ABSTRACT
This article is prepared in the course of a dissertation for the Master in Design and Marketing. The focus of research concerns the exploitation of human and natural resources according to textile industry business objectives and their respective wastes that pollute the environment. Moreover, the consumers pressure so that textile industry responds quickly to their requirements and vice versa, is from the creation and development of a garment, to its disposal, a process unsustainable - designated as "Fast-fashion." This is where the center of the work is derived, namely the reuse of garments, with careful collection and classification, which can be recovered in a current approach to fashion increasing its life cycle. "Design" as an essential tool of the "Life Cycle" of products, is responsible for maximizing the value of a piece of clothing in the search for minimizing its environmental and socio-economic impacts. Thus, the methodology adopted for the study in question will be “Up-cycling” with the reuse of garments belonging to a random sample.

KEYWORDS

1. The challenge of sustainability in the textile industry

Over time, came to be evident that the cause-effect relationship between economic, technological and social development was more than obsolete, forming a deadly threat to the planet Earth and humankind. Being the natural environment essential for life, ecological awareness is the initial basis of the concept of sustainability.

Is in this context, in the year 1987, the concept of sustainable development by the Brundtland Commission or WCDE (World Commission on Environment and Development) was defined as the "development that meets present needs without compromising the ability of future generations to meet their own needs "(Barro, 2010, p.15). So, the Sustainable development covers different dimensions inseparable from each other: ecological or environmental, economic and social development. Thus, in the modern industrialized society, the sustainable environmental values reserve themselves, in practical terms, essentially to the production based on the guarantee of the natural resources renewal; the preservation of non-renewable resources - whether air, water and sun; in the ability of biodegradable waste produced; and finally, on the non-interference in the environmental space that every individual and community have as a fundamental right (Manzini, 2002, p.28).

1.1. The impacts os the fashion system
The adverse effects caused by the fashion industry who are clearly proven environmental, social and economic terms. The production of a garment exposes the need to explore a huge set of resources that are be distributed over several productive phases in a life cycle (Defra, 2011, p.4)

As illustrated in Figure 1, the various production phases are distributed between the extraction of raw material production, distribution or transportation, use and, finally, elimination (White, 2008, pp.44 - 45).
1.2. Fast-fashion vs Slow-fashion

Under the aegis of globalization, in 2005 – with the end of the Multifibre Agreement by the World Trade, which consisted on the removal of textile trade quotas in several countries - began a new era of free market, promoting and cementing global competition through low-cost production combined with technological advances. In the last decades, investors and known brands of clothing have adopted a policy of low prices, in finding the best relation quality / low cost, especially, in countries considered from the 3rd world or in development process that have cheap labor. This situation led to a further reduction of prices to the public which turned in a greater consumer demand. (Jones, 2005, p.33).

It is the speed of response that currently defines the fashion industry. The production of a garment may be only 12 days to be rapidly consumed by a more and more avid consumers of buying products at low prices, provided by giant retail chains such as Primark, Zara or H & M (Fletcher, 2007). The variety of offer in conjunction with the latest fashion trends at low prices, easily, seduce the consumer to purchase and stimulating excessive cloth buying more than necessary. This phenomenon is called as Fast-fashion. Fast-fashion movement is actually a disguised form of seeking maximum profit relegating environmental, social and human especially in developing countries (Fletcher, 2008, p.162).

“The response speed to market is considered the real leverage competitive; low costs of their products are mainly obtained by exploitation of its suppliers, which are imposed by prices and conditions of delivery that inevitably lead to labor exploitation (Cietta, 2010,p.19)”.

Contrasting with the Fast-Fashion model of mass production arises the concept of Slow-fashion. The teacher Guttorm Fløistad – The World of Institute of Slowness – explains the “slow movement” philosophy:

“The only thing for certain is that everything changes. The rate of change increases. If you want to hang on, you’d better speed up. That is the message of today. It could, however, be useful to remind everyone that our basic needs never change. This is given only through slowness in human relations. In order to master changes, we have to recover slowness, reflection, and togetherness. There we will find real renewal.”

Instead of satisfaction in the short term, "slow" is the watchword to adapt in our everyday pace allowing us to
make more environmentally conscious and ethically responsible decisions (Hadden, 2012). Therefore, the principles of the "Slow-Fashion" movement relate to:

- Worry about the negative impacts of the fashion industry in the lives of their employees, communities and ecosystems;
- Quality over quantity;
- Promotion of consumer awareness in relation to unnecessary consumption;
- Slowing down the production chain in order to reduce the number of trends and collections;
- And, finally, to promote sustainability as a core value in the life cycle of clothing.

2. Design for sustainability

Fundamentally “sustainability it is above all, a reflection that leads us to ask why things are as they are and what we can do to improve them” (Barro, 2010, p.15), in the moment is projected an idea or object to a particular society, through a process that search optimization and low consumption of resources or even doing the recovery to a new stage in the product life cycle.

As mentioned, textile products have environmental implications, social and economic, through the various stages of their existence until they are eliminated or finish in a landfill. In this type of production, To this McDonough (2002) calls the cradle-to-grave. "Resources are extracted, shaped into products, and eventually disposed of in the "grave" of some kind, usually a landfill or incinerator." (McDonough, 2002, p.24).

2.1. Life Cycle design

The methodology for developing sustainable products must be linked to the Life Cycle Design and the designer must find sustainable solutions for all phases that compose it.

“Life-cycle analysis is a framework for examining the range of sustainability impacts that occur from the time a product is born into existence until it reaches its death. Life cycles are typically broken into phases, such as raw material extraction, material processing, manufacturing, distribution, sale, use and end-of-life” (White, 2008, pp.44 – 45).

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2.2. Up–cycling

In the moment of a product discard, design is the ideal tool to make a new reinterpretation of the same, making it's re-design giving back it's functionality and, therefore, a new life-cycle. Following this concept the fashion cycles will slowing down incorporating unique pieces, lasting and value-added going against the current fashion trends. The Up-cycling methodology is one of the solutions to help solve the problem of disproportionate consumption and textile short life cycles. Through a random sample of used clothing with no functionality is intended to give a new integration in the daily life of different individuals based on each lifestyle.
3. CONSIDERAÇÕES FINAIS

Currently, the design methodology adopted is under the analysis of its feasibility in the garments recovery deemed useless by their owners, but that contains important emotional ties or sentimental memories. These garments will be evaluated by a set of criteria that will dictate the practicability of transforming them into timeless aesthetically pieces. Throughout this process is intended to do continuous monitoring of all the provided details for the transformation through a photographic and descriptive record. The global social and economic situation can be a factor in ensuring the success of this initiative among communities aware of the fashion impacts and concerned to maintain a lifestyle more "green."

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