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TEXTILE HANDCRAFT: A LESSON OF SUSTAINABILITY

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Abstract: Nowadays, when the world is aware of the limitations of available resources, the sustainability appears as an up-to-date and relevant concept: it is the ability of humans to interact with the world, preserving the environment to avoid compromising the natural resources for future generations. The sense of limitations of environment resources makes the designers to re-think the use of their knowledge in a more responsible and conscious way and to look for viable solutions to the conservation of the ecosystem yet to discover and explore. The textile handcraft product is an excellent example of the sustainable product in various ways namely the recycling, the use of raw material available in each region and the re-gain of other materials to create unique pieces from local traditions. The interaction between design and handcraft will allow to renew the offer of products, making them differentiate and more attractive to consumers.

This work intends to present the results of a questionnaire for textile design students. The study, called SustentArte analyzes the attitudes and perceptions of this future designers and the perceived role of concepts like sustainability and handcraft into future textile trends.

Keywords: Handcraft, Designers, Slow Design, Sustainability

1. Introduction

The consumption over the last few times alongside with the facility of fast disposable and throw-away transformed and/ or condemned the planet earth. Recently, and by contrast, appear the slow movements, seeking for sustainability, quality of life and the healing the planet. Globally there is an understanding of revival trend, followed by an effort of valorisation and protectionism for this secular art. One bigger concern of design to the textile handcraft will result in an excellent contribution to the desired sustainability.

Our article pretend to present main results of a study with textile design students about environment sustainability themes and textile handcraft and their representations and perceptions in terms of sustainability of the environment. The article is structured in five chapters. After the introduction, chapter 2, entitled sustainability in the design, explores theoretically the concept of sustainability and new trends in the design. The chapter 3, sustainability in the textile handcraft exposes the interaction between the design and the handcraft, as being the way to sustainability of the textile handcraft. In the chapter 4 is presented the results of the study <code>SustentARTE</code> that consist in a enquire to design students to confirm their attitudes and perceptions related to the concept of sustainability and to the role of handcraft in the future textile trends. Finally, in chapter 5, are presented main conclusions.

2. Sustainability in the Design

The environment problems and the environmental movements are a XX century phenomenon, and are more and more present nowadays. It is common that we find in newspapers and magazines, sections about environment and to attend reports in the news about environment disasters or manifestations of environment protests [1]. Studies done in several countries suggest a bigger careful and concern to the environment [2] [3] and consequently to the companies that are more and more aware to the impact of their products in the environment and a bigger offer in the "green products" or "environment friendly". According to the Brundtland (1987) report, promoted by the United Nations and entitled "Our Common Future", the sustained use of natural resources must "meet the needs of the present generation without affecting the possibilities of future generations to suppress their own [4]. In a broad sense, the sustainability aims the use of renewals resources so that the existing resources don't exhaust in order future generations won't suffer [5]. The sustainability concept was, after, added in the Agenda 21, adapted at the Rio Conference in 1992 and has by base three big dimensions: one ecological dimension respecting human needs and the limits of the nature; one economic dimension with development of technologies and knowledge that privilege the longterm ecological balances and, one social and political dimension, that insists that the reconciliation between the environment and the economy is only viable by the democratic way [6]. Since then, the expressions of sustainability and sustainable development became more used and the concept sustainability multiplied in several areas including in the design and textile universe where the new strategies have as a goal the use of materials with low environment impact and the development of new concepts [7]. In the textile, and according to the study made by Li, the organic cotton seems the fiber with less environment impact and with



more sustainability, yet the acrylic is refered as the fiber less recommended in terms of environment impact and ecological sustainability [8].

The sense of limitations of environment recourses impels the designers to re-think the use of their knowledge in a more responsible and conscious way and to look for viable solutions to the conservation of the ecosystem yet to discover and explore.

The appearance of new design trends such as, the eco-design, the social and inclusive design, the "slow design" or the sustainable design, are primordial to the level of management resources, to the Man-Nature relationship, to the deficiency and human limitations and the sustainability of our planet. The movement "slow design" values the handcraft processes of creation and production, and proposes designers the design and the creation of single objects against the invasion of standard parts which are produced in accordance with current laws of the market. Based on the ideals of "slow design", the "slow fashion" concept presents a new vision of products that respect the human condition, the biodiversity and the limited human resources and it also highlights the value of increasing the life cycle of products and of reducing its environmental impact.

3. Sustainability in the Textile Handcraft

To be sustainable is, in the end, to be something that last for long. How can the textile fashion, developed to a short period of life and renewed every seasons by "the last fashion scream" be in agreement with the sustainability principals [9]? What is the sense of producing fast fashion, clothes without quality, made to be used 2 or 3 times and dispose? Isn't handmade fashion more durable and, for that, more environment friendly? Even after some usage textile craft pieces keep the quality and can be adjusted or complemented, conferring in that way, a new look.

But if the designer is an important agent in the production chain, on the other hand the handcraft product is an excellent example of sustainable product. The recycling cycle, the use of raw materials available in each region and, the reuse of other materials to create unique pieces from local traditions, are essential ingredients. To Dias Filho the interaction between design and handcraft will renew the offers of products, making them differentiate and more attractive to the consumers. To the author, the designer will be an intermediate between the "craftsmen subjectivity and the industrial rationality" in order to satisfy the consumers wishes without assuming the role of projecting the product [10].

The dialogue between the tradition and innovation, handcraft and design, craftsmen and designer must be well worked in a way that their skills are the key of future sustainability.

In Portugal there are registers of some examples of design intervention in the handcraft. The Castelo Branco embroideries and the "Renda de Bilros" are used in Wedding dresses designed by known stylist. The designs of the "Lenços de Namorados" were adapted to new supports, in collaboration with the stylist Nuno Gama were used in masculine clothes, namely in shirts. In a previous study of Ferreira *et al*, one of the interviewed stylist [Helena Cardoso] stated the need of connection to the land, to the flowers, to the knowledge and to the traditions to the development of "modern things". She also mentioned the satisfaction of her clients in the buy of her garments as being timeless, ecological and lasting [11].

According to Türkmen, the change of the thought about sustainability requires a new approach in the education of the design and proposes the introduction in the superior education of principles and practices to the sustainability, trusting the university as a power that models the sustainability and it's relation with the society. The design students must understand the learning of the design in a non-fragmented way but instead as an interdisciplinary cooperation, being able to think in a creative and holistic way to support the sustainable development [12].

4. SustentARTE study

4.1 Methodology and sample

With the base concern to understand how future textile perceived the textile handcraft and the "environment friendly" slope, a questionnaire was developed with 3 distinct parts. The first part includes questions of characterization of the respondent with gender, age, course, and nationality. The second part included questions regarding the perception of the environment theme and to the attitude pro-environment, attitudes and perceptions to the sustainability and fashion, intentions and behaviour as a designer (acceptance degree in a Likert scale with 5 points, to vary between 1="disagree completely" to 5= "Agree completely"). Finally, the third and last part of the questionnaire focused in the thematic of the craftsmen textile, i.e., the



attitudes and the intention to the textile handcraft, the perception of the sustainability of the textile handcraft and the knowledge of the design students in relation to examples of Portuguese textile handcraft and to interventions in the textile handcraft of designers and/or know stylists.

The SustentARTE questionnaire was implemented in classes of the undergraduate degree in Design and Fashion Marketing and in one class of the Master's Degree in Design and Fashion Communication, of the Minho University in the 21st and 22nd May. From the total of 83 inquires received, there were no situations of many incomplete answers, which allowed to consider all inquires as valid. In a summarized way the sample can be characterized by:

- Mainly female gender respondents (85.54%).
- With an age mean of 22.55 years and a standard deviation of 5.705 years. The age varies between 18 to 51 years with a sample range of 33 years.
- To attend the Degree in Design and fashion Marketing (73.90%) and only 24.10% in the Master's Degree in Design and Fashion Comunication.
- The predominant nationality is Portuguese (80.72%).

In the next sections there will be introduced in a brief way, the main results obtained with the study SustentARTE.

4.2 Analises of main results

4.2.1 Environment and perceptions

In relation to the respondent's pro-environment attitudes, we analyse their agreement degree with 4 presented statements. In Figure 1 we analyse the percentages of the more positive answers: "4- I agree somehow" and "5- I totally agree". We noted that the statements with a higher percentage of agreement relates to the environment politics as motivation to innovation (item 1 – 92.8%) and the perception of the recess of the environment problems in the quality of life (item 3 – 92.8%), both with same percentage of agreement. At times, the item with a lower percentage of positive answers refers to the statement related to the effect of economic growth on the environment, with only 33.70% of positive answers.

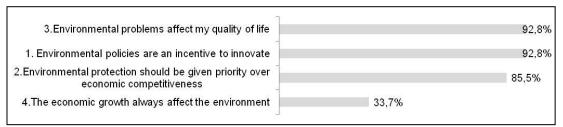


Figure 1: Environmental attitudes: distribution of positive answers

In the environment issue and to test the images associated to the environment, respondents were invited to indicate their first direct association with the word environment: "When you think of the environment, which of the following comes first?

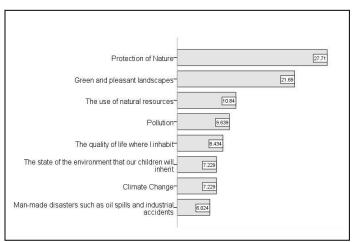


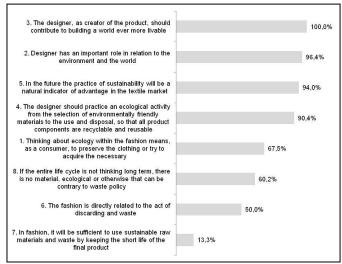
Figure 2: Associations to the environment



From the results obtained (*Figure 2*) most of the respondents identifies the association to the environment to the protection of nature (27.71%) and to the green and pleasant landscape. The less chosen options were the man-made disasters (6.024%) and the "earthquakes, flood and other natural disasters" (0.0%).

Regarding the attitudes and perceptions to the sustainability and fashion, it was analysed the positive answers ("I totally agree and I agree somehow"). In Figure 3, we notice that the statements with a higher percentage of agreement refers to the contribution of the designer as a creator of the product, in the construction of a world more habitable (100.0%), to the importance of his role in the relation to the environment and the world (96.4%) and to the perception of future advantage in the practise of sustainability (94.0%). We register the item with a lower agreement refers to fashion as being sufficient the use of raw materials sustainable keeping the waste and the short life term of the product (13.3%).

As for the intentions and behavior as a designer, the analysis of the positive answers (Figure 4) identifies the intention to prefer more environmental friendly products (94.0%), increased responsibilities in the development of sustainable products (92.8%) and the intention to develop more durable pieces with higher quality (91.4%). The choice of raw material more environmental friendly, regardless the price, represents the decrease of intention (57.8%) what suggests sensibility to the price factor by the designers.



1. As a designer I will preferably give preference to products that throughout the life cycle are more environmentally friendly

3. As a designer I feel I have added responsibilities in the development of sustainable products (textiles)

5. I intend to develop parts more durable and higher quality as opposed to the current fashion trend "disposable"

2. I intend in my future projects, give preference to the manual production than industrial, because the former are more environmentally friendly

4. If I have to think of raw materials I will choose environmentally friendly alternative regardless of price

94,0%

92,8%

91,4%

91,4%

91,4%

57,8%

Figure 4: Designer and Environment

Figure 3: Sustainability and fashion

4.2.2 Textile handcraft, attitudes and intentions

The questioner included a study regarding textile handcraft attitudes (Figure 5). The statement with higher percentage of choice refers to the value of textile handcraft as an cultural heritage (95.2%), followed closely by items related to tradition recognition, history and value of Portuguese textile handcraft, the concern for the genuineness / authenticity of the textile handcraft and the recognition of necessary time for execution (91.6%). Interesting to notice that the intention of inclusion of textile handcraft on projects is considered by 78.0% of the respondent (item with lower positive answers)

Figure 6 presents an evaluation of sustainability of textile handcraft (positive answer %). The statements with higher percentage of choice refers to durability, quality and enlarged life cycle of textile handcraft (81.9%) and to "environmental friendly" characteristic (80.7%). The lower choice item was "the textile handcrafts meets current needs without compromising the needs of future generations" (47.0%).

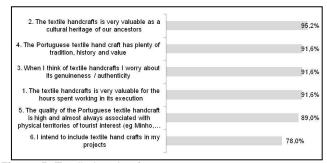


Figure 5: Textile handcraft

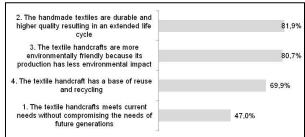
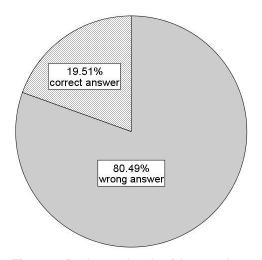


Figure 6: Textile handcraft sustainability



The questioner included an evaluation of the future designer's knowledge in Portuguese textile handcraft. The first question presents two photos of a shirt with traditional embroidery designed by Nuno Gama, a famous Portuguese designer, and it was requested to identify the name of the designer (4 options). On the results (Figure 7) the wrong answer percentage is expressive (80.49%) against only 19.51% of correct answers. This result is in some way surprising due to the media exposure of the designer Nuno Gama, which indicates a lack of knowledge of the respondents (future designers) on existing work collaborations between designers and Portuguese craftsmen.



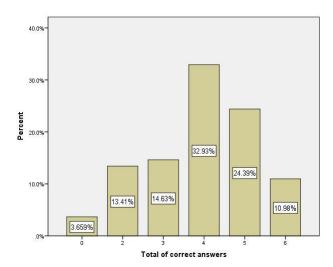


Figure 7: Designer – handcraft intervention recognition

Figure 8: Total correct answers per individual

On the second question, an open question to measure spontaneous knowledge, was asked to the respondents to mention fashion designers, stylist or creators which have used handcraft in its productions. 55.4% of the respondent didn't present any answer, which suggests lack of spontaneous knowledge. 44.6% of the respondent suggested 24 names, being one of the most nominee Storytailors with 14 quotes, followed by Joana Vasconcelos and Miguel Vieira both with 4 quotes.

The test to the student knowledge ended with the presentation of 6 photos each for one example of Portuguese textile handcraft, on which the respondents were requested to choose to each one of them the correct designation (4 options, 1 correct). Figure 8 illustrate the distribution of the correct answers number. Just 10.98% of the respondent answered correctly in the identification of all examples presented. If we unite the respondent with 4,5 or 6 correct answer ends with a total of 68.3% which indicates a good level of recognition of Portuguese handcraft. It is interesting to refer that the handcraft examples with most correct answers were representative of the north Portugal handcraft: "Lenços de Namorados" (87.95%), "Renda de Bilros" (87.95%) e "Bordados de Viana do Castelo" (83.13%). Such fact could be explained with the usage of a convenience sample located in the north of the country as well as by the coincidence of recently was done a workshop on "Renda de Bilros" with expositions and live demonstrations by craftswomen on the University.

5. Conclusions and Contributions

The up to date economical model based in continuous growth of consumption must be analyzed, thought and restructured. The valorization of the handcraft creation processes and production could invert the consumption of "mass" pieces that goes out of fashion quickly. Nature and pleasant green spaces are environmental references of future designers which recognizes is job as important to the future of the planet. Their pro-environmental attitudes are related on one hand with environmental politics as a motivation to innovate and on the other hand with the reflex of the environmental problems in the quality of life. In the theme sustainability and fashion it is recognized that in the future the practice of sustainability will be a natural indicator of advantage in the textile market. The intention of development of more durable pieces and with better quality as opposition to actual fashion tendencies, "disposable", that is assumed by a large percentage of the respondent, which, demonstrate a will to invert the now a days "Fast fashion". As in previous studies, the culture heritage, the genuineness / authenticity, the tradition, history, value and time spent in execution are values of the textile handcraft well known. Handcraft sustainability is highlighted by quality and long life cycle, as well as reutilization and recycling. To the knowledge level, is notorious the Portuguese traditional textile handcraft knowledge, specialy in the north part of Portugal, but on the intervention level in the textile handcraft, the designers and/or stylist the study suggests some ignorance that in the future shall be worked in a larger spread perspective. We can conclude from the results that the future



designers recognize the importance of its job in the development of sustainable products with a larger life cycle and, enhance the textile handcraft considering that it is a sustainable product. Therefore, it is important to increment the spreading and collaboration between designers and Portuguese craftsmen to stimulate the interest for products full of value and culture heritage.

Many can be the conclusions to be taken. Off all presented and by coincidence of values, the present investigation project suggests that the valorization of textile handcraft will be through the concepts of design and sustainability. It is for the future designers the acknowledge of the wealth in the Portuguese textile handcraft and the incorporation in their projects of conscience environmental solutions. This is the future challenge.

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