



Innovation of Fashion Industry Basic Materials in Conservation of Environmental Ethics (A Case Study of Plant Fiber)

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Abstract

Animal-derived fashion products have been one of the interests of fashion-enthusiasts. Those products are a social marker for the upper middle-class society. The use of animal-derived materials has resulted in reducing animal populations. Fashion industry-manufacturers are demanded to be more ethical in designing fashion products and consumers are required to be wiser in terms of fashion. Switching from animal to plant-derived materials is a wise move. Innovation by using plant fiber is part of environmental conservation. This research focused on renewable, recyclable, and biodegradable plant fibers. Descriptive method supported with qualitative approach were employed as this research's method. The research data were collected by observation, interviews, and literature study. Meanwhile, the research analysis was done using compact comparison technique. The research results show that hyacinth fiber can produce fabrics which will result in a new fashionable trend that replace animal-derived fibers as well as preserve animals and the environment.

Keywords: *Animal; Environment; Fashion; Fiber; Plant*

Introduction

The fashion referred to in this research is the use of clothing. Dressing is one of the primary human needs for protecting the human body from surrounding atmosphere. However, clothing nowadays has developed into a lifestyle necessity for someone because it relates to self-image which has an impact on someone's value in front of the public. The wearer characteristics reveal fashion as a communicative phenomenon that can communicate the wearer's self, as a sign of understanding the wearer's characteristics. Trisnawati revealed that clothing is not just a cover of the body but it also has signs because those signs form meaning and carry certain messages (2011: 38). Fashion material means that from the use of certain materials that are considered to have a high class, while the message comes from materials that give the impression of luxuries. The use of materials can influence someone's level in his social life. This can be shown through the use of certain materials that have prestige. Those prestige materials can be of animal origin such as leather, fur, and wool. However, some parties are against the use of animal-derived materials in fashion. For that reason, other alternative materials need to be utilized. Some people think that animal-derived substitutes are synthetic materials, but synthetic materials are no better than animal-derived materials. In this research, the researcher focused on materials from plant

fibers for materials in fashion production which are expected to support animal welfare, humans, and environmental sustainability.

Raw materials from cultivated plants and wild plants which if in large quantities will be bad for the environment. Therefore, these plants can be used to become something more profitable for the environment and the surrounding community. Even plant fibers when used as raw materials in the fashion industry are safer for health, especially for people who have sensitive skin. In addition, plant fiber also has good quality, is strong, and comfortable when used which enhances the selling value of the product. However, this discourse is not fully accepted by producers and consumers of the fashion industry. Therefore, the author intends to explore several theories that are used to strengthen the idea of using materials from plant fibers that can provide a recommendation to fashion producers and consumers to think more about the impact of using materials.

Research Method

The observation phase of this research was done in Surakarta, Central Java due to ease of finding transparent and accountable sources, which made the data collection much easier due to shorter distance covered from the researcher's location so that the researcher had better time efficiency and more focus to analyze the research data. This was a qualitative research emphasizing on cause and effect analysis as well as analysis of the dynamics between observed phenomena, by prioritizing scientific logic (Koentjaraningrat, 1997: 128). This research aimed to provide an overview of the use of basic materials in the fashion industry to balance the environment in accordance with data and facts in the field, analyzed and discussed in detail, which would then be concluded to provide a new reference. This research used descriptive data which were not represented by numbers or statistic that will provide an understanding of the ethical view of norms to assess the morality of an action.

The object of this research was the use of basic materials in the fashion industry regarding the balance the environment. In addition, this research used utilitarianism theory from Peter Singer, diffusion of innovation theory from Everett Rogers, and habitus theory from Pierre Bourdieu. Primary data were obtained directly from the objects of research, by conducting direct interviews with informants, and through observations related to the innovation of basic materials for the fashion industry in the context of environmental ethics conservation in the case study of plant fibers. While the secondary data were supporting data obtained from documents relevant to the research on innovation of basic materials for the fashion industry in the context of environmental ethics conservation, in the case study of plant fibers. The data were then validated using data triangulation technique in order to check the data validity by utilizing something other than the data for checking or comparing the data.

Discussion

Fashion from Animal Materials

Fashion made from animal materials, which are usually sold at exorbitant prices, remains in demand and this phenomenon lead to the killing of many animals just to fulfill the desire of dressing with classy and luxurious fashion products. In accordance with Trisnawati's opinion, that with the clothes they wear, people can attach certain values, impressions, messages and intentions which are usually attached to the clothes they wear (2011: 43). Fashion enthusiasts consider fashion as a symbol of their existence, by choosing fashion made of luxury materials such as leather, wool or real animal hair can make a person considered capable and belongs to the upper middle class. In addition, many people choose fashion products with leather, wool or real fur because they are more comfortable and durable, because leather is a flexible and durable material compared to other materials.

Animal exploitation that is widely carried out by the fashion industry is considered to be seeking personal gain, regardless of future life. Even though there has already been a ban related to the animal trade, this phenomenon must still be monitored, although this does not really have an impact on reducing cases of killing and violence against animals. However, it is still important to monitor this phenomenon because it is animal torture and inhumane. Siahaan said that such problem related to the trade in rare or wild animals has not been eradicated until now. Until now, endangered animals are still traded on the black market and this practice is still difficult to banish because those protected animals are in great demand with high prices (Siahaan, 2004: 36). Endangered animals are still widely traded at high prices because they are sought for their exotic leathers. Rare animal leathers are considered more beautiful and look sumptuous.

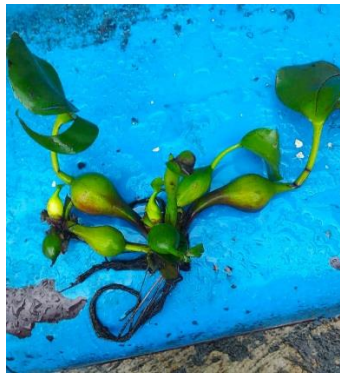
In those parts of the world considered to be developed and wealthy, it is possible to find this form of exchange of information and communication flowing everywhere in all levels of society. This is seen through the wearing of high-fashion brands, expensive designer clothing, jewelry crafted from precious and expensive metals or gemstones, and prestige types of fur and hides (Plannthin, 2016: 54). Demi memenuhi kebutuhan *fashion* setiap hari banyak hewan liar maupun hewan langka yang harus mati sia-sia karena dibunuh manusia hanya untuk diambil kulit, wol dan bulunya sebagai produk *fashion*. Siahaan said that the problem of wildlife trade must be eradicated. We must apply the prohibition system set by CITES (International Convention on Trade in Endangered Species) which has been ratified, because if this is not the case then the extinction rate of rare species from our country will be even higher in the near future (2004: 38). The awareness of animal welfare is still very low, this may be due to the lack of understanding of how important animals are for the life sustainability in the future. Siahaan said that the current development of modernization should be carried out wisely in order not to bring new hardships to life (2004: 210). However, lots of humans still underestimate animals till now.

There are many pros and contras on the use of materials in fashion. Materials for fashion industry products are in the spotlight, because they can lead to serious problems for the environment. For that reason, producers and consumers are expected to do their best effort to produce and wear products from sustainable fashion industry. Designers are required to use environmentally friendly resources, while fashionistas are required to practice consuming fashion products ethically. Designers are required to utilize environmentally friendly resources, while fashion enthusiasts are demanded to consume fashion products ethically. All parties must be committed to being responsible for the environment, both producers and consumers must be able to ensure that the fashion products they produce or wear are safe and do not bring negative impact on environmental sustainability. An ethical fashion industry product is one that has portrayed zero cruelty to feel comfortable and look cool. Fashion ethics is applied to raise awareness of environmental sustainability as a whole. As fellow living beings, animals also have the full right to their lives. Humans also need to realize that it is not ethical to exploit animal for personal gain or interest. Plannthin stated, one can say that the term “animal rights” is a label because it is based on the idea that all nonhumans are entitled to their own life and that their basic interests are to be considered on equal terms with the interest of human beings (2016: 57).

Leading fashion brands morally respect animals that are used as base materials in the fashion industry. There are several brands that still use animal-derived materials. In using ingredients derived from dead animals, the brands also try not to continuously use animal-derived materials. Reducing animal-based products is a good thing to do so that in the future fashion products are truly animal-free. This step should be taken to implement an effective animal welfare protection policy. Agustina suggests that some animal rights advocates argue that the perception of animal welfare implementation should be better executed in facilitating and related to increased exploitation of animals (Agustina, 2017: 6). Many consumers and some of the fashion industry already have the mindset that using animal products is a cruel act that should be avoided. Therefore, many fashion brands have started selling animal-free fabrics and products. The leading fashion industry started to use materials from plant fibers that are more sustainable in order to protect animals and the environment.

Fashion Made from Plant Fiber

Plant fiber offers a new innovation to solve the environment-related problems in the fashion industry. Utilizing plants as the production material in the fashion industry will result in products with less environmental pollution. The innovation of using plant fiber in fashion industry represents an effort to lower the rate of animal exploitation and the negative impacts on the environment can be done through the selection of materials and production processes. This plant fiber innovation can come from additions that are around the production site or plants that can have detrimental effect on the environment. For example, around Surakarta area, water hyacinth, which is commonly considered a type of weed by people, can be easily found. In a reasonable amount, water hyacinth can be beneficial because this plant can absorb waste in water naturally.



Picture 1. Water Hyacinth
(Source: Yovita Devi)

Indirectly, if water hyacinth is present in the water, it will bring positive impact by filtering industrial waste in the water. However, water hyacinth can grow relentlessly due to the stimulation from the chemical substance contained in the waste. If that happens, water hyacinth can bring negative impact to the environment because it blocks the sunlight from reaching the water, which will then decrease the oxygen solubility level in the water, obstruct the water flow, and ruin the aesthetics of the water. Therefore, it would be better if water hyacinth can also be exploited for the sake of surrounding community. The surrounding community can harvest and utilize water hyacinth to suppress its rapid growth rate.

Putera stated that water hyacinth, which is an aquatic weed that can grow and bloom rapidly, turns out to have a fairly high cellulose fiber content, which is around 60%. Water hyacinth has the potential to be used as a basic material for making cellulose which in the future can be applied in various ways (2012: 03). One of which is to use it as a fiber material in the fashion industry. This is because water hyacinth is very easy to find, so the utilization can reduce the import of materials in the fashion industry. Moreover, from several plants whose fibers are often used in the fashion industry, water hyacinth tends to be underutilized. Water hyacinth which is used as a raw material for the fashion industry can provide economic value. In addition, water hyacinth has long fibers which provide good strength because its structure is more perfect than other weeds. The water hyacinth fiber has some advantages, one of which is its fairly great thickness, which leads to stronger fashion products if it is utilized in fashion industry. Water hyacinth can also be utilized to make clothing products that require thick fibers. Other than that, water hyacinth fiber also provides the advantage of natural anti-bacteria, which adds the selling value in the market.

Water hyacinth fiber also provides many benefits to humans and the environment. Such material innovation through product design can stimulate fashion consumers to enhance their awareness of animal welfare and the environment, which will then lead the consumers to switch from using animal-derived

materials to plant-based materials. Designers and fashion enthusiasts can produce and consume sustainable materials into products that look trendy and fashionable when worn. Designers and fashion enthusiasts can produce and consume sustainable materials into products that look trendy and fashionable when worn. In relation to the current problems of the fashion industry, plant fiber may offer the right solution. Although plant fiber is considered good for the fashion industry, it should not be overused either. In addition, producers are also required to pay attention to the origin of plant fibers used in the production, whether it comes from sustainably-managed industrial forest plantations, disturbing wild plants, or something else. If the fiber is taken from sustainably-managed industrial forest plantations, the harvest time need to be considered as well. Things like this must be considered to ensure the sustainability of raw materials.

Environmental Consequence

Actions that can be taken to maintain environmental balance are by utilizing the environment properly, and avoiding excessive exploitation activities for the fashion industry. This is done so as not to damage the function of the environment and so as human survive side by side with nature, and to remain oriented towards the interests and welfare of future generations in order to avoid inequality problems between generations. Siahaan (2004: 25) mentioned that the environment must be maintained, built or managed in the best possible way for the sake of the survival of life and generations of mankind only.

The synthetic materials used to replace animal-derived materials are considered environmentally unfriendly and dangerous. Planthin explained that the conclusion is that the environmental benefits of products produced from living animals are better than products made from synthetic materials (2016: 72). Real leather, wool, and fur are considered more ethical and significantly more sustainable than synthetic materials. Faux leather and fur fibers are usually produced from petroleum-based chemicals. Synthetic materials also require a lot of energy and oil in use, where in fact oil processing is one of the largest emitters of greenhouse gases.

Mubarok in Khairina stated that human activities put pressure on the environment, in which it may lead to the potential of environmental and ecosystem degradation both on land and sea, which results in enormous losses in our life (2020: 156). Animals and the environment are harmed in the name of fashion, due to unregulated use of materials and production techniques. Fashion production from raw materials to clothes is also a process that requires a great source of energy. These clothes contain chemicals from the beginning of the production process until they are sold in stores. Not only synthetic clothes, clothes made from natural fibers that come entirely from animals also still contain chemicals. Siahaan revealed that the environment gets increasingly damaged by pollution, and damage to biological resources such as depletion of forest reserves (deforestation), the extinction of various biota, both animal and plant species. In addition, various diseases occur as a result of industrial pollution (2004: 19).

Furthermore, industrial growth also causes pollution through waste, smoke (soot) or noise (2004: 27). The textile industry needs special attention and handling from producers, consumers, and the government because it uses large amounts of water, produces a lot of toxic chemical waste, and uses a lot of energy. Material innovation can be relied on to reduce or even eliminate the use of materials derived from animals, so as not to make those animals suffer during the production process. Besides saving animals, plant fiber is also a good innovation for a sustainable environment because it is easily biodegraded in the soil and does not contain plastic. Therefore, designers are competing to conduct experiments with materials derived from plant fibers which are considered environmentally friendly.

Plant fibers provide lots of benefit to humans and the environment. The innovation of these materials through production design and consumer fashion can further increase awareness of animal welfare and the environment, which will shift the use of animal-derived materials to plant-derived materials. Designers and fashion enthusiasts can produce such sustainable materials into fashionable and

trendy products. In dealing with the current problems of the fashion industry, fiber from plants is the right solution to choose.

Conclusion

Fiber innovation can change the way of thinking from using animal fiber to plant fiber. The use of plant fiber has added value because it is not harmful to the environment, easier to develop in cultivation, and its supply is abundant. The use of plant fiber can be a solution to overcome the problems that exist between consumers, producers, and fashion critics. In addition, this research is also expected to open a scientific perspective and create positive impact.

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