividend: Urban artistic specialisation and economic development implications. Urban Studies (Routledge), 43(10), 1661–1686.

Markusen, A., Wassall, G. H., DeNatale, D., & Cohen, R. (2008). Defining the Creative Economy: Industry and Occupational Approaches. Economic Development Ouarterly, 22(1), 24–45.

Mellander, C. (2010). Book review: Colette Henry(ed.), Entrepreneurship in the creative industries: An

international perspective. International Small Business Journal, 28(1), 127–128.

Mom, T., Van Den Bosch, F., & Volberda, H. (2007). Investigating managers' exploration and exploitation activities: The influence of top-down, bottom-up, and horizontal knowledge inflows. Journal of Management Studies, 44(6), 910-931.

Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. Journal of Business Research, 36(1), 15–23.

O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, Present and Future. Academy of Management Perspectives.

Ragin, C.C. (2006). Redesigning social inquiry: Fuzzy sets and beyond. Chicago, IL: University of Chicago Press.

Ragin, C.C. (2008). User's Guide to Fuzzy-Set/Qualitative Comparative Analysis. Based on: fs/QCA 2.0. http://www.u.arizona.edu/~cragin/fsQCA/download/fsQCAManual.pdf. Accessed 8 April 2015.

Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. Journal of Management, 34(3), 375-409.

Schneider, C. Q., & Wagemann, C. (2012). Set-theoretic methods for the social sciences. A guide to qualitative comparative analysis. Cambridge, UK: Cambridge University Press.

Scott, A. J. (2001). Globalization and the Rise of Cityregions. European Planning Studies, 9(7), 813–826.

UNESCO, & UNDP. (2013). Creative Economy Report 2013: Widening Local Development Pathways. UNESCO. http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf. Accessed 4 June 2015.

Walker, E., & Brown, A. (2004). What Success Factors are Important to Small Business Owners? International Small Business Journal, 22(6), 577–594.

Yin, R.K. (2003). Case Study Research: Design and Methods. Thousand Oaks: Sage

# THE RE-ORDINATION OF FASHION SYSTEM THROUGH THE EMERGENCE OF NEW ORGANIZER NOTIONS THAT EMERGE FROM THE DYNAMIC OF CONSUMPTION IN FASHION SYSTEM AT PORTO ALEGRE

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### INTRODUCTION

The fashion system is the reflex of the socio-cultural context in whitch it is produced, being directly related to social, cultural, economical, behavioral, historical, aesthetical, indentity and tecnological factors of this scenario. Fashion is driven by a sociological phenomenum that determs its aesthetic context and is related to the emergence of consumption society, turning itself into one of the most important Western institutions and – why not? – one of the most important nowadays institutions.

The german sociologist George Simmel taught us that them factor that impeles the fashion system would have its starting point in the unceasing pursuit for the new and for place of status on society structure, being the fashion directly linked to the aesthetic of appearances. It allows the emerge of social recognizement devices and allows that its subjects can choose how they want to look and present themselves to anothers (SIMMEL, 1961).

As we discuss about this system evolution, we can understand that the production method was guided by High Couture until 1960, when pieces were handmade in a slow and individual process. Just in the second half of the XX century, it started to take another path, where new sectors and production methods started to emerge, and the *pret-à-porter* method arises, whitch culminates in fashion industrialization.

The same industry that makes the prêt-à-

porter evolves even more and with it the way a whole generation consumes and thinks, which obligate the fashion system to reordinate itself again, going to an even faster level. With more appeal to consumption and more creation of desires and needs, we go to the called fast-fashion, used by big magazines to a fast and full of news production, with lower prices than used by the methods before of it.

In the world fashion system logic, we have Europe and United States as the most important Fashion Weeks on Earth, where everything that is relesead is captaded in a very fast and direct way by brands around the world, specially those from South Hemisphere. This wait for what emerges there is so strong that end up on the production of copies of the international models, since society wants to consume what has been released there, and brands follow this path as a way to offer to clients what they want.

### THE FASHION SYSTEM: FROM CULTURAL INDUSTRY TO CREATIVE INDUSTRY

The fashion system is guided by the logic of reinless consumption, the pursuit for the new and reproduction. It is related to the cultural industry, that aims to exclusively generate a standardized consumption and guide the consumers` tastes and desires, without, of course, let them know they are being trapped by a ideology interested on its reproduction. The concept of cultural industrie was proposed by Adorno and Horkheimer in the middle of the 40s, in whitch the industrial

production of cultural goods was analysed as a movement of cultural production of goods with more chances to be consumed. So the term "cultural industry' was associated to the industrial production of cultural goods and services to mass dissemination and marketing (ADORNO and HORKHEIMER, 1991).

The main function of this kind of industry is the production of cultural goods, even thought culture has to loose its original handmade character to become industrial. According to Matterlard and Matterlard, it supplies standardized goods to satisfy the abounding demand and "establish exemplarily the destruction of culture, its decline to the marketing" (MATTERLARD, 2003, P.78).

As already examinated, the fashion system has been reordinating iself from the High Couture production method to the fast fashion, always consonant to new ways of consumption. There are a few factors that boost these transformations even more. Among them, the globalization and mediatization. The first one economically connects markets all over the world. approaching people, brands and, as a consequence, goods; the second one, as the media field, according to Maldonado, "has the quality to pass over through all the other fields, regulating and adjusting them to the expressive and representative media configurations" (MALDONADO, 2002,p.4).

The media crossing on the fashion consumption is easy, since media occupies a central place on the dynamic of fashion trends information to a huge amount of readers who

receive this content online, but also by soapoperas, magazines, newspapers and movies, among others. So Schmitz taught us that, as fashion uses the media to reach the mass and adapt itself to the media protocoles to be merchandised, media works throught some qualitites that were attached to the fashion system, specially after *prêt-à-porter*, when fashion started operating inside the industrial system (SCHMITZ, 2007) and when the time period between a collection and the next one became shorter to allign the three logics of this relationship: fashion, media and the receptor-subject of the media society.

As a consequence of the configuration of the new system, big brands survive peacefully, since they can ensure speed and price to compete because they work with a large volume of production and they look for markets where labour is cheaper to manufature their products. Regarding to smaller brands, a lot of them cannot survive, since they can get to a competitive price due to their low production and the fact that they have to manufature their products in Brazil, where, beyond the expensive labour, there are a lot of taxes. So they cannot highlight themselves on the market.

Before this context, and to walk against that scenario, the smaller brands or the brands/designers that are starting with their bussiness have choosen to have creativity as a friend to create new and creative products/ services, so they could distinguish themselves for the difference and not for the reprodution and standardization.

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Avelas teach us that, in the same way new brands are changing their way of thinking, there is a new generation of consumers that is worried about the future of the planet. These consumers that are starting to see those brands - which, until now, were making their wishes true in a fast way and with cheap prices – as brands that attack the environment and the society by a reinless production of continuous growing strategies. With this concerns, emerges a new way of consumption, the aware consumption, that reordinates the fashion system again with the slow fashion movement, which is qualify as brands that are worried about questions like the finitude of natural resources and are boosting the trend to take care of the environment, which has growed in the last decades (AVELAR, 2009).

In the last decades, a lot of kinds of brands and companies started to recognize the importance of knowledge as production input and realized their role as a trasformer of the productive system. Beyond the innovative and high quality feedstock, the especialized labour and the necessary capital, the companies strategic areas started to understand that creative ideas could be use as a essential resource to obtain value in the company.

As this was being observed completely, new bussiness models and sectors began to emerge, fomenting jobs and wealth generation, all from creative ideas: the creative industries.

The creative industry, according to Hesmondhalgh, is traditionally linked to the creative arts field, with its association to historical and emblematic figures, as the creator genius (HESMONDHALGH, 2012).

Creativity, in other words, the capacity of innovate in a significant way, has transformed itsel in an important factor to achieve competitive advantage to companies in the creative industry. As Florida (2001) teachs us, in almost all of the economy segments, those whitch can create and keep innovating are the ones that obtain long-term sucess. In fact, since agricultural revolution, it was always like that, the diference is that, in the last decades, companies started to recognize the importance of creativity and innovation on their strategic planning and use it to their advantage.

Creative industries, according to Howkins, are those whitch devolpt creative products linked to intelectual properties. The creative economy, on the other hand, is made by the transaction of these products endowed with intangible values. It is the group of activities that results in individuals exercizing their imagination and exploring their economical value. It can also be defined as processes that involve creation, production, distribution of products and services using the knowledge, the creativity and the intelectual capital as the main productive resources (HOWKINS, 2013).

The leading figure of creative economy is the human being. It will be the creativer producer of this kind of industry, and creativity and human knowledge will be its inexhaustible input, what imediatly differs from companies whitch resources are finite and not able to be renewed. In this context,

fashion as a creative industry is considered a sector of creative economy and, therefore, the creative industry.

Creative bussiness like to group, because their products and servies gain with the exchange and interations among their actors and, besides that, they gain with the increasing visibility of a cluster, if compared to the visibility they would have if isolated. They also benefit with common actions and knowledge transmission.

According to Porter, the notion of *clusters* is deeply linked to the crowding of a bussiness area in certain place, in whitch all of the actor interrelate with one another. A geographical crowding of interconnected companies, specialized suppliers, service providers and associated institutions in related industries (PORTER, 1998).

The clustering on creative bussiness also allows the creation of pratical and creative exchange among companies and the obtainment of economy of scales (labour price, atelier oppening, exhibition spaces, etc.)

Now we will bring to the work a brief case study of the only creative cluster in the south of Brazil, the Pandorga Loja Coletiva, a creative space destined to group fashion brands on their beggining level that want to show their products to the final costumer and, if it was not like that, maybe they wouldn't even exist. Pandorga is located on 897 Miguel Tostes street, on Rio Branco district, at Porto Alegre (Brazil), being recognize since its oppening in 2010 as a creative cluster of brands and products that are results of fashion, design

and visual art projects, on a space composed by about fifty brands.

We consider Pandorga a creative cluster because, as explained by Porter (1998), it is also a way founded to reduce the obstacles of creative industries on its beginning, since it enables a highter access to information, network and technical support. Pandorga offers space, clientele, merchandising service, press assistance to constant divulgation of what happens there, besides the events with a big number of guests that walks throught the store and get to know all of the brands. Besides that, there is a lot of social media, as Facebook and Instangram, where contend is created to comunicate these brands.

Each brand has its own space, named *corner*, and display their products there by paying a month tax for it (it can have exceptions) and, besides that, Pandorga add an amount on each product displayed by the brand. Each *corner* has a board with the name



Picture 1 – Vuelo's backpack

of the brand and the products are displayed bellow that.

There are a lot of brands inside Pandorga and, in this study, we will present *Vuelo*, a brand of bags made from tire chambers collected from tire repairs and warehouses. The lining is made with nylon from umbrelas found on the street or collected by recycling ICUs. The brand proposal is extremely creative, sustainable and collective-aware, being related to questions as the sustaintability. We can see a picture of products of the brand: a backpack made with tire chambers and with the lining made with nylon from umbrellas.

The Vuelo project won, in February of 2015, the *Prêmio Brasil Criativo* on the fashion category. The brand keeps selling at Pandorga, but already has its own e-commerce (www. store.vuelista.com) that sells for the whole country, even the expensive pieces if its considered the creation process and more elaborated development.

### CONCLUSION

We started this work by understanding that the fashion system in Brazil still operates under the logic of reinless consumption and the pursuit for the new and the exogenous, the reproduction and standartization, qualities related to the cultural industry. But we can also identify that fashion has been reordinating itself around the creative industry, and that new brands created at Porto Alegre are getting space when ordenated in

this format. Some organizer notions emerge with this model of industry, among them, the creative cluster, whitch we did brief case study about with the only example in the south of Brazil, where we could observe the latent potential of creative industry on the fashion segment at Porto Alegre.

### REFERENCES

ADORNO, Theodor; HORKHEIMER, Max. The Culture industry: elighetenment as mass deception. New York: The Seabury Press, 1991.

AVELAR, Suzana. Moda, globalização e novas tecnologias. Rio de janeiro: Estação das letras e cores, 2011.

BRAGA, José Luiz. Circuitos versus campos sociais, 2012. In: MATOS, Maria Ângela; JANOTTI JUNIOR, Jeder; JACKS, Nilda Aparecida. Mediação e Midiatização: Livro Compós 2012. Salvador/Brasília: UFBA/COMPÓS.

FLORIDA, Richard. The Rise Of The Creative Class: And How It's Transforming Work, Leisure, Community And Everyday Life. New York: Basic Books, 2001.

HESMONDHALGH, David. The cultural industries. Londres: Sage, 2012.

HOWKINS, John. Economia Criativa. São Paulo: M Books do Brasil, 2013.

Maldonado, Efendy. Produtos midiáticos, estratégias, recepção: a perspectiva transmetodológica. Ciberlegenda. Rio de Janeiro, n.9, p. 1-23. [Online] Available at: <a href="http://www.uff.br/mestcii/efendy2.htm">http://www.uff.br/mestcii/efendy2.htm</a> [Accessed July 2015]

Mattelart, A. Introdução aos estudos culturais. São Paulo: Parábola, 2003.

PORTER, M. E. Clusters And The New Economics Of Competition. Harvard Business Review, 1998.

SCHMITZ, Daniela Maria. Mulher na moda: recepção e

identidade feminina nos editoriais de moda da revista Elle. Dissertação de Mestrado. Universidade do Vale do Rio dos Sinos. São Leopoldo: UNISINOS, 2007.

SIMMEL, G. Filosofia de la moda. In:\_\_\_\_\_. Cultura feminina e outros ensaios. México: Espasa Calpe, 1961.

# APPAREL MANUFACTURING 4.0: a perspective for the future of the Brazilian textile and apparel industry

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### INTRODUCTION

From the beginning of the final stage of the Multi-Fiber Arrangement, in 1995, until its conclusion, in 2004, the advantages brought by the exploration of low-wage labor in Asian countries have reconfigured the global production of textile and apparel products (e.g. GEREFFI, 1999; KAPLINSKY, 2000; SCHOR, 2005). Global competition for everdecreasing prices and cost structures centered on low salaries seemed to condemn any mass manufacturing initiative not following this cost strategy to certain failure. The widespread use of unskilled labor prolonged the use of technologically obsolete, manually operated machinery, which in turn inhibited and delayed investments towards industrial automation in the production of mass goods. The displacement of the industrial workforce to Asia was impelled by the computerization of work, the ubiquity of the Internet and private high-speed data networks (GEREFFI, 2006).

In the years that followed, the process of globally integrated value chains was initiated, which generated changes in consumption habits as well as valuable lessons, impelled by new business models as well as communication and information networks. In producing countries, the rise in transportation and energy costs, political, social and environmental risks as well as an increase in wages (DISTLER et al., 2014) coincided with demands to improve quality, increase diversity of styles – introduced by fast fashion

- (AZMEH; NADVI, 2014) and keep up with the trend of individualized consumerism; this confluence gradually shed light on new possibilities for investment in technology for the automation and robotization of the apparel industry.

Cost control, together with the development of new forms of competitiveness based on principles of advanced manufacturing, may alter the geography of global manufacturing in a brief amount of time, including the migration of activities from low cost countries to economies with developed markets (BRYSON et alii, 2013). The return of manufacturing to countries with highly complex economies is considered a certainty by several authors (SIRKIN et alii, 2011; THE END, 2012; EULER HERMES, 2013; FORESIGHT, 2013). Conscious of the opportunity awaiting the textile and apparel sector, the Brazilian Textile and Apparel Industry Association (ABIT), the Brazilian Agency for Industrial Development (ABDI), the Center of Technology for the Chemical and Textile Industry (SENAI CETIQT) together with entrepreneurs, representatives of government bodies, academia, employer's associations and labor unions have promoted a careful futures study in order to establish strategic bearings for the sector.

The objective of this study is to synthesize the main disruptive technologies within four of the sector's strategic emphases, beginning with the identification of fields of technological development that may be obliquely implemented within manufacturing - what we refer to as ubiquitous technology.

Section two presents the methodology for the research, analysis and treatment of information. In section three, we assume an evolutionary focus and describe the main historical stages of global production within the sector, aiming to reveal the emergence of a profound schism in the current conditions for competition and consumption capable of altering industrial structure and organization, as well as introducing opportunities and creating larger risks than those heretofore encountered for the preservation of national productive structures. The fourth section presents the technologies and production methods capable of impelling the textile and apparel industry to adopt principles of Industry 4.0<sup>1</sup>. Lastly, we present final considerations on the study.

### **METHODOLOGY**

We have created a unique organizational architecture responsible for the production, analysis and redirection of prospective studies that precedes the presentation of our final conclusions. ABIT, ABDI and SENAI CETIQT were the institutions that constituted the Management and Knowledge Production Nucleus, responsible for involving 150 people, thus composing the Greater Committee for the Brazilian Textile and Apparel Industry (CSITCB), the body responsible for specifying the study's emphases.

In an eighteen-month period, the CSITCB had three meetings; studies of decision support were undertaken between meetings with the participation of committee members. The CSITCB chose the following four strategic emphases for the futures study: apparel, design, new fibers and new consumer channels, in this particular order. This choice guided the research projects according to literature composed of governmental work, specialized consulting and academic studies, as well as interviews with entrepreneurs selected by the committee. Technological prospecting was guided by the principles of Industry 4.0, with the objective of intensifying entrepreneurial initiatives as well as bolstering investments in science, technology and innovation capable of promoting the sector to a new level of development and socioeconomic representation in the country. Interviews and visits to companies with leaders chosen by the CSITCB sought to establish the mindset of small, medium and large entrepreneurs in regards to the future of the strategic emphases, which, in turn, directed the analysis of the pertinence and relevancy of research

<sup>1</sup> In Germany, the term Industry 4.0 was first used during the 2001 Hannover Fair and is commonly understood as the general application of cyber-physical systems in the production line. In the USA, similar ideas emerged under the name of "Industrial Internet" by General Electric (DRATH; HORCH, 2014, p.56). More recently, the term "Advanced Manufacturing" has come into use, which, nevertheless, has a broader scope than the German concept (cf. NSF, 2015c). Despite the increasing use of the term by businesses, consulting firms, research institutes and universities, a consensual definition of the Industry 4.0 concept does not exist. Hermann, Pentek and Otto (2015) recently produced a working paper defining six main principles associated with the concept in literature.

parameters. Researching available literature resulted in the identification of ubiquitous technological trends; in other words, trends with the potential to impact all technological developments of manufacturing. Given the guidance provided by these technologies, research was conducted into the technological initiatives and trends within the sector that have the potential to transform the industry, which was the final product of this study.

### BRIDGING THE GAP BETWEEN PRODUCTION AND CONSUMPTION

Throughout the process of globalization, the evolution of the textile economy opened new and unforeseen pathways. Fast fashion and global value chains altered the structures and philosophies of production and consumption (GEREFFI; MEMEDOVIC, 2003; AZMEH; NADVI, 2014). The increase in work costs, new development policies, changes in consumer habits and political tensions were some of the causes that mitigated the advantages of low cost competition based on the exploitation of low-wage work (DISTLER et alii, 2014; THE END, 2012). The Internet as well as information and communication technologies disseminated information in real time to anywhere in the world. Consequently, the transposition of physical space became the only limiting and differentiating factor between markets and new products.

At the moment, specialized consultants and analysts estimate that the end of competitive advantages of low-cost manufacturing is near. Outdated technology, productive inefficiency, unskilled work, physical infrastructure and precarious communication only add additional costs; regional political instability introduce threats and increase risks; and long distances increase energy costs (DISTLER et alii, 2014; EULER HERMES ECONOMIC RESEARCH DEPARTMENT, 2013; ELOOT et alii, 2013; THE END, 2012; SIRKIN et alii, 2011). Physical distances between producers and end-consumers become the final bottleneck to be resolved. Consulting firms, government studies and specialized articles (THE END, 2012; SIRKIN et al., 2011; EULER HERMES ECONOMIC RESEARCH DEPARTMENT, 2013; FORESIGHT, 2013) advocate the reindustrialization of countries in North America and Europe based upon the profound creative destruction of the sector's current structures. Modular automation and the robotization of apparel (BOOK et alii, 2010; OWANO, 2012) attract investments from governments and even large global buvers who used to invest in the emigration of production to countries with low production costs.

### NEW TECHNOLOGIES FOR APPAREL IN BRAZIL

Initially, technologies that presented high potentials for implementation and diffusion were selected among the sector's manufacturing technologies identified in the research. We have oriented ourselves according to principles of Industry 4.0, from the unification of material and informational systems through ICTs, sensors, actuators and controllers as well as the development of the Internet of Things and the Internet of Services. Consequently, the fact to consider is that every transaction taking place on the web, including everything that is produced, is, to a large extent, information; thus the importance given to this dimension as a criteria in the identification and selection of these ubiquitous technologies. In regarding information as the mother cell of the new industrial organism, we have selected ten branches of technological knowledge based on the literature consulted (DICKENS et alii, 2013; FORESIGHT, 2013; SHANG et alii, 2013; DEUTSCH BANK, 2014).

- » Automation and robotics
- » Information and communication technologies
- » Sensors and actuators
- » Modeling and simulation
- » Cloud computing
- » Mobile web
- » Sustainable technologies
- » Biotechnology
- » Materials technology
- » Big data and 3D printing

These ten ubiquitous technologies guided the search for disruptive technologies within the four strategic emphases. In Table 1 we have listed the disruptive technologies capable of promoting the sector's transformation in adopting principles of Industry 4.0.

### **MINI-FACTORIES**

A single automated and integrated mini-factory undertaking order processing, design, modeling, double-sided dyeing, labeling, optical cutting, robotic handling, sewing, finishing and shipping, allowing for personalized production with a profit margin two to three times greater than mass production that relies on global supply chains (cf. VIMA, 2015; McCURRY, 2014).

### PURCHASE ACTIVATED MANUFACTURING (PAM)

The PAM strategy is a disruptive technology in the Internet age. Starting with a virtual stock of white fabrics, there are no longer stocks of finished products. Nothing is materially produced before the purchase order is concluded and activated by the consumer. The delivery deadline is instantaneously reduced to a few days instead of months and, eventually, could be reduced to mere hours (POLVINEN, 2012).

### ACTIVE TUNNEL INFUSION

That is, physical rather than chemical dyeing. ATI technology allows for the change of color in each article of clothing, in dyes, designs and prints, eliminating stocks of finished products. The principle of ATI is that the formation of each fiber possesses enough harnessed energy to create tunnels through which the dye may be channeled, penetrating the fiber's interior (POLVINEN, 2012).

### **AUTOMATED APPAREL SYSTEMS**

The Softwear Automation project (GEORGIA TECH, 2014) dismembers the process of sewing two pieces of a fabric into a series of controlled stages, based on the development of four proprietary technologies: conveyor (budger), vision system for quality control, thread-count vision system and handling robot.

### SOCIAL MANUFACTURING

Social manufacturing is a production principle that unites the consumer and the productive system through the integration of project, production, commerce, service, communication, information and computation technologies. Its main characteristic is its emphasis in making individual production, as opposed to mass production, viable (SHANG et alii, 2013).

### SMART TEXTILES AND WEARABLE TECHNOLOGY

The basic concept of a Smart Textile is its capacity to perceive and react to different environmental stimuli. Its main elements are its sensors, actuators and control units. In its most basic forms, the product merely perceives and automatically reacts without the participation of control units or actuators. In its most complex form, a smart textile perceives, reacts and activates a specific function through a processing unit (cf. BERGLIN, 2013; STOPPA; CHIOLERIO, 2014).

### 3D and 4D Printing

Google's Ray Kurzweil foresees that in less than ten years we will be printing our own clothes; in the meanwhile, minifactories will sell directly to their consumers. 4D printing adds time as a variable to the three spatial dimensions. The principle of its conception is based on an object's necessity to adapt to movement (FASHIONLAB, 2014).

Table 1: Disruptive technologies for Apparel 4.0

in the complexity of apparel manufacturing, generating impacts in the entire value chain of production and consumption that may potentially eliminate such barriers as the lack of seamstresses or shortage of talented professionals within the sector. In complex environments, workers act in a more interconnected manner among themselves as well as other companies and must broaden their knowledge. Their productivity is, thus, measured more fluidly given their capacity to contribute to the creation of new value. Professionals capable of creating value may receive higher wages without resulting in a loss of competitiveness. In addition, the virtualization of production eliminates stocks and wastes, allowing for the productive work to be more efficient in regards to the use of energy and materials, also permitting tests to be executed without losses. Experiments to develop new products may be undertaken more frequently and in greater numbers since they do not result in significant waste, further stimulates productive intelligence.

These technologies signal an increase

Another matter that illustrates a chronic difficulty in today's industry is the increase in large-scale retail governance over the production chains. According to the specialists and entrepreneurs interviewed for our study, the increasing competitive fragility of micro and small businesses on account of tax policies<sup>2</sup> is aggravated by

retail strategies that threaten to wipe out multibrand stores, a traditional distribution channel for goods produced by micro and small businesses. Together with the lack of seamstresses, a difficulty in distribution would be a definitive hindrance to the preservation of these structures. Retail entrepreneurs estimate that only a small percentage of micro and small Brazilian apparel businesses are capable of meeting the quality, scale and deadline demands imposed by large-scale retail. Interviewed entrepreneurs revealed that, given both factors, even more cohesive and strategically integrated structures. such as the Local Productive Arrangements (Arranjos Produtivos Locais, in Portuguese). lack sufficient incentives to continue their investments.

Substituting micro and small businesses for automated mini-factories can ameliorate all of these issues. The diffusion of highly technological and sustainable mini-factories, in substitution of traditional microbusinesses, will provide few highly qualified jobs – which will attract talented professionals to the sector. The increase in productivity – guaranteed by automation, robotization and technological integration – together with improvement in product quality as well as low environmental impact will not only meet the demands of large-scale retail, but, more importantly, those of the final consumer.

As for the agglomerations of micro, small and medium enterprises (MSMEs), essential to the reanimation of the industrial

sector, new investments in new production technologies must be made. Fortunately, however, cyber-physical system costs are constantly decreasing. In order to support this leap, research and development institutions must adopt the new role of providing technical assistance to the MSMEs in their reformulation of processes and products in line with principles of advanced manufacturing (BRYSON et alii, 2013).

### FINAL CONSIDERATIONS

Traditionally identified as an industry with low technological intensity, the textile and apparel industry can make a significant qualitative leap in employing more science and technology if it is capable of disseminating cyber-physical systems, the Internet of Things, the Internet of Services and modular automation in its manufacturing processes. Favored by the limitations of competition models based on the advantages of lowcost work, this gradual yet inexorable shift in the degree of technological intensity should significantly reduce Brazil's current difficulties, such as those related to the attraction of talented professionals and unskilled labor. The intensification of the employment of new technologies throughout the entire value chain and the hybridization of products and services should result in changes in the industrial structure, offering opportunities for new business models and changes to institutional profiles.

Small apparel enterprises will be

<sup>2</sup> To learn more about tax policies, consult the RTCC: Regime Tributário Competitivo para a Confecção, in English, the Competitive Tax Regimen for the Apparel Industry (BORGES, 2015)

able to explore their own channels of access directly to the consumer, reducing the power of large-scale retail. Automated, modular, mobile and sustainable mini-factories will be able to couple themselves to systems of virtual production, promoting the restructuring of the industry. The diversity of products with wearable technologies, the employment of biotechnologies and new materials will create new demands for intelligent and functional textiles, exponentially increasing the diversity and technological intensity of threads, fabrics, notions and required auxiliary products to meet new consumer needs. The dissemination of apparel factories adhering to principles of Industry 4.0 should promote the textile industry's qualitative improvement as well as its scientific and technological development.

### REFERENCES

AZMEH, Shamel; NADVI, Khalid. Asian firms and the restructuring of global value chains. International Business Review, v.23, p.708-717, 2014.

BOOK, Wayne; WINCK, Ryder; KILLPACK, Marc; HUGGINS, James; DICKERSON, Steve; JAYARAMAN, Sundaresan; COLLIN, Thomas; PRADO, Ron. Automated garment manufacturing system using novel sensing and actuation. Proceedings of 2010 ISFA. 2010 International Symposium on Flexible Automation. Tokyo, Japan, Jul. 12-14, 2010.

BORGES, Solange. Regime Tributário Competitivo para a Confecção é considerado prioritário para comitê da FIESP. Agência Indusnet FIESP. São Paulo, 20 mai. 2015. Disponível em: <a href="http://www.fiesp.com.br/noticias/regime-tributario-competitivo-para-a-confeccao-e-considerado-para-comite-da-fiesp/">http://www.fiesp.com.br/noticias/regime-tributario-competitivo-para-a-confeccao-e-considerado-para-comite-da-fiesp/</a>. Acesso em 23 mai.

2016.

BRYSON, John; CLARK, Jennifer; MULHALL, Rachel. British manufacturing: where is manufacturing tied locally and how might this change? Future of Manufacturing Project, 2013, Evidence Paper n.3. Foresight. The Government Office for Science, London, out. 2013.

DEUTSCHE BANK. Deutsche Bank Research. Industry 4.0: upgrading of Germany's industrial capabilities on the horizon. 23 abr. 2014. Disponível em < http://www.i40.de/wp/wp-content/uploads/2015/04/Industry-4\_0-Upgrading-of-Germany%E2%80%99s-industrial-capabilities-on-the-horizon.pdf>. Acesso em 21/10/2015.

DISTLER, Jessica; FERNÁNDEZ-SEARA, Javier; GOTTSTEIN, Holger; HAEMMERLE, Volker; RASCH, Stefan; ROHRHOFER, Stefan. Apparel at crossroads: the end of low cost country sourcing. The Boston Consulting Group. Nov. 2014.

ELOOT, Karel; HUANG, Alan; LEHNICH. A new era for manufacturing in China. McKinsey Quarterly, Junho 2013. Disponível em < http://www.mckinsey.com/insights/manufacturing/a\_new\_era\_for\_manufacturing\_in\_china>. Acesso em 15/10/2015.

EULER HERMES ECONOMIC RESEARCH DEPARTMENT. Reindustrilization of the United States. Special Report. Economic Outlook n. 1187, 25 jan. 2013.

FORESIGHT. The Future of Manufacturing: a new era of opportunity and challenge for the UK. Summary Report. The Government Office for Science, London, 2013.

GEREFFI, Gary. International trade and industrial upgrade in the apparel commodity chain IJournal of International Economics, v. 48, 1999

GEREFFI, Gary. The new offshoring of jobs and global development. International Labour Organization (International Institute for Labour Studies), 2006

GEREFFI, Gary; MEMEDOVIC, O. The global apparel value chain: what prospects for upgrading by developing countries? Vienna: United Nations Industrial

Development Organization. 2003.

KAPLINSKY, Raphael. Globalisation and unequalisation: what can be learned from value chain analysis? Journal of of Development Studies, 2000, v. 37.

MCCURRY, John W. Demand-based manufacturing prepares for commercial roll-out. California Apparel News. Monday, July 7, 2014. Disponível em <a href="https://www.apparelnews.net/news/2014/jul/07/demand-based-manufacturing-prepares-commercial-rol/">https://www.apparelnews.net/news/2014/jul/07/demand-based-manufacturing-prepares-commercial-rol/</a>. Acesso em 18/11/2015.

POLVINEN, Elaine. Employing a high profit integrated mini-factory. Virtual Fashion Technology, Set. 2012b. Disponível em < https://fashiontech.wordpress.com/tag/am4u/>. Acesso em 18/11/2015.

OWANO, Nancy. DARPA issues robot challenge to clothing imports. Phis. Org. June 10, 2012. Disponível em <a href="http://phys.org/news/2012-06-darpa-issues-robot-imports.">http://phys.org/news/2012-06-darpa-issues-robot-imports.</a> html#jCp>. Acesso em 19/10/2015.

SCHOR, Juliet. Prices and quantities: Unsustainable consumption and the global economy. Ecological Economics, 2005, v. 55 🛽

SIRKIN, Harold L.; ZINSER, Michael; HOHNER, Douglas. Made in America, again: why manufacturing will return to the U.S.. The Boston Consulting Group. Ago. 2011.

SHANG, Xiuqin; CHENG, CHANGJIAN, Cheng; LIU, Xiwei; MA, Yongjiong; XIONG, Gang; NYBERG, Timo R.. Social manufacturing cloud service platform for the mass customization in apparel industry. IEEE Intelligent Systems, p.220-224, 2013.

THE END of cheap China: what do soaring wages mean for global manufacturing. The Economist. Business. Manufacturing, 10 mar 2012. Disponível em <a href="http://www.Economist.com/node/21549956/print">http://www.Economist.com/node/21549956/print</a>>. Acesso em: 19/10/2015.

VIMA. Purchase Activated Manufacturing, PAM. 2015. Disponível em <a href="http://www.vimalliance.org/what-is-pam">http://www.vimalliance.org/what-is-pam</a>. Acesso em 19/10/2015.

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## TO BUY OR NOT TO BUY: imitation brand name clothing in Turkey

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### INTRODUCTION

Scholars have posited that fashion is not simply about personal style, aesthetics and comfort but a reflection of broader societal dynamics (e.g., Simmel 1957). "[F]ashion becomes an idea of value" as differences in standards of life have become more sharply drawn, allowing fashion as a way to accentuate these differences (Simmel 1957: 547). The value of fashion is often associated with brand names. Brand names are often assumed to set fashion trends with events featuring designers' take on the new season. However, not all these fashion trends or designs are suitable for daily wear or affordable by the general public.

Imitations, in varying degree, of such products allow more people to consume fashion and harvest its value. The choice of brands to "imitate" is not solely based on demand but on available resources, such as extra tags and materials. At the same time, the imitating is not simply about the brand but the symbolisms the brand possesses through visible signs such as the brand name, style, materials, and its foreignness. Foreignness in products is generally assumed to hold higher value than local products (Nakassis 2012).

To capture the imitative variations of brand and brandedness (products that are attractive and stylish and look like they have a brand) in apparels, Nakassis (2012: 705) posits four categories: real (original authorized brand commodity); de-authorized brand commodity (e.g., export surplus or

defect goods); counterfeit, unauthorized original, copy of originals, or copy of brand logo and name; non brand (don't reference brand but are look-a-likes). Other scholars have used different terms to capture the differences. For example, Vann (2006:290) used the term mimic goods to describe imitation goods that are "less-than-perfect versions of the famous products on which they are modeled."

From a legal standpoint, the distinction is a binary between 'authentic' and 'counterfeit.' Fashion counterfeits are the unauthorized "copying of registered logos. brand names, or ornamentation" (Cheek and Easterling 2008: 40). Only brand name owners can produce 'authentic' versions of their brands and products. The implicit assumption of counterfeiting implies product misrepresentation and deception of consumers. However, research has documented that consumers often know what they are purchasing (e.g., Bian, Haque and Smith 2015). Given the variations of imitation, scholars also have problematized binary concepts such as 'authentic' and inauthentic or 'original' and 'counterfeit' in their studies of brand and brandedness in clothing. Studies have shown that consumers' distinction of the different versions of a product focused more on aesthetics, symbolism and value than a legal dichotomy (e.g., Vann 2006).

Few studies have directly examined the purchase of imitation apparels from the perspective of tourists, even though tourists are major consumers in some counterfeit markets (e.g., Hamelin, Nwankwo, and Hadouchi 2013). This study contributes to the current literature by including tourists' perspective along with those of local residents and store owners in Turkey.

### **METHODS**

In 2014-15. I had visited Istanbul. Turkey, about 3-4 times a year, during which I conducted systematic recording of field notes and in-depth interviews. My friendships with store owners gave me entrée and I was allowed to stay in some stores for hours at a time. I have conducted 200 hours of participant observations. I also have conducted 31 indepth interviews. The interviewees included five store owners, ten local residents, and sixteen foreign tourists. Interviews were conducted in English. I employed a grounded theory approach in analyzing the data. I performed a two-stage coding process by first open coding broad themes and then by focused coding using those identified themes. Re-reading and familiarizing myself with the data. I was able to discover and develop a deeper understanding of the empirical world as presented by my participants. To ensure anonymity, I only identify participants using their country-of-origin, and a code for data reference.

### RESULTS

This study examines the views and

behaviors of consumers towards imitation brand name apparel. The results are consistent with earlier research showing that criminality, brand symbolism, aesthetics, and worth are considerations in whether or not to buy imitation brand name clothing. In addition, the location of manufacture, and brand illusion style are two new major concerns impacting participants' views.

### Criminality

Most participants buying these products do not necessarily consider the act criminal. One justification used is that these products are commonly sold on the streets and in stores which means that they cannot be totally illegal. Only foreign tourists would sometimes mention that these are illegal in their country. Interestingly, though, this became a reason for them to purchase these products because of their scarcity in their home country. If there is any concern, it is generally related to peer impression -- being embarrassed if they are caught by friends for using imitation products rather than fearful of legal authority for purchasing them.

The knowledge of what is legal and what is strictly enforced is not complete or consistent for participants. On one hand, consumers who are aware or paid attention to the legal issue of such products have generally seen campaign announcements against supporting this industry by not buying "knock offs" or read about them in the news media. On the other hand, store owners see the

issue as a combat for profits between larger companies and smaller businesses, and do not see the products as necessarily against the law.

Brand Symbolism And Brand Aesthetics

Brand names are attractive to some participants because of their symbolism (e.g., Chen, Zhu, Le, and Wu 2014). Displaying ownership of these products connotes class affiliation and global connectivity which could form an important aspect of one's identity. For some participants the apparels need to be as close to the original as possible and they are willing to pay a premium price for them. For others, having a brand name is sufficient to invoke the idea of fashion.

Murat (Turkey e30) mentions that putting on a label allows him to sell the product at a higher price: "people are more willing to pay more money if there is a brand. It doesn't matter whether they are the correct label." This is consistent with Nakassis' findings (2012: 713): "...without the label, without the tag, without the visible marker of the brand... the shirt would look 'bad' and 'ugly'... the garment would look 'cheap.' But putting these brand names and logos... would make the shirt look more 'royal' and attractive."

The desire to look good is conceptually different from wanting to look rich. However, what constitutes fashionable is often shaped by what the media portrays to be trending nationally and internationally. As such, fashion and wealth are often intertwined. Imitation

brand name clothing (in its various forms) in a way represents a form of affordability fashion. What some participants seek are the aesthetics that are deemed fashionable and not solely for the brand name. Jenny (Singapore e13) and Erdi (Turkey e22) both share that they buy clothing primarily because they look good on them and not necessarily for the brand.

### Worth

Worth is this study is defined as value for money. This is not just about the apparel being cheap but that the price is worth paying for given what the apparel would bring to the consumers. Imitation apparel offers a range of quality corresponding to sale prices. Comments from participants include: "I will buy a good and cheap tee shirt even if it is a copy" (India r29); and "I am not paying so much just for the brand name. If the clothes fit me and serve the purpose. That's fine with me" (Turkey r2). Decisions to purchase these products are not simply an aspiration to look rich. "[C]onsumer decision making was a careful balance between cost and quality, style and durability" (Vann 2006: 291).

### Location Of Manufacture

The location of manufacture is another determination of the worth of the apparel raised by participants. Foreign tourists are more likely to mention this aspect of the

apparel than local residents. In fact, only one local resident mentioned this but it is in the context of buying gifts for friends in other countries. For some foreign tourists, locally manufactured products are sought after and make better souvenirs. According to Lim (Malaysia r4), "I didn't come all the way here to buy something that is made in China. I might as well get them from home." Joyce (USA r31) claims that "everything made is outsourced and made in other countries. It is refreshing to buy clothes made locally."

Even store owners know how to utilize the concept of "made in Turkey" to sell their apparels. Some of them play with the words and argue that "made in Turkey" renders the apparel 'original' and 'authentic'. I have overheard a shopper asking if the clothes are 'copies' and the owner answered that "It is original made in Turkey." I also have observed many racks of clothing with the 'made in Turkey' label in one store.

### **Brand Illusion Style**

Owning and using both imitation and non-imitation products are common among some wealthier "savvy" consumers - consumers who are able to optimize their resources, fool others with their imitation products, and, enjoy the experience of shopping (Perez, Castaňo and Quintanilla 2010). However, some participants primarily enjoy the mix and match of wearing both imitation and non-imitation brand name clothing. To them, it forms a different style with the

combination. Like matching colors, this style is about making the combination fashionably presented and subtle.

These participants see this as broadening the shopping activities. They claimed that they would purchase them only if they come across something suitable. These participants also mentioned that imitation brand name apparel could look even better or be more unique than the non-imitation ones. May (USA a10) uses the phrase "brand illusion" to describe that mixing. Steve (USA a1) reports that "The styles and design vary from country to country even if it is the same brand. Sometimes the imitation ones are even more attractive and stylish. I don't mind as long as the quality and style is right. Most people cannot tell anyway. It adds diversity to my wardrobe and it is fun to mix and match."

### **Incomplete Information**

The first four issues have been surfaced in earlier studies. The location of manufacture becomes important from a transnational perspective when we consider tourists in local consumption. From a fashion angle, the idea of brand illusion is interesting as it added another dimension to styling practices. While all these six issues underscore why consumers might choose to purchase, it is also clear that consumers are a diverse group that cuts across nationality, class and gender.

Consumers' lack of awareness of certain brand names and training to differentiate the apparel, and having the apparels sold in stores further complicate the question of whether the apparel is imitation or non-imitation. Including foreign tourists' perspective complicates the issue of awareness of brand names. Tan (Singapore e5) shares that "There was a show that got some celebrities to play a game of guess whether a product is original or counterfeit then got an expert to explain how to tell the difference. It's like a guessing game essentially for most." Joyce (USA r31) ponders over the complexity of how to tell if apparel is imitation or not: "Those selling on the streets or those that are too cheap are probably imitation stuff. But can imitation clothing be sold in stores?"

Education and exposure might help solve this challenge. However, who should assume such responsibility and investment is the question. At the same time, knowing the difference and seeing buying imitation apparel as an unethical behavior do not necessarily translate into not making such purchases (e.g., Cho, Yoo and Kim 2005).

### The Issue Of Inequality

Attempts to understand the factors influencing imitation apparel purchases often returned to the question of what could be learned from them to prevent and discourage further engagement in this counterfeit market. Often neglected in this discussion is the broader issue of inequality that exists. In a way, buying counterfeit product is not simply a legal or criminal issue but could be interpreted as reactions to the boarder question of

inequality. Some participants comment: "Not only the rich can look good" (Germany e15); and "They claim so much money lost because of counterfeit sales but whose money is lost? Definitely not the people sewing the clothes in the factory!" (USA r19).

This is not to excuse any actions that are deemed illegal under the law. However, the underlying problem of social inequality should not be dismissed. Some participants view imitation brand name apparel in its varying forms as an access to otherwise unaffordable fashion. Store owners view these laws and its enforcement as a form of oppression against small local business as exemplified by these participants: "Those big companies have the money to police us. We are not even making that much money and we have to pay fines when they come" (Turkey e30); and "Police come and only check for certain brands, generally international brands like Nike" (Turkey f14). What is interesting is that they seem to assume that other brand names', especially local designers, lack of enforcement on this issue as 'accepting' such business practices.

From these perspectives, Poddar et al's (2012) argument that companies should include improvement of their perceived corporate citizenship as well as lower price differentials between the two versions of the product as part of their strategies to combat the sale of counterfeit products. Perceived ethical questions in these purchases (e.g., Kozar and Marketti 2011) could be confounding what individuals perceived as

being law abiding or being a modern day Robin Hood. For example, Jean (USA e7) shares that "I like to think that I am supporting small local business" and Stephanie (Taiwan r12) comments that "I don't even think about if that sweater is counterfeit or not. I feel bad seeing that man sitting on that street the whole day and selling them for a few bucks each. I hope he doesn't have a family to feed."

Economic inequalities exist among individuals in both the local and global context. The more difficult and larger sociological challenge is the role in which fashion chooses to play in this context. Clearly, this is not an easy question to answer when competing corporate interests and politics might be involved.

### **CONCLUSION**

In this study, I highlight six reasons that potentially affect consumer decisions whether or not to purchase counterfeit apparel: criminality, brand symbolism, aesthetics, worth, location of manufacture, and brand illusion style. These are important information to learn when trying to understand the phenomenon. However, we also need to recognize and address the larger picture of inherent inequalities within the context that fashion is situated.

Several issues need to be examined more in-depth and on a broader basis. First, we need to understand the extent consumers make distinction among the different variations of imitation brand name apparel. It is not

only important whether they make a clear black and white distinction but also where the line is drawn. Second, more effective communication and education are needed for consumers. Appealing solely to consumers' morality is not sufficient as some of them see the imitation brand name products as making fashion accessible and more equitable. Third, a more in-depth examination of the extent perceived corporate citizenship would have on consumer behavior is warranted.

### REFERENCE:

Bian, X.; Hague, S.; Smith, A. Social power, product conspicuousness, and the demand for luxury brand counterfeit products. British Journal of Social Psychology, 54, p. 37-54, set 2015.

Cheek, W.; Easterling, C. Fashion counterfeiting: consumer behavior issues. Journal of Family and Consumer Sciences, 100, p. 40-48, set 2008.

Chen, Y.; Zhu, H.; Le, M.; Wu, Y. The effect of face consciousness on consumption of counterfeit luxury goods. Social Behavior and Personality, 42, p. 1007-1014, set 2014.

Cho, H.; Yoo, J.; Kim, K.P. J.. Ethical ideologies: do they affect shopping behaviors and perception of morality? Journal of Family and Consumer Sciences, 97, p. 48-55, set 2005.

Hamelin, N.; Nwankwo, S.; Hadouchi, R. E. Faking brands: consumer responses to counterfeiting. Journal of Consumer Behaviour, 12, p. 159-170, set 2013.

Kozar, J. M.; Marcketti, S. B. Examining ethics and materialism with purchase of counterfeits. Social Responsibility Journal, 7, p. 393-340, set 2011.

Nakassis, C. V. Counterfeiting what? Aesthetics of brandedness and brand in Tamil Nadu, India.

Anthropological Quarterly, 85, 701-722, set 2012.

Perez, M. E.; Castaňo, R.; Quintanilla, C. Constructing identity through the consumption of counterfeit luxury goods. Qualitative Market Research: An International Journal, 13, p. 219-235, set 2010.

Poddar, A.; Foreman, J.; Banerjee, S.; Scholder, E.P.. Journal of Business Research, 65, p. 1500-1506, set 2012.

Simmel, G. Fashion. The American Journal of Sociology, 62, p. 541-558, set 1957.

Vann, E. F. The limits of authenticity in Vietnamese consumer markets. American Anthropologist, 108, p. 286-296, set 2006.

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# POTENTIATION OF FASHION'S INDUSTRY OF PARANÁ NORTHWEST: a SEBRAE's project

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# INTRODUCTION

The Paraná Northwest region consists of 61 municipalities, and second SESC Cultural inventory data its population is estimated at 630,421 inhabitants. For its marketing feature of the development in the regional economy leading industries is the garment industry, including is known as runner's Fashion (Londrina - Maringa - Cianorte). Within attended garment sector in the region, we highlight the sub-sectors: womenswear, menswear, jeans, printing, accessories, childrenswear.

Based on the importance of the sector for the region and the growth of international competition, Sebrae, which aims at guiding the development of micro and small businesses, presented to the entrepreneurs of the sector a specific design for fashion. The project was entitled "Enhancement of the fashion industry of Paraná Northwest", the basis for measurement is about the diagnosis of management excellence model (MEG).

The project has a horizon of four years, and in this sense, is born the objective of this work, which is to present and discuss the proposed actions in 2015. After all, we consider this fundamental assessment for the conduct of work and achieve the proposed objectives.

# **THEORY**

Gorini (2000) points out that the

international competitiveness has taken other standards, which do not highlight only the price, but, quality, flexibility and product differentiation. In this sense, globalization brings together textile technology with hand-cheap labor, after all, despite the development of technology that sector remains dependent on labor-intensive. The author also points out that in this scenario it is essential that countries pursue the formation of economic blocs.

Based on international competitiveness, each fiercer day, Brazilian industries need to adapt to international standards. Therefore, it was necessary to seek a management measurement instrument that has its formulation based on international standards of management.

To view the current instrument, the National Quality was based on users MEG Foundation, experts and major international awards for quality, as Malcolm Baldridge, European Quality Award, Singapure Quality Award, Japan Quality Award and Australian Quality Award (FNQ, 2013).

The Excellence in Management Model (MEG) allows to evaluate the degree of maturity of the management through the identification of management processes and the main results of the company. The same is structured on eight criteria of excellence, which are: leadership, strategy and plans, customers, society, information and knowledge, people, processes, results. The issues of diagnosis allow the evaluation of these criteria tangibly and measurably (FNQ,

2016).

- » Clients: Analysis and market development, understanding of the needs and expectations of current and potential customers, brand management and organization's image and relationship with customers.
- » People: work systems, identification of skills, selection and integration of people, performance evaluation, compensation and recognition, training and development, preparation of new leaders and quality of life.
- » Leadership: Organizational culture and development management, governance, risk, interaction with stakeholders, the exercise of leadership and organizational performance analysis.
- » Strategies and plans: Formulation and implementation of strategies, through analysis of internal and external environments, intangible assets such as the definition of indicators and targets, action plans unfolding
- » Society: Social responsibility and social development, including identification of needs and expectations of society, compliance with the law.
- » Processes: value chain processes in interaction, designed to meet the requisitosde products, stakeholders, carrying out the transformation and delivery of the organization, considering highlighted those related to suppliers and the economic and financial.

- » Results: Presentation of strategic and operational results relevant to the organization, in the form of indicators to evaluate, on the whole, improved results, the level of competitiveness and the fulfillment of commitments to stakeholder requirements in the economic and financial outlook, environmental and related to customers and markets, people and value chain processes.
- » Information and knowledge: organization of information, from the identification of needs to the implementation of the information system and management of organizational knowledge, to identify, develop, retain and protect, disseminate and use the knowledge needed to implement the strategies (FNQ, 2013, p. 14-15).

The operation of the model is inspired by the PDCA (Plan, Do, chech, learn), and in this sense is a systemic model of learning and continuous improvement. It is emphasized that it is not prescriptive in this sense is what encouraged the entrepreneur is the reflection and learning based on the proposed questions (FNQ, 2016).

In short, MEG allows the measurement of the degree of management of companies, as well as reflection and learning of the entrepreneur. It is used as a conceptual basis of the Empowerment Project of Industries of Paraná Fashion Northwest.

# **METHODOLOGY**

This study aims to present and discuss the proposed actions in 2015 for fashion companies of the State of Paraná Northwest by Sebrae, in particular the "Empowerment Project of Industries of Paraná Fashion Northwest." To meet this objective, a bibliographical research was initially carried out in books, yearbooks sector and articles, in order to raise numbers on the scenario of the textile industry in the last four years, presenting the actions that are being practiced in other states by entities to support the industry and the union.

The field research consisted of: (1) identify the initial score of the companies in relation to the Model of Excellence in Management, (2) present actions for development of organizations, (3) to evaluate the participation of companies in the proposed actions.

In this sense, it was used initially the diagnosis of MEG, which has quantitative character collection and tabulation of data. This instrument consists of 37 questions that analyze eight dimensions of business: leadership, strategy, customers, society, information, people, processes and results.

The sample consisted of 30 companies in the Maringa and Cianorte region in the Northwest Paraná State. Since these companies have a turnover of up to 3.6 million yearly, to be considered micro or small companies, audience Sebrae.

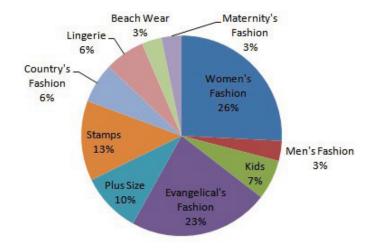


Figure 1 -Segments.

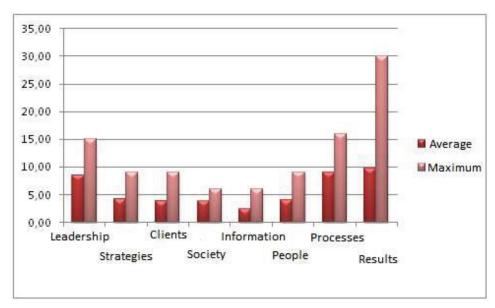


Figure 2 – Scores of MEG.

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# **RESULTS**

Profile Of Project Participants Enterprises

This work is focused on a sample of 30 micro and small enterprises in the region of Maringá (Maringa, Cianorte, Floraí, Colorado, Astorga, Mandi), which composes the Empowerment project Industry of Paraná Nororeste of Fashion. The same are divided into ten segments, especially women's fashion (27%), as shown in graph 01.

Regarding the sales channel used for marketing the product, there is the wholesale (33%) and sales through representatives (33%). Since the same company often use more than one sales channel for the flow of goods.

# Action Plan

As discussed in the methodology, the MEG diagnosis consists of eight dimensions, the sum of the scores of all sizes allows for a score of 100 points. In the graph 03, the mean have submitted by 30 companies attended the Project in 2015, and the maximum that could be achieved in each dimension.

Note that all dimensions have possibilities for improvement still, however, there are the results and information dimensions as the lowest average relative (percentage of the maximum value that can be achieved), respectively presenting the following percentages, 32.4% and 38.83%.

Based on this diagnosis, was built a set of actions based on four pillars: excellence in management, quality, productivity and certification, innovation management and finally, access to market.

Regarding the ALI program, 90% of companies met in aderiaram project. The ALI program aims to promote the practice of innovation activities in small businesses. A fellow agent CNPq and trained by SEBRAE is

Excellence in	» Workshop Excellence Model in Management - MEG
	Workshop In Strategic Planning
Management	D C 7 11 . TAT 1 1
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	» Circuited Competitive Intelligence 2015-2016
	» Consulting In Strategic Management
Quality, productivity and	» Workshop and consulting: 5S;
certification	
Innovation management	» Local-agent Innovation - ALI
	» Round Technology
	» Workshop Social Networking
	» Supplier -Thurs for Clothing Industry - FFIC
	» Mission For Walk Fashion summer 2016 to meet new
	components for the fashion industry (Assintecal partnership)
	» Mission For Walk Fashion Winter 2016 to meet new
	components for the fashion industry (Assintecal partnership)
	» Workshop For Development and Creation of Collections at the
	sight of the Italian Giulia Tesorieri
	» Workshop Trends Inova Fashion (SENAI, Sindvest and APL)
	» Forum Inspirations Summer 2016 and Winter 2017
	» Rota Inspirations - Isabela Capetto
	» Snoop Fashion
	» Workshop-creation - Walter Rodrigues
	» SEBRAETEC - Consultancies for technology and innovation
Market access	» Workshop Commercial Management Representatives
	» Workshop Brand Positioning
	» Workshop New Business Models - Enrico Cietta
	» Consulting Commercial Representatives Management
	» Visit The technical Sebrae SP and Brás market and Oscar Freire
	» Showroom MG (partnership with Sinvespar)
	» Mission SPFW
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Table 1 -Action Plan.

designed to monitor the company for a period of two years, spreading innovation concepts according to the needs and characteristics of each organization (SEBRAE, 2015).

The Sebraetec is a grant offered to micro and small enterprises for innovation development (product, process or markeking) in the year 2015, 80% of companies received this support. With this grant the company pays only 20% of the costs related to the investment, and it can only be applied to services. The main applications of this Sebraetec group were: production (PCP and Layout), E-commerce and Digital Marketing. Also, it has been the consulting In Company, which was requested by seven companies, primarily in the area of finance and trade.

In addition to the program ALI and consultoriais, the program offered 22 meeting, through workshops, courses, missions and lectures. In this sense, the group was divided into three, according to the frequency of interest. The first group had an average of 60%, the second 33% and finally, the third group with 17%. This assessment of the participation of companies and the satisfaction for each event, identifies the really effective actions as well as companies that are interested in developing, allowing for correction of both actions as a filter of the participating companies.

## CONCLUSION

The central objective of this work was to present and discuss the proposed actions

in 2015 for fashion companies of the State of Paraná Northwest by Sebrae, in particular the "Empowerment Project of Industries of Paraná Fashion Northwest."

First, we measured the degree of maturity of company management through diagnosis of MEG, thus identifying the points of improvement.

In this regard, the Company has presented the project, aligned within the four action pillars: Model of excellence in management, innovation, productivity and certification, and also access to the market. The main actions are focused on: collective actions, such as lectures, workshops, missions and training; and individual actions, such as consulting, in company or through Sebraetec grant.

And finally, there was the frequency of group participation, which clearly observed a strong demand for ALI and Sebraetec program; and for collective action, it was possible to break the group into three, the first with a strong participation and the latter with low interest in the actions proposed.

It is hoped that this set of actions present significant impact on the management of the company and consequently the next measurement of the diagnosis, which must take place between August to October 2016.

## REFERENCES

Gorini, Ana Paula Fontelle. Panorama of the textile sector in Brazil and in the world: restructuring and prospects. 2000. Available in<a href="https://web.bndes.gov.br/bib/jspui/bitstream/1408/3226/1/BS%2012%20Panorama%20">https://web.bndes.gov.br/bib/jspui/bitstream/1408/3226/1/BS%2012%20Panorama%20</a>

do%20Setor%20T%C3%AAxtil%20no%20Brasil%20 e%20no%20Mundo\_P.pdf>. Access March 14. 2016.

FNQ. Model of Excellence in Management. 2013. Available at <file: /// C: /Users/marcela/Downloads/modelo\_de\_excelencia\_da\_gestao\_meg\_fnq.pdf>. Access 7 March. 2016.

FNQ. Model of Excellence in Management. 2016. Available at <a href="http://www.fnq.org.br/avalie-se/metodologia-meg/modelo-de-excelencia-da-gestao">http://www.fnq.org.br/avalie-se/metodologia-meg/modelo-de-excelencia-da-gestao</a>. Access 7 March. 2016.

SEBRAE. Guide to Innovation: Guidance Instrument for actions to improve the dimensions of innovation. Curitiba: Sebrae / PR, 2015.

SESC. Cultural inventory. Available in <a href="http://www2">http://www2</a>. sescpr.com.br/inventario/regioes.php?cod=13>. Access 13 in October 2015.

# TREND FORECASTING AND FASHION DESIGN: consumer context related to development methods

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### INTRODUCTION

Fashion is a social phenomenon that relates to all areas of knowledge, from architecture, through clothing, and influencing even the decor and politics (MONTEMEZZO, 2003; RECH, 2001). According to the definition of Caldas (2004), fashion apparel "is a type of phenomenon, because of its dominant character, eventually become the finished model of consumption: the rapid and constant production of schedule obsolescence<sup>1</sup>, a permanent race forward". Cidreira (2005) defines fashion as a personal expression, linked to personality, adaptable, and inseparable from behavior. In addition, for Filipecki (2008), "clothing is protection, identity and culture. Clothing is language. And also, since the first Industrial Revolution, labor market".

Therefore, it is possible to see that fashion is present in society as a matter of comprehensiveness and economic importance, translating personalities and serving as a means of communication and interaction.

From the advent of Prêt-à-porter, the fashion market found itself in the midst of "a desperate search for predict and anticipate future trends in order to obtain a higher level of competitiveness in relation to competition,

<sup>1</sup> Planned obsolescence is a term that defines the change of attitudes in enterprises in the era of consumerism. Companies implement "programmed failures" that will force consumers to replace goods with new products, even though the technology (design, materials and manufacturing) are advanced enough that the product has a much better life than the effective (KISCHINHEVSKY, 2007).

which is wide" (CARRICO, 2012). Trend forecasting agencies, also called Bureau of Style, arise in this context with the main goal of selling fashion predictions. From information and signals issued by society and its relationships, the Bureau of Style build trends companions.

This paper will analyze the most relevant characteristics of the methods of fashion product development, studied and proposed by Rech (2001) and Montemezzo (2003) and compare them with the research carried out by WGSN, an important trend Bureau of Style. This comparison may serve as a basis for understanding the positive opportunities that greater integration between research trends and product development processes can bring to fashion industry. In order to achieve this goal, this paper will be characterized by Basic Search nature, with a qualitative approach. As purpose, part of this work will have exploratory research character and part will have explanatory research character. As a means of investigation, the literature will be used - using materials published in books, magazines, newspapers, conference proceedings, Internet, among others - and desk research - basically the research and documentation of procedures of the Bureau of Style which is the object of this study.

# FASHION PRODUCT DEVELOPMENT BY SANDRA REGINA RECH

Aiming precisely at the adequacy of product development methods to the

characteristics of the fashion industry, and relying on product design guidelines from Slack, Chambers and Johnston (2002), Rech (2001) describes a method of fashion product development comprising five phases:

Concept Generation, Screening, Preliminary design, Evaluation and improvement, Prototyping and final project.

Is possible to verify that the understanding of the particular characteristics of the development of fashion products is central in the method proposed by Rech (2001):

Upon the development of new products and the launch of new product lines, the company must turn sharply to capture the desires and needs of consumers, as it is these desires (conditioned by the general objectives of the company), the availability of materials and the effective use of resources that guide the fashion design process (RECH, 2001)

# METHODOLOGICAL GUIDELINES FOR DEVELOPMENT OF FASHION PRODUCTS BY MARIA CELESTE MONTEMEZZO

From the method proposed by Lobach (2001), based on the characteristics previously submitted and maintaining the commitment to balance the needs of consumers with technical-productive aspects, Montemezzo (2003) defines five stages as her methodological proposal:

Preparation, Generation, Evaluation, Implementation, Documentation for the production.

Montemezzo (2003), in the presentation of her methodological guidelines, highlights the importance of adequacy of fashion product to the characteristics of "social phenomenon of fashion". Companies looking to differentiate in this competitive market should be those who can get innovation in its products at feasible cost also meeting the physical and psychological needs of consumers.

# **FASHION TRENDS RESEARCH**

Fashion trends are translated directions of the cultural language of a particular time and society. They are always worked in future time and are the driving agents of the cyclic behavior observed and so evident in fashion. Come from the analysis of social phenomena widely disseminated (CAMPOS; RECH, 2008).

The macro trends are criteria and market strategies based on analysis of human behavior in various contexts, such as sociocultural, political and economic (SILVA; SATO, 2009). The macro trends, therefore, always guide the beginning of the research trends. This becomes even more evident when we consider that, according to Sproles (1981) fashion is applied to a much larger universe than just clothing, ranging from art and education, to literature and science.

The micro trends are one of the main driving forces of the fashion consumption. They change every season and represent the various facets of public taste; generate desire because they reflect, within the larger context of the macro trend, different lifestyles and preferences, often with several different coexisting micro trends (MARTIN, 2010).

# Trends Research In The Bureaux Of Style

Currently, the Bureaux of Style are the main source of reference in fashion trends forecast. The Bureaux are organizations that have many professionals who transcribe their observations on the society's behavior in a verb-visual companion that serves as a forecast of what will be adopted by consumers in the future (PASCHOAL, 2012; MARINS, 2008).

Bergamo (1998) corroborates the connection of the Bureau of Style with micro trends to say that the work of these organizations is based on the identification of strengths and niche desires passing hitherto unnoticed by the rest of the population. Thus, the Bureaux can transform this information into potential economic strength to fashion companies.

# WGSN'S TRENDS FORECAST: FORECAST TO CONFIRMATION

The megatrend "Rational", presented by WGSN in 2012, with reference to spring/ summer of 2014. In this material, WGSN explores the "Math influences in design, and the fascination that mathematicians, as well as designers, have in the search for the ultimate symmetry found in everyday objects and nature, in order to create a new universal aesthetics" (SARDOUK, 2012).

Trends reference panels consist of a set of images and texts that aim to illustrate and shape the direction of each megatrend line (FIG. 1). The panels follow an organized pattern, with four to five slides, with a maximum of five images and a short text with the verbalization of the trend and/or an example of work related to the trend. Each set of trends is related to

the reference color palette, where the whole set of images remains consistent in its color composition.

Below, in Figures 2, is presented a report excerpt generated by WGSN with the confirmation of the megatrend 'Rational'. Among the various models, color palettes, materials and textures, you can see that different brands eventually provide consistent collections with what was shown in the megatrend forecast panels.

Prior to July 2012, several events



FIG. 1 - Example of a panel of one of the guidelines from megatrend "Rational". (SARDOUK, 2012).



FIG. 2 – Panel showing confirmation of the trend forecast regarding materials and textures. (SARDOUK, 2012).

worldwide, in various industries, influenced directly in determining the macro trend presented as an example in the present paper.

In 2011, for example, chronic unemployment faced by Tunisia, led the population to violent protests, also compounded by allegations of brutality by police, which ended in the death of at least 24 people. As a result, President Ben Ali fled the country into exile in Saudi Arabia<sup>2</sup>. Also in 2011, after the accident at the nuclear

power plant in Fukushima, Japan, American engineers signaled the nuclear power plant still had serious problems regarding to contamination of the Pacific Ocean water. Although health officials ensured Americans that fish consumption was still not being affected, New York restaurants bosses, for example, began spontaneously to check with a radiation detector all seafood and fish served in restaurants<sup>3</sup>.

In 2012, it is possible to highlight

additional relevant events for the economic. social and technological scenarios. Early in the year, Greece was facing serious economic problems, which led the Greek parliament to approve new austerity measures in order to guarantee foreign loans needed to avoid inevitable breaking of the country. At least 80,000 people came out in protest, and more than 40 buildings were set on fire by Molotov cocktails<sup>4</sup>. In Syria, attacks by government killed 32 children in Houla village. The UN Security Council criticized the excessive use of force by the government, which claimed to be a terrorist attack<sup>5</sup>. The critical situation in Syria, around June 2012, escalates to civil war, declared by the United Nations<sup>6</sup>. Analysis of the facts in the two years prior to the launch of the megatrend 'Rational', you can highlight key words, as shown in table 1, summarizing the essence of the time and events that can be related to the topic addressed by WGSN's forecast.

In light of the macro vision of all these events, is possible to identify that in 2011 and 2012, the social, economic and environmental

<sup>2</sup> Source: Protests Spread to Tunisia's Capital, and a Curfew Is Decreed. Disponível em: www.nytimes. com/2011/01/13/world/africa/13tunisia.html?\_r=0. Acesso em 12/10/2014.

<sup>3</sup> Source: NYC restaurants defy government reassurances about Fukushima by voluntarily testing fish for radiation. Disponível em: www.naturalnews.com/032029\_fish\_radiation.html. Acesso em 12/10/2014.

<sup>4</sup> Source: Photos of Greece in turmoil: Protesters riot over EU austerity measures. Disponível em: http://news.nationalpost.com/2012/02/12/photos-from-riots-in-greece-over-unpopular-austerity-measures/. Access 12/10/2014.

<sup>5</sup> Source: Dozens of Children Die in Brutal Attack on Syrian Town. Disponível em: www.nytimes.com/2012/05/27/ world/middleeast/syrian-activists-claim-death-toll-in-villagesoars.html?pagewanted=all. Access 12/10/2014.

<sup>6</sup> Source: Syria conflict now a civil war, U.N. peacekeeping chief says. Disponível em: http://www.reuters.com/article/2012/06/12/us-syria-crisis-unidUSBRE85B11V20120612. Access 12/10/2014.

inputs, ended up directly affecting the construction of the trends presented in this section. As shown in the release of 'Rational' trend, the search for mathematical accuracy, symmetry and aesthetics conformity, are factors that, after all, mean reduction, optimization and economy (for example, the economy of materials obtained through automated processing of materials, such as laser cutting, proposed in trend forecasting 'Rational').

Unemployment - riots -cuts >> reduction

Threat - control >> restriction

Break - force abuse >> austerity

Less - breaking - aggravation >> extremes

Table 1 – Words summary that relate to the moment of the forecast 'Rational'. Source: the authors.

# **CONCLUSION**

The objective was to show, in detail, WGSN tools in parallel to development of methods optimized to meet the specific characteristics of fashion products. This parallel, therefore, it is useful to visualize how trends forecasting can bring the benefit of inspiration, strategic positioning and suitability for the target audience, to systematized design methods. It is important to note, as Caldas (2004) stated, that there is a "fine line between the referenced creation and pastiche", so it is extremely important that the development of fashion products is grounded in tools that

help not only in methodological coordination of the creation process, but also in the systematization of the references and market positioning.

Further, it is possible to signal that trends research integrated to development process becomes a key factor for the emergence of a genuinely Brazilian fashion. Brandini (2009) points out that the new Brazilian fashion uses its local culture and ethnic references, not art and traditional culture references, as does the traditional European fashion.

However, Brazilian references, to some extent supported by our historical past, should not be totally set aside. The "well done Brazilian", explains Leitao (2007a), is the attempt to circumvent the antagonism of not copying and at the same time serving from Brazilian stereotypes. According to the author, it is necessary to reinvent the Brazilian traditions in order to "build authenticity achieved by parameters that sometimes hang down to the picturesque, the 'tourist'".

Both in the model of development of fashion product proposed by Sandra Regina Rech, as in that one proposed by Maria Celeste Montemezzo, you could see how the social issue of fashion, the meanings, market characteristics, desires and needs of consumers are important themes that constantly permeate the various steps of the method. The objective of this paper was to precisely align product design and methodological strategies of product development that within the scope of fashion development, are two confluence fronts in

achieving a successful product that meets both the wishes of consumers, as the concerns of manufacturers. In this sense, it would be interesting to extend the analysis of issues such as: the development of forecasting agencies focused trends in the Brazilian public; which are the necessary changes to the forecast trends in order to make them more accessible for Brazilian fashion companies that have different values and references from foreign companies; and assess, in detail, the influence of the two main characters of the fashion market, user and industry, in the research and trend forecasting.

# REFERENCES

BERGAMO, A. O campo da moda. Revista de Antropologia, v. 41, n. 2, 1998.

BRANDINI, V. Fashion Brazil: South America style, culture and industry. In: The Fabric of Cultures: Fashion, Identity, and Globalization. Oxon: Routledge, 2009.

CALDAS, D. Observatório de sinais: teoria e prática da pesquisa de tendências. Rio de Janeiro: Editora Senac Rio, 2004.

CAMPOS, A. Q.; RECH, S. R. Futuro do presente: porque e como pesquisar tendências. In: FEEVALE. 40 Colóquio de Moda. Novo Hamburgo, RS, 2008.

CARRICO, D. V. Cool Hunting como metodologia de pesquisa de tendências e gestão da inovação aplicada ao sector da moda. Dissertação (Mestrado) — IPAM - The Marketing School, Porto, 2012.

CIDREIRA, R. P. Os sentidos da moda. São Paulo: Annablume, 2005. Citado na página 10. CLARK, K. B.; FUJIMOTO, T. Product development performance: strategy, organization, and management in the world auto industry. [S.l.]: Harvard Business Press, 1991.

# **Trend Forecasting and Fashion Design**

FILIPECKI, B. Moda... quatro letras. In: 0 ciclo da moda. [S.l.: s.n.], 2008.

KISCHINHEVSKY, M. O rádio sem onda: convergência digital e novos desafios na radiofusão. Rio de Janeiro: E-papers, 2007.

LöBACH, B. Design industrial: bases para a configuração dos produtos industriais. São Paulo: Blucher, 2001.

MARINS, A. De onde vem as tendências? In: FEEVALE. 40 Colóquio de Moda. [S.l.], 2008.

MARTIN, L. V. Curso de diseño de bolsos y carteras: tendencias y armado de colección. Buenos Aires: [s.n.], 2010.

MONTEMEZZO, M. C. Diretrizes metodológicas para o projeto de produtos de moda no âmbito acadêmico. Dissertação (Mestrado) — Universidade Estadual Paulista - Faculdade de Arquitetura, Artes e Comunicação, Bauru, 2003.

PASCHOAL, N. E. Construção de um Bureaux de style: uma análise da metodologia para a pesquisa de tendências de moda. Dissertação (Mestrado) — Uniritter, 2012.

RECH, S. R. Qualidade na criação e desenvolvimento do produto de moda nas malharias retilíneas. Dissertação (Mestrado) — Universidade Federal de Santa Catarina, 2001.

SARDOUK, I. Forecast - Megatrends Rational - Youth/ Active - S/S14. 2012.

SILVA, J. S.; SATO, S. K. Aplicação das macrotendências no gerenciamento das marcas contemporâneas. Revista Administração e Diálogo, v. 12, n. 1, p. 46–58, 2009.

SLACK, N.; CHAMBERS, S.; JOHNSTON, R. Administração da produção. São Paulo: Atlas, 2002.

SPROLES, G. B. Analyzing fashion cycles - principles and perspectives. Journal of Marketing, v. 45, n. Fall, p. 116–124, 1981.

# CRAFTWORK BEYOND FOLKLORE: possibilities of handicraft in brazilian fashion industry

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# INTRODUÇÃO

Ronaldo Fraga went to Passira, a town located in Ceará, Northeast of Brazil, to discover the bordadeiras association and the traditional embroidery work that is developed in the modest, small town. After that, he created a collection with the bordadeiras collaboration that was presented in São Paulo Fashion Week. After that, the Passira embroidery workers were documented in GNT Fashion, a TV program lead by the influent fashion journalist Lilian Pacce<sup>1</sup>.

Craftwork has been more and more valued as a way to aggregate value to products in fashion industry. In Brazil, since the 1920's it is a way to confer some kind of identity to national fashion, so pursued by fashion brands, designers and media, in contraposition to an European or North American dominant fashion (Neira, 2008).

Leitão (2009) talks about the discourse of "brasilidades" in brands and business aspects. Nature is perceived as a mold for a Brazilian character, impulsioned by "legitimating instances" like fashion journalism and critic. She cites an episode when she interviewd a fashion consultant about a beachwear runway show that happened in Fashion Rio with the theme "Indigenous Graphics":

Quando um consultor de moda carioca foi entrevistado, ainda que as perguntas versassem sobre os usos

<sup>1</sup> The interview can be seen on: http://gnt.globo.com/moda/materias/e-o-destino-desta-segunda-feira-e-pernambuco.htm

do artesanato na moda brasileira, o primeiro exemplo de 'bom uso da cultura brasileira' na moda do país que lhe veio à cabeça foi justamente tal coleção. Segundo o consultor de moda, o uso 'do índio em nossa moda é necessário porque é o que tem de mais roots, de mais tradição, e fica uma coisa séria, sóbra'. Quando perguntado sobre a razão do adjetivo 'séria', ele responde que 'não é um festerê colorido, tem um refinamento porque as pessoas conhecem menos, tem uma tradição cultural'. Tal fato nos permite pensar que talvez o índio, nessas instâncias produtoras e consumidoras de alta moda, ainda ocupe um lugar de 'outro exótico', menos próximo qie, por exemplo, a cultura negra. (LEITÃO, 2009: P. 154)

Lina Bo Bardi claims that this is folklore, and we should run away from it. Folklore is not craftwork, it is romanticized, and it puts in the right place "incômodas e perigosas posições da cultura popular periférica". (1994: p. 29)

Indeed, textile craftwork is important and very representative to Brazilian culture. But using craftwork made by traditional artisans, ghettos and communities in fashion designer products aggregate value for the artisans themselves? How is Passira after Ronaldo Fraga? What do they gain in exchange to sell their work to fashion brands? Do brands "save" craftwork traditions by using

them in a new consumption context? Do artisans actually need fashion designers to develop new and innovative products? That is what this article want to discuss, based on bibliography about the subject and on the experience of the authors themselves with craftwork and handicraft teaching for artisans communities.

# **CRAFTWORK INDUSTRY IN BRAZIL**

Craftwork is a big industry in Brazil. A study made by Sebrae in 2010 defines 9 types of craftwork: arte popular (popular art), artesanato, trabalhos manuais (handicraft), produtos alimentícios (food goods), produtos semi-industriais ou industrianato (semi industrial products), artesanato indígena (indigenous craftwork), artesanato tradicional (traditional craftwork), artesanato de referência cultural (cultural reference craftwork) and artesanato conceitual (conceptual craftwork).

The main difference between in all these categories remains in craftwork and handicraft. The definition of 'artesanato' in the study is:

[...]define-se como artesanato toda atividade produtiva que resulte em objetos e artefatos acabados, feitos manualmente ou com a utilização de meios tradicionais ou rudimentares, com habilidade, destreza, qualidade e criatividade. (Sebrae, 2010).

Meanwhile, handicraft is a product of manual hability, but it is necessary, in this case, to use a mold and predefined model (Sebrae, 2010). In 2010, more than 64% of the Brazilian cities had some kind of typical craftwork. Lina Bo Bardi is more strict in the definition of craftwork. She says that craftwork, a tradition of one specific people in a speficic time, never really existed in Brazil – what we have is a 'pre craftwork' that came with immigrants from iberian countries and Italy, and which is domestic and sparse. So, she calls what is made in Brazil "Popular Art" (1994).

Many os these crafts, mainly the textile ones, are inside a gender context, made by women and passed from mother to daughter, uncle to niece etc. (ALMEIDA, 2013; KANAMARU; MATSUSAKI, 2013; ANGELO, 2005). Angelo (2005), describing her interviews with lace workers from Santa Catarina, claims that:

As memórias das rendeiras estão diretamente ligadas ao trabalho, o que parece ser uma das características mais marcantes do cotidiano dessas mulheres, que, com seus cinquenta, sessenta ou setenta anos de idade, rememoram suas trajetórias de vida por meio da confecção das rendas de bilros. (Angelo, 2005: 134)

Craftwork is based, historically, in corporations and guilds – it is never individual, like industrialized society (Bo

Bardi, 1994). Nowadays, craftwork is still marked by these corporations. Formally, there are several kinds of artisans associations. They can be a collective (cooperativa), an autonomous institution that is based on colective property and profit distribution (it has to have 20 members or more), or an association, institution which is not to profit, the two main types, and many others (Base Conceitual do Artesanato Brasileiro, 2012).

Brazilian artisans has a great capacity of association for improvement of their work conditions, sales increase etc. Ana Julia Melo Almeida (2013) shows, in her study within the Passira embroidery workers, that the lace workers are extremely organized. They created AMAP – Associação das Mulheres Artesãs (Association of the Women Artisans), to be more productive, teach techniches between each other and find more strategic ways to sell their product, not only in town for turists that are around there. They participate in fair and events, helping to make Passira embroidery more known and relevant around all country.

Keller (2014), interviewing net artisans that work with buriti fiber and live in Maranhão, discovered that the artisans who made only nets with buriti in the past had developed new products themselves to adjust to tourists demands. Using government help like Sebrae to capacitação courses, they've found a way to improve the products and profits from the technich they already had been doing.

### **DESIGN AND CRAFTWORK**

Design has traced its history distant from craftwork. Industrial revolution has separated the intellectual work from the mechanical one. (Santana, 2012). Design appears as a strategy of industry's profit increasement: instead of many artisans, one can hire one designer, a management worker and plenty of ill-paid workers. (Santana apud Cardoso, 2004).

In fact, every garment product has the handmade work behind it, even if it's made by the industrial process. It is one of the last industries which still use the taylorist method for industrial work. The human hand, hability, skill, is necessary for the success of garment manufacturing (MEIRELLES; CIPINIUK, 2012).

Santana quotes Marx, when he claims that the object holds off from the worker, it is a strange object and becomes an "independent power of the manufacturer" (2012). The worker does not have control or knowledge about the process of making that product. That's a logic of money accumulation. Keller claims that "with the progress of the capitalist industrial manufature mode, Marx points for a process of 'decomposition' of the artisan activities on the diverse operations they compose" (2014, p. 325). There is a seggregation between know-how, intellectual work from hand work.

For craftwork, it is necessary the full participation os the artisan in the process. Lina Bo Bardi (1994) claims that Popular Art is not alienation. People know how to do it, why they do it etc.

Traditional craftwork has to make sense for the ghetto it is inserted. Bo Bardi, speaking of Northeast Popular Art, claims that one day it will all desappear, and it should be, with the necessary increase of the rural work yield. (1994). Even if the social situation of a people is vulnerable, the resignation is never complete. Underdog groups always develop strategies of fighting, resistance and fleeing from their own realities, even if they don't realize they do that. (DARCY DE OLIVEIRA; DARCY DE OLIVEIRA, 1981).

# CRAFTWORK IN BRAZILIAN FASHION BRANDS

According to Appadurai (1990), to insert products in a context that is not probable, the economic value fo this products would be increased. That is what happens when craftwork goes to a new context, like prêt-à-porter fashion. This products are created by the demand of people who value social and sustainable aspects of them.

Ronaldo Fraga is one of plenty of fashion designers that works with artisans to develop collections with "handmade allure". Just in this article from Folha de São Paulo's blogs, *Protagonistas da moda discutem mão de obra artesanal nos 20 anos de SPFW* (2015), the designers Fernanda Yamamoto and Ronaldo Fraga are cited as using craftwork in fashion collections.

But the same article talks about an artisan who saw in a fashion magazine a R\$15000 dress that was made with the same lace

# **Craftwork Beyond Floklore**

work she used to charge R\$60 per line ball. The fashion brands providers travel through Northeast to find the best and cheaspest lace. The lace workers, who are in a vulnerable situation, accept the price and gain a Brazilian minimum salary (R\$742 at the time of the article). Santana (2012) claims that companies which doensn't care about artisans own identity is not craftwork at all, because it decharacterized and ignored the producer from the process.

None of this fashion designers actually used craftwork, if we use the Marxist concept of it appointed by Santana (2012), or the concept of Popular Art by Lina Bo Bardi (1994). The final product has nothing to do with the artisans themselves. Only their hand work is used, they are not really connected with the product. If there is not this connection, there is not craftwork. Keller (2014) use the term "industrianato" (something like industrywork) to describe hand works like embroidery or laces used as a regular industrial, and cheap, labor.

Another way to designers contribute with artisans is to participate with educational programs. Santana (2012) is very critical about this kind of designer contribution, claiming that, sometimes, the projects give a good visibility for the designer and doesn't really help the artisans communities. Darcy de Oliveira and Darcy de Oliveira remember Paulo Freire when they say that education is not synonymous of knowledge transference because there is no knowledge ready and done, that passes from teacher to student.

Reality is invented and reinvented all the time, and the real education is dynamic and knowledge centered on discovery, analysis and transformation of reality (1981).

Bo Bardi criticized what she called a "paternalist mithology", as a way to free the artisan – and the Brazilian design itself:

Precisamos desmistificar imediatamente qualquer romantismo

a respeito da Arte Popular. Precisamos nos libertar de toda a mitologia paternalista, precisamos ver, com frieza, crítica e objetividade histórica, dentro do quadro da cultura brasileira, qual o lugar que à Arte Popular compete, qual sua verdadeira significação, qual o seu aproveitamento fora dos esquemas 'românticos' do perigoso folklore popular. (BO BARDI, 1994: p. 25)



Figure 1 – Artisans practice textile painting during Vem Ver project

# THE 'VEM VER' EXPERIENCE

Between August 2014 and Novembre 2015, we've participated on a project sponsored by Proac – Programa de Ação Cultural from São Paulo province, whose goal was to teach handicraft techniches for women of vulnerability situation. The project, named Vem Ver (Come and see), was accomplished in Cubatão, Campinas and São Bernardo do Campo. It was conceptualized to be handicraft (with predefined model), but we instead wanted to let the women create the models themselves. The techniches was textile painting, handmade print, "arte francesa" and button mosaic.

During the course, it was a challenge to show to those artisans that they could create their own pieces. We demonstrated naif art, and explained that they don't even need to know how to draw in a formal way, but only do what they wanted to, inspired by the environment they were sorrounded. But our examples and explanation was way too far from the realities they were living, and we felt we didn't understand everything they said, did or felt about the work they were doing. It was a huge challenge, intercepted by our ignorance about the artisans lives and processes.

In the end of the project, although there was a lot of copy and "kitsch" elements (like a Mickey or Peppa Pig pillow), we get to make some of the artisans to create. The results, in some of them, were wonderful, but very incipient yet. In 2016, we will work with 6 new groups of artisans in 6 different

cities in São Paulo, and we hope to improve our methodology, knowing the artisans perspectives better.

# CONCLUSIONS

We agree with Lina Bo Bardi when she claims that there is no good for people in vunberable situation to put craftwork as "folklore", within our industralized society. When an artisan is ill-paid to do a laborious job to other people – crossers, brands, the designers thelselves – to profit with expensive products, just a few people receive benefits from the typical products of our "brasilidade".

There are a lot of experiences in Brazilian fashion that values craftwork and the traditional communities and ghettos who do it, but with little or none benefit for the community itself.

An artisan should be inserted in fashion industry as an independent player. He or she should be paid well for their work, be part or aware of the entire process, put their indentity – always as a corporation, never individually – in their products and not be just a simple way of cheap "industrianato". As Santana (2012) claims, it is necessary to emancipate the artisan.

# REFERENCES

ALMEIDA, Ana Julia Melo. Design e artesanato: a experiência das bordadeiras de Passira com a moda nacional. Dissertação de mestrado em Têxtil e Moda. Escola de Artes, Ciências e Humanidades da

Universidade de São Paulo, 2013.

ANGELO, Elis Regina Barbosa. Tecendo rendas: gênero, cotidiano e geração. Lagoa da Conceição – Florianópolis – SC. Dissertação de mestrado em História Social. Pontifícia Universidade Católica de São Paulo, 2005.

APPADURAI, Arjun. Introdution: commodities and the politics of value. In: The social life of things. Cambridge: Cambridge University Press, 1990.

BARDI, Lina Bo. Tempos de Grossura: o design no impasse. Ed. Instituto Lina Bo e P. M. Bardi, São Paulo, 1994.

Base conceitual do artesanato brasileiro. 2012. Disponível em: <a href="http://www.desenvolvimento.gov.br/">http://www.desenvolvimento.gov.br/</a> arquivos/dwnl\_1347644592.pdf>. Acesso em 28 de março de 2016.

DARCY DE OLIVEIRA, Rosiska; DARCY DE OLIVEIRA, Miguel. Pesquisa social e ação educativa: conhecer a realidade para poder transformá-la. In: Pesquisa participante (org. Carlos Rodrigues Brandão). São Paulo: Brasiliense, 1981.

DINIZ, Pedro. Protagonistas da moda discutem mão de obra artesanal nos 20 anos de SPFW. Matéria de 18 de outubro de 2015. Disponível em: <a href="http://www1.folha.uol.com.br/ilustrada/2015/10/1694841-protagonistas-da-moda-discutem-mao-de-obra-artesanal-nos-20-anos-de-spfw.shtml">http://www1.folha.uol.com.br/ilustrada/2015/10/1694841-protagonistas-da-moda-discutem-mao-de-obra-artesanal-nos-20-anos-de-spfw.shtml</a>>. Acesso em 28 de março de 2016.

GUERRA, Flavia. Ronaldo Fraga, o estilista aprendiz. Folha de São Paulo Blogs. Disponível em: <a href="http://cultura.estadao.com.br/noticias/geral,ronaldo-fraga-o-estilista-aprendiz,554939">http://cultura.estadao.com.br/noticias/geral,ronaldo-fraga-o-estilista-aprendiz,554939</a>>. Acesso em 28 de março de 2016.

KANAMARU, Antonio Takao; MATSUSAKI, Bianca do Carmo. Fios entrelaçados. 9º Colóquio de Moda, 2013. Disponível em: <a href="http://www.coloquiomoda.com.br/anais/anais/9-Coloquio-de-Moda\_2013/COMUNICACAO-ORAL/EIXO-8-SUSTENTABILIDADE\_COMUNICACAO-ORAL/Fios-entrelacados.pdf">http://www.coloquiomoda.com.br/anais/9-Coloquio-de-Moda\_2013/COMUNICACAO-ORAL/EIXO-8-SUSTENTABILIDADE\_COMUNICACAO-ORAL/Fios-entrelacados.pdf</a>> Acesso em 28 de março de 2016.

KELLER, Paulo. O artesão e a economia do artesanato na sociedade contemporânea. Política e Trabalho - Revista

# **Craftwork Beyond Floklore**

de Ciências Sociais, n. 41, out 2014.

LEITÃO, Débora Kirschke. O Brasil é uma paisagem: moda, nação, identidades, e outras invenções. Iara – Revista de Moda, Cultura e Arte – São Paulo – V.2 No.2 out./dez. 2009 – Artigo 1.

MEIRELLES, Luisa Helena Silva; CIPINIUK, Alberto. Considerações sobre os limites entre o trabalho artesanal e o industrial na produção de vestuário. In: Inovação, estudos e pesquisas: Reflexões para o universo têxtil e de confecção. Volume I: Inovação, tecnologia e gestão. Rio de Janeiro: Senai/CETIQT, 2012.

NEIRA, Luz Garcia. A invenção da moda brasileira. Caligrama – Revista de Estudos e Pesquisas em Linguagem e Mídia. Vol. 4, nº 1, Jan/Abr. 2008.

OLIVEIRA, Pedro Renan de. Cultura nordestina: das grandes referências à (re)utilização de matéria-prima regional em produtos de moda. Iara: Revista de Moda e Arte, São Paulo – V. 6 | Número 1 / 2013.

SANTANA, Maíra Fontenele. Design e artesanato: fragilidades de uma aproximação. Cadernos de Gestão Social. Vol. 3, n.2, jul./dez. 2012

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Termo de referência – Atuação do Sebrae no Artesanato, 2010. Disponível em: <a href="http://intranet.df.sebrae.com">http://intranet.df.sebrae.com</a>. br/download/uam/Pesquisa/Artesanato/Termo%20 de%20Referencia%20Artesanato%202010.pdf>

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# WE HAVE TO TALK ABOUT FORCED LABOR: an analysis of the current behavior of mass consumption

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# INTRODUCTION

This research presents the relationship between fashion and consumerism, at how to identify the way it affects consumption habits on our population. The importance here is to provide a wider comprehension of the events and the system fomenting the fashion market and the fashion industry, and to suggest less impacting options to the social, economic and environmental means associated to fashion production.

The goal in this research is to perceive how production and excessive consume are arousing irregular production chains all over the world, and that they are encouraging waste and significance depreciation. More specifically, fashion is figured here as playing the role of connecting past, present and future endorsing individualism and favoring harmful attitudes over the being's self-reflection and thinking. Furthermore, the globalization impact into fashion and consumption range are measured approaching economic aspects involving the development of fashion wholesale and retail industry in underdeveloped nations. Another important goal of this research is to indicate the processes of chain productions inside the work environment, its conditions and technicality, evidencing corporative abuse and questioning the fashion's neglect towards objective life standards.

Thus, the first part of this article brings out fashion as provoking consumerism in the modern society, tiding its causes and

effects into a social structure. In a second moment, fashion is defined as unbridledly interpreted and overvalued by the individual. overpassing meanings and distorting ethical principles. From that, the concept of branding embraced by fashion brands is introduced. as a consequence of globalization and of a capitalist system moving the current world economy. In the sequence, the definition of contemporary slave work is set, based on national and international organizations researches, such as the Brazilian office of the International Labour Organizations (2009) in order to identify specific matters related to Brazil; and the NGO Repórter Brasil (2015) the main organism for investigation, research and communication of this issue in the whole country.

# **FASHION TO BE CONSUMED**

In order to understand the current mass market we must think fashion as the main gear stimulating all behavior of contemporary society. Not only through clothing but through all fabrics inside our homes, fashion translates social and aesthetical aspects of a certain time, location and generation. According to Lipovetsky (1989), fashion is a social mechanism characterized by a time gap particularly short and by its changes, which through them fashion reaches distinctive circles of the collective life. Cobra (2010, p.126) complements this definition saying that:

Fashion is, above all, a business following the economic trend, the life styles and the behavior, but mainly people's desire. In this sense there is a worldwide integration and, at the same time, interdependence of and among markets.

Therefore, the fashion principles would be to create new necessities in a constant increasing speed, as the old ones already bored us. As the market analyses cannot dictate these needs because they do not exist yet, there is no other way then create them.

The endless acquisition and discard of products are the driving force of the axis in the textile industry. Following the logic of fast fashion, product's life is becoming shorter, forcing markets to increase their sales to compensate it, causing even faster storage renewal and restructuring. Once the consumers reach the capital and the symbolic power, they conquer the driving power behind the consumerist's behavior and the exaggerated disposal. Pierre Bourdieu (1983) believes that belongings determine the individuals' personality. Thus, possessing and consuming goods represent more than simple acquisitions – the added value of this belongs go beyond them. It is well known that people do not buy only to meet their basic needs, "they also satisfy explicit desires, conscious desires, or even hidden ones located in the subconscious". (COBRA, 2010, p.26-27). The industry takes advantage of these wishes to create false necessities and also, due to the

desire of possessing, to make the individual works in endless buying cycles, evoked by impulse, momentary satisfaction and by significance rejection.

In a civilization where even the most economically deprived classes are stimulated to consume in order to become part of a social dynamism, created expectations naturally change into frustration when they are not accomplished. This vicious circle is kept by the constant sensation of emptiness, left by the fast obsolescence of consumer goods. Then a new search for significance begins – and this is introduced as a palliative solution to compensate the modern life disillusions.

The consumer, whose ego is the target of the most subliminal strategies of fashion marketing, is seduced by the beauty of the products, by its differential and by its added value, and he/she may no longer consider *important or fundamental the products* origin or the conditions the product was acquired, profited or transformed into common good. [...] Bearing it in mind, we can also find - considering the set of contemporary practices on fashion world, from cruelty and perversity dissimulators to pacifists and politicians committed with style movements. Yes, one of the options of fashion is the euphemization of the complete brutality and of the pain it may have caused when extracting and obtaining a specific matter, instead

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of the promotion of a given symbolic data added to the product. (DE CARLI; MANFREDINI, 2010, p.69).

On this context, where viewpoint is more worthy than being or possessing, the responsible ones for managing the brand identity start to analyze their own work as competing directly against the factory production and not by their same side. In other words, these companies found out that branding could be used to substitute the whole added value of these products. Naomi Klein (2008, p.119) explains:

According to this logic, the corporations should not waste their own limited resources in factories that may require solid maintenance, with machinery that may erode or with employees that will get old and die. Instead, they should concentrate their resources on the elements used to build their brands; i.e. sponsorship, package layout, company expansion and publicity. They should also spend on synergy: on buying distribution channels and retail chain to take their brands in contact with people.

By the logic, when a factory process is unappreciated, it is more likely that the factory workers are belittled and discarded. Today immigrants are found working in shuttered basements, containers and buildings without any condition of hygiene and safety. In most

of the cases, these workers are children and young women obeying more than 12 working hours per day. The owners of these productions take advantage of their extreme poverty and vulnerability: "[...] the concerned corporation guarantees they do not have to face the possible matter that there are adults supporting their families depending on the salaries they are paid". (KLEIN, 2008, p.264).

It is known that the society reflect on their actions a set of ideas and values to justify what they produce and consume, thus building its own logic to define perceptions, to create needs and to expand markets. Nevertheless, there is yet, in our globalized world, a great parcel that shows not to understand how products with such conflicting prices are made.

Our huge productive economy demands that we settle consumption as a way of life, that we convert shopping and use of goods into rituals, that we search our spiritual and ego satisfaction through consumption. The social status, the social acceptance and the prestige are now set by our consumption standards. [...] The greater the pressure on an individual to accept these social standards, the more these individuals tends to express their ambitions and individuality by the way they dress, drive, eat. (LEBOW, 1955, p.3).

On the 50's, the American economist and

retail specialist Victor Lebow already dealt with the unstoppable consumerism coming from the American lifestyle. The changes on this scenario demanded other appeals to these necessities, and nowadays the industry has to deal with overproduction and crammed storage faster and more efficiently: offering big and seasonal clearance sales. Even by the end of each seasonal cycle, the advertised price does not pay by the whole process this product passed thorough.

According to Parode, Remus and Visoná (2010) when we deepen into fashion structure, it is possible to realize how it shows only a small rate of its ambitious and productive machine, capable of always generate renewable concepts. Actually, if a deeper analysis about its methods and product conceptions is done, it will be found that the formation process of territory, logic and system of power have not became less unfair over the centuries.

### CONTEMPORARY SLAVE LABOUR

On its 'traditional' format, exploration of manpower is justified by beliefs, agrarian structures and production cycles inherited by colonialism. Such habits are a result from a discriminative system, and from social inequality related to minorities – like tribal nations or casts in Asia, or the indigenous nations in South America. With the arouse of globalization and migration, the most 'modern' way of exploitation is associated to illegal search for financial advantages, through

various actions.

Since the 60's, many economic changes all around the world caused strong swifts in the working relationships. In the last years, more than a quarter of world production is made in China – the rest in produced in Bangladesh, India, Turkey, Mexico, Haiti, Cambodia, Pakistan and Romania. (LEE, 2009). According to Walk Free Foundation reports (2014), it is estimated that 35,8 million of people live in working condition similar to slavery in 167 countries, where 71% are located in India, China, Pakistan, Uzbekistan, Russia, Nigeria, Democratic Republic of the Congo, Indonesia, Bangladesh and Thailand. Notwithstanding the information source for this quantitative estimated data is a rigid evidential process, the reliability of the numbers is also reflected on the quality and the quantity of free accessible information, e.g. there are areas where this awareness is weak or the freedom of expression is restricted, so the data are less trustful.

There are many reasons why these industrial activities were transferred from United States and Europe to those countries. Thereby, Berlim (2012) explains that the development of strict labourite and environmental regulation in Europe would be one of the determinant factors. Apparently, the textile companies' adequation to a new regulation would be more costly than to move to another country – which would enable them to implement traditionally cheaper practices. Both in industrialized countries and urban zones, cases of immigrant workers in bonded

labour or coercion are increasing.

Forced Labour

The International Labour Organization (ILO, 2009, p.1) defines forced labor as "an antithesis for dignified labour". As a practice that violates human rights because of exploitation and abuse of vulnerable people, it is absolutely considered a crime for compromising social, environmental and psychological structure of the population – ILO argues that poverty is a fundamental factor in forced labour, as it can also be considered an immediate cause.

Not long ago, forced labour and human traffic were phenomena rising in very poor communities and remote locations, but in the last years these crimes are frequently found in big urban centers. To Martins (2002), forced labour is an expression within the contradictions of capitalist development, which foments means to amplify the extreme efficiency of the accumulative mechanism. Modern slavery uses a great number of vulnerable people to this kind of abuse: instead of paying the necessary amount to afford a worker, the system discards this worker according to its own necessity, turning this activity less costly for business owners. (BALES, 2000).

> The contemporary kind of slavery does not chain its victims, but denies them dignity and freedom. The slavery legacy and its agrarian structure

left their strong roots on countryside organization: the land concentration worsens socioeconomic vulnerability of thousands of workers whose, in the lack of options, are obliged to accept unhuman life and working conditions. (ONG REPÓRTER BRASIL, 2015).

Considered an even worse kind of extortion, the similar-to-slavery conditions embrace two aspects: the individual's dignity and freedom – for restraining substantial needs of human being existence, such as feeding, education, dwelling and health. This exploitative system justifies their choices on the regional cultural. Even if this practice was common in certain places, it disrespects the dignity and suppresses the liberty of the worker. Once this kind of attitude is already considered criminal all around the world, it cannot be characterized as a cultural manifestation. (ONG REPÓRTER BRASIL, 2015).

When we are not part of this minority, it may be hard to understand: the common sense even questions, in the XXI century, how can someone be deluded by false promises of a better life with so unreal high income? First, it is important to notice that these workers have no idea that they are servants in an unjust system suppressing their rights. They come from precarious places, they were not alphabetized and are not aware of their rights and duties – most of them believe they are in a better situation then in their original country, and just the idea of losing what they have got

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so far already causes fear and moves away any attempt of resistance.

Many workers are forced to sleep in their working place, usually in makeshift workshops without dwelling structures. It is very common to find rotten food and dirty water being consumed – besides the dangerous conditions they are already exposed. These workers hardly receive enough food or money to buy it, and every cent they produce has discounts for bondage debt. Deluded by the idea of a better life, these workers arrive on their workplace already owing the money of their ticket to arrive there, and their debt even grows with ungrounded discounts.

# **Actions Fighting Slave Labour**

Since 1995, when the first Special Group for Mobile Operation (GEFM) investigated slavery work in Brazil, 43.545 people were released. Between 2003 and 2009 more than 60% were illiterate or had less than 4 years of education. (ONG REPÓRTER BRASIL, 2015). These data show that those children have not had the chance to study in order to help in their household or even to fight for survival - what clearly connects slavery and child work. But freedom does not mean problem solved in Brazil. The 2nd National Plan to Eradicate Slave Work<sup>1</sup> previses that fighting to stop this vicious circle should be by three complementary action fronts: prevention - through information and formation;

assistance – with cooperativism and victim's classification; and with crime punishment. (SEDH, 2008).

The International Labour Organization was created in 1919 as part of the Treaty of Versailles<sup>2</sup> and has been working at "the formulation of international standards to be adapted by every country, to guarantee the defense of the right of the workers". (OLIVEIRA; SETTON, 2006, p.36). From 1930 on, ILO strives to keep the countries unite and to make them aware of manpower exploitation, but only after the 90's projects, with technical cooperation, they started to be developed (ILO, 2005).

Annually an International Labour Conference is set to discuss problems related to work. The organization focus is on engaging both local governments and social interlocutors. The problem exposure as a social and economic matter caused many countries to adopt a legislation categorizing these practices criminal. But the lack of ascertainment on identifying these cases ends up providing poor resources to establish and approve penal actions; moreover it restricts society and media awareness – two of the main characters to terminate this problem. Journalist and doctor on political science, Leonardo Sakamoto (2014) confirms that:

For [...] them to be punished, the press – one of the main responsible for

the symbolic making on our daily lives – must ensure not to display wrong cases. Because if everything is slave labour, nothing actually is.

# FINAL AND PARTIAL CONSIDERATIONS

The fashion industry needs to produce to keep surviving in the market and the consumer needs to keep on buying to maintain profits and turnovers. Everything happens simultaneously, culminating in an individualized society and unstoppable consuming habits. Berlim (2012, p.141) highlights the man's influence on social contexts explaining that "one cannot condemn fashion to capitalist chaos, because [...] before capital's existence there was already a being and its identity". Excessive consumption is directly encouraged by globalization, thus fomenting capitalism, which increases market competition. An even more complex cycle is identified, but it is also noticeable a counterculture movement inclined to change this reality. Fashion brands, ONGs and means of communication already show consumers the need of environment conservation. Our society already lives a more mature era and perceives sustainability - achieving new interactions among users, creators and designers, pushing the companies to adequate to their new habits.

To understand contemporary slave labour, it is required a lot of effort in order to build a global consensus to systematically deal with the problem. It is needed time, resources,

<sup>1</sup> It is a referential document in Brazil to combat slave labour.

<sup>2</sup> This Treaty ended the First World War. It is founded on a basic conviction that universal peace is permanent and should be based on social justice.

coherence and, in many cases, courage. Thereby, it will be possible to develop and to disseminate the necessary tools to ensure efficiency on those actions. It is essential to be intensive on training the population, the governments and the organizations, to ensure a wide sustainability to combat forced labour.

# **REFERENCES**

BALES, Kevin. Disposable People: new slavery in the global economy. London, England, University of California Press, Ltd, 2000.

BERLIM, Lilyan. Moda e sustentabilidade: uma reflexão necessária. São Paulo, Estação das Letras e Cores, 2012.

BOURDIEU, Pierre. Gostos de classe e estilos de vida. In: Ortiz, Renato (Org.). Bourdieu. São Paulo, Editora Ática, Coleção Grandes Cientistas Sociais, 1983.

COBRA, Marcos. Marketing e moda. São Paulo, Editora Senac São Paulo, Cobra Editora e Marketing, 2010.

DE CARLI, Ana Mery Sehbe. Moda no terceiro milênio: novas realidades, novos valores. In: DE CARLI, Ana Mery Sehbe; MANFREDINI, Mercedes Lusa. Moda em sintonia. Caxias do Sul, RS, Educs, 2010.

KLEIN, Naomi. Sem logo: a tirania das marcas em um planeta vendido. Trad. Ryta Vinagre, 6ª edição, Rio de Janeiro, Editora Record, 2008.

LEE, Matilda. Eco chic: o guia da moda ética para a consumidora consciente. São Paulo, Editora La Rousse do Brasil, 2009.

LEBOW; Victor. Price competition in 1955. Journal of retailing, 1955, artigo digital. Disponível em: <a href="http://www.gcafh.org/edlab/Lebow.pdf">http://www.gcafh.org/edlab/Lebow.pdf</a>>. Acesso em 7 junho 2015.

LIPOVETSKY, Gilles. O império do efêmero: a moda e seu destino das sociedades modernas. São Paulo, Companhia das Letras, 1989.

MARTINS, J. S. A sociedade vista do abismo: novos estudos sobre exclusão, pobreza e classes sociais. Petrópolis, RJ, Editora Vozes, 2002.

OIT, Organização Internacional do Trabalho. O custo da coerção: relatório global no seguimento da declaração da OIT sobre os direitos e princípios fundamentais do trabalho. Relatório digital, Genebra, 2009. Disponível em: <a href="http://www.oitbrasil.org.br/sites/default/files/topic/forced\_labour/pub/custo\_da\_coercao\_308.pdf">http://www.oitbrasil.org.br/sites/default/files/topic/forced\_labour/pub/custo\_da\_coercao\_308.pdf</a>. Acesso em: 4 abril 2015.

OLIVEIRA, Anna; SETTON, Ana Leonardo Nassar de. A organização internacinal do trabalho e a interação entre os atores locais e globais no combate ao trabalho escravo contemporâneo no Brasil. Pontifícia Universidade Católica, São Paulo, 2006. Recurso digital. Disponível em: <a href="http://reporterbrasil.org.br/documentos/atuacao\_oit.pdf">http://reporterbrasil.org.br/documentos/atuacao\_oit.pdf</a>>. Acesso em: 14 maio 2015.

ONG REPÓRTER BRASIL. Escravo, nem pensar! Uma abordagem sobre trabalho escravo contemporâneo na escola e na comunidade. Livro digital, São Paulo, 2015. Disponível em: <a href="http://escravonempensar.org.br/livro/">http://escravonempensar.org.br/livro/</a>. Acesso em: 4 abril 2015.

PARODE, Fábio Pezzi; REMUS, Bruna do Nascimento; VISONÁ, Paula. Desafios da moda em tempos de crise: reflexões sobre sustentabilidade e consumo. In: DE CARLI, Ana Mery Sehbe; MANFREDINI, Mercedes Lusa. Moda em sintonia. Caxias do Sul, RS, Educs, 2010.

SAKAMOTO, Leonardo. C&A não foi condenada por trabalho escravo. Maio, 2014. Disponível em: <a href="http://blogdosakamoto.blogosfera.uol.com.br/2014/05/21/canao-foi-condenada-por-trabalho-escravo/%20">http://blogdosakamoto.blogosfera.uol.com.br/2014/05/21/canao-foi-condenada-por-trabalho-escravo/%20</a>. Acesso em: 01 junho 2015.

SEDH, Secretaria Especial dos Direitos Humanos. II Plano Nacional para Erradicação do Trabalho Escravo. Brasil, Presidência da República, Brasília, 2008. Disponível em: <a href="http://www.sdh.gov.br/assuntos/conatrae/direitos-assegurados/pdfs/pnete-2">http://www.sdh.gov.br/assuntos/conatrae/direitos-assegurados/pdfs/pnete-2</a>. Acesso em: 1 junho 2015.

WALK FREE FOUNDATION. Global Slavery Index. Australia, 2014. Virtual Report. Disponível em: <a href="http://reporterbrasil.org.br/wp-content/uploads/2014/11/">http://reporterbrasil.org.br/wp-content/uploads/2014/11/</a> GlobalSlavery\_2014\_LR-FINAL.pdf>. Acesso em: 14 junho 2015 P.102-118.

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