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## Ecodesign and initiatives of sustainable development in the dimension of passion of artistic and design creativity

### Ecodiseño e iniciativas de desarrollo sostenible en la dimensión de la pasión de la creatividad artística y del diseño

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#### Abstract

The fashion industry under modern circumstances is one of the most developed industries, which determines its tangible impact on people and nature. The purpose of the article is to analyze ecodesign and sustainable development initiatives through the dimension of passion for artistic and educational creativity. The theoretical and empirical methods of scientific research were used. In the results, it was established that previously the requirements of environmental friendliness were perceived to a greater extent as limitations in the creative process. They are the basis and a kind of impetus for the generation of new creative ideas. The novelty of the work consists in proving the development of clothing design as an element of the designer's personality development as a leading specialist not only in design matters, but also in creating an organic combination of all components of the product creation process. The practical significance of the work is to determine the future of the fashion industry in the use of

#### Resumen

La industria de la moda en las circunstancias modernas es una de las más desarrolladas, lo que determina su impacto tangible sobre las personas y la naturaleza. El propósito del artículo es analizar las iniciativas de ecodiseño y desarrollo sostenible a través de la dimensión de la pasión por la creatividad artística y educativa. Se utilizaron los métodos teóricos y empíricos de la investigación científica. En los resultados se estableció que anteriormente los requisitos de respeto al medio ambiente se percibían en mayor medida como limitaciones en el proceso creativo. Son la base y una especie de impulso para la generación de nuevas ideas creativas. La novedad del trabajo consiste en demostrar el desarrollo del diseño de prendas de vestir como elemento del desarrollo de la personalidad del diseñador como especialista destacado no sólo en cuestiones de diseño, sino también en la creación de una combinación orgánica de todos los componentes del proceso de creación del producto. La importancia práctica del trabajo es determinar el futuro de la industria de la

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environmentally friendly and technological fabrics. In the conclusions, it is noted that new creative searches are due to the vital need for a new philosophy of world perception, which will influence ecodesign in the future.

**Keywords:** textile and clothing design, art and design creativity, design-project ethics, sustainable development, individual passion of the designer, ecological paradigm.

## Introduction

Turning to ecodesign and studying it is an urgent issue in the modern fashion industry, as it is important for society not only from an aesthetic but also from a practical point of view. However, the global challenges of humanity have a negative impact on the artistic and design sphere, neglecting environmental standards and requirements. Therefore, clarifying the possibilities of ecodesign through the prism of modern transformations in the perception of society and the corresponding artistic trends is an important part of understanding the current world of consumption.

### *Problem statement*

The issues of sustainable development, conscious consumption, environmental ecology affect all aspects of human life in the modern world. Mankind is increasingly aware of its responsibility to future generations for the conservation of the natural resources of our planet. The fashion industry occupies a significant niche in modern life - in the economy, production, consumption. The issues of clothing design are raised by various specialists, considered in the context of various problems of modern society (Goyal, 2016). Ecodesign is an approach to creating clothing that takes into account its environmental impact (Flannery & Smith, 2014, p. 5). It focuses on using environmentally friendly materials, reducing waste, and reducing energy use in the production process (Flannery & Smith, 2014). A fashionable eco-designer creates clothes that are beautiful, stylish, and environmentally friendly at the same time. Such clothes compare favorably with others because they are created using eco-friendly materials such as cotton, linen, hemp, silk, bamboo, and other natural fabrics. Therefore, addressing the issue of using eco-friendly materials to confront the challenges of our time is important, especially given current globalization trends. Therefore, it is important to trace the influence of modern environmental factors on design thought. It is a current trend not

moda en el uso de tejidos ecológicos y tecnológicos. En las conclusiones, se señala que las nuevas búsquedas creativas se deben a la necesidad vital de una nueva filosofía de percepción del mundo, que influirá en el ecodiseño en el futuro.

**Palabras clave:** diseño textil y de prendas de vestir, creatividad artística y de diseño, ética del proyecto de diseño, desarrollo sostenible, pasión individual del diseñador, paradigma ecológico.

only in the aesthetic but also in the ethical dimension of contemporary design. Turning to eco-friendly materials and recyclability, the difference from real fur and leather is an open message from designers about the importance of ecology for society. Contemporary designers around the world openly demonstrate their ethical considerations and civic views in this way, which generally affects the renewal of environmental trends in design and art.

### *Research focus*

The need to match the development of fashion with general trends provides certain positive results. Designers are increasingly turning to environmental trends, due to which the possibilities of their creativity are expanding. Ecodesign of the future is an innovative and promising direction that ensures the preservation of natural resources and the environment, while maintaining style and fashion, which requires detailed study.

### *Research aim and research questions*

**The purpose of the article** is to analyze ecodesign and sustainable development initiatives through the dimension of passionate artistic and educational creativity.

In accordance with this goal, the main tasks of the work are:

1. To identify the environmental problems of the modern fashion industry.
2. To characterize the main styles that eco-designers work with.
3. to analyze the main directions of work of modern popular brands through the prism of artistic and project creativity.

## **Theoretical Framework or Literature Review**

Fashion design as an activity, inherently combines different practices, skills and materials.

Williams (2018) explores the practice of design in the fashion world from a global perspective - establishing connections between people, people with their environment. She positions the designer as an owner who is able to create conditions for interactive interaction between man and fashion, thereby contributing to the implementation of sustainable development practices. From these positions, we will consider design activities in this work, studying the creative potential of a designer as a passionate personality in the process of working on various projects in the fashion industry of a sustainable direction (Lahoda, 2021).

Kvasnica (2019) explores ecological and ethical trends in the design of spaces to showcase fashion innovations. She focuses on environmental issues in the fashion industry, which are also reflected in the design of fashion shows. The paper analyzes in detail a large amount of scientific literature reflecting current research in this area. Pokhodenko (2020) also addresses the topic of sustainable fashion. She analyzes the study of this topic in the Ukrainian scientific literature. The main attention is paid to the issues of terminology, in particular, the terms "eco fashion" and "sustainable fashion". Hakhova & Yeremenko (2021) researched the place and role of clothing design in the system of general environmental measures. It reveals the issues of the influence of socio-cultural factors on the development of eco-design in the fashion industry, conceptual approaches and techniques for creating eco-friendly clothing. In addition, the author pays special attention to the trends in the further development of the ecological direction in the fashion industry (Hakhova & Yeremenko, 2021).

Bakalinska & Kolosnichenko (2018) conducted an analysis of design practices, which made it possible to determine the compliance of the principles and methods of designing fashionable clothes with environmental standards. They defined the concept of an eco-trend and developed a classification of principles for its creation (Bakalinska & Kolosnichenko, 2018).

Tkanko & Tkanko (2019) in their research emphasize the importance of eco-design in the global fashion industry. They determine the main challenges that society receives in the cultivation, processing, coloring of raw materials, environmental pollution, and the destruction of flora and fauna on the planet. Researchers consider the processes of the emergence of ecological style in fashion in the middle of the twentieth century, determine the main directions

for the development of ecological clothing design. They identify as the most relevant areas: limited consumption, wardrobe minimization, natural materials, natural colors, waste-free production technologies, loose fit, the use of eco-prints, niche design, alternative eco-friendly fabrics, and so on. In addition, the authors describe the "conscious" methods that domestic and foreign designers use in designing collections: "careful", "re-use", "recycling" of waste (Tkanko & Tkanko, 2019).

All of these works touch upon certain issues of sustainable fashion, which are more related to the choice of materials and technologies for the production of clothing. Features of the creative process, the influence of the ecological orientation of modern fashion on it were left without attention. The purpose of the study is to determine the features of the creative process, directly design design, in a sustainable fashion.

## Methodology

### *General background*

This study belongs to theoretical (involves the use of the results obtained from previous studies), fundamental (the article contains new results that will help solve the problems of ecodesign development as an important component of the fashion industry of the future) research. The work is based on the complex application of general scientific and special research methods (historical-comparative, formal-typological and artistic-compositional).

### *Data analysis*

The use of the historical and comparative method made it possible to trace the stages of change in the perception of the importance of eco-materials in the fashion world in recent times. On the basis of the formal-typological method, the following paradigms of development were identified. In addition to theoretical (analogy, comparison, classification, generalizations) and the method of studying objects in the temporal dimension (retrospective) were used. This made it possible to analyze the trends in the development of design thinking within the framework of the ecological and ethical direction of the fashion industry. A systematic approach was also used, which made it possible to study the process of creativity in fashion design, to identify features and changes in accordance with the personal position of the designer as a passionate person.

## Results and Discussion

The fashion industry is actually the second most polluting industry in the world, behind only the oil industry (Pozniak, 2019). In recent years, the development of fashion brands has shown a trend towards a shift in emphasis towards ecology and sustainable production. What is happening in the fashion industry now points to real changes in a positive direction: not only small artisanal productions have joined the climate movement, but also big fashion houses with history (Dior, Chloé, Gucci, Prada, Balenciaga, etc.).

At Paris Fashion Week, 2020, Christian Dior emphasized its sustainable spring-summer show with specific design. A "Green Inclusive Garden" was created on the podium – 164 trees were placed here, which were then planted around the French capital. The author of the idea was the brand's creative designer Maria Grazia Chiuri (together with Coloco). In an interview before the show, Chiuri said: "The tree is an important symbol because it is about investing in nature. Landing on the future is a positive action" (Singer, 2019).

An important event in the fashion industry is the Green Carpet Fashion Awards, because it actually marked the beginning of a new era in fashion – the Eco era. The organizers at the highest state level were the National Chamber of Fashion of Italy (CNMI), with the support of the Municipality of Milan, together with the organization Eco-Age, which advises brands on environmental strategy. CNMI takes a proactive stance on the sustainable development of fashion, promoting large-scale initiatives in the field of communication, education and training. The main goal is to achieve guarantees of sustainability as an integral part of the perception of Italy and Italian fashion around the world. Thus, Italian designers were the first to assume global responsibility for the development of the luxury industry in this direction.

Stella McCartney is one of the first in the fashion industry to adopt and implement a sustainable attitude in her business model. Her company is constantly looking for new ways to achieve sustainability, recognizing the responsibility for the resources used and the impact of activities on the planet. This is expressed in the development of collections, the manufacture of clothes, and the opening of new stores.

All Stella McCartney studios, offices and stores in the UK and abroad are powered by renewable energy. Stella McCartney prefers organic cotton

and viscose in her collections. Viscose is made from environmentally friendly and certified wood imported from Sweden. The company's principled position was demonstrated by the termination of a contract with a manufacturer that produces viscose from an endangered forest.

In addition, research is constantly being conducted to find new environmentally friendly materials and technologies. One of the key points in the company's philosophy is the use of textiles created from recycled materials for the production of clothing. Stella McCartney was the first of its kind to participate in the NRDC Clear by Design Program.

Clothing making is still, to a certain extent, a skilled handicraft industry. Nevertheless, the latest achievements in the field of digital, engineering, and chemical technologies are increasingly being used here. The results of the research find their application both in functional clothing and in high fashion.

It is possible to single out the key features of the modern direction of creativity in fashion design. Previously, the possibilities of materials limited design thought. Their choice was determined by the geometric, spatial, functional characteristics of the clothes being created (Oliveira et al., 2022). Currently, it is the characteristics of the materials that can set the concept of the entire collection. Ecological orientation in the technologies of creating materials dictates solutions in the design of clothing and accessories. They form a new vision of fashion, its functionality and semantic load - what it broadcasts to the masses.

The emergence of the term "eco fashion" dates back to the early 1990s and is associated with fashion that has a minimal impact on the environment. First of all, it was about the choice of materials for creating collections (natural, organic, durable fibers). Additionally, cutting methods were taken into account that contribute to the economical use of fabric during cutting (for example, Zero Waste). Ecological fashion trends also include upcycle and recycle. At the moment, the concept of eco-fashion covers the entire process of creating, manufacturing and selling products. It is this integrated approach that is directly related to the concept of "sustainability". The term appeared in 1987 – it was used in the work of the Brundt and Report and was defined as development that meets the needs of the present without compromising future generations in meeting their own needs

(Hakhova & Yeremenko, 2021; Jochamowitz Yribery et al., 2023).

The definition of sustainable fashion is based on ethical, noble goals. In using this term (and its related "ethical fashion", "green fashion" and "eco fashion"), activists and experts consider a fashion industry that is able to manage its impact on the environment throughout the planet, it guarantees the well-being of people and other animals throughout the entire cycle of work with the fashion object (Jochamowitz Yribery et al., 2023). This calls for a rejection of business models that lead to overproduction, overconsumption, waste, worker exploitation and the climate emergency. Also here, terms describing the systemic changes necessary to achieve a sustainable fashion become relevant: "growth slowdown", "circular economy", and so on. However, lately, the vagueness, uncertainty of this term, the lack of attention to purely design, creative aspects lead to the fact that many designers prefer to independently formulate its understanding from the standpoint of their own philosophy. Eco-fashion was formed at the intersection of the environmental movement, the fashion industry and marketing (Kiurski et al., 2017). Sustainable fashion is a system of factors and conditions for the creation, production and sale of clothing.

The implementation of the sustainable characteristics of fashion in creativity is developing in different directions. A significant niche is occupied by work directly with materials: the development of completely new textile products for the manufacture of clothing, technologies for the production and processing of raw materials. Another direction is working with cutting technologies to obtain a minimum amount of waste or the possibility of using them to create other products. Separately, you can consider the process of organizing the design, production, presentation and sale of products. The theme of design from the perspective of realizing the creative potential of a designer as a passionate personality includes the first two directions. Let us consider in more detail their features and possibilities for creating a creative product. Each designer finds his own way of working to realize his own creative philosophy. Thanks to this, we are getting the development of the concept of sustainable fashion, and it is associated with the emergence of new semantic, figurative and technological niches.

Design duo Vin+Omi (Britain - Singapore) produces fabrics from weeds (nettle, hydrangea, willow, ash and others). Prince Charles joined the

project, offering to use nettles from his garden at Highgrove House. A fabric was made from it, resembling fleece or wool in appearance. Models made from this fabric were presented at London Fashion Week 2018, some of them are on display at the Victoria and Albert Museum. From the very beginning, the fundamental principle of the brand has been environmental friendliness (Cartner-Morley, 2019; Van Doorselaer & Koopmans, 2020).

The younger generation of designers have become actively involved in the movement for sustainable fashion, broadcasting ecological and ethical principles in their collections. Young foreign designers include Collina Strada, ChopovaLowena, Rave Review and Ahluwalia. All of them form their own style, demonstrate their understanding of sustainable development, implement new ideas and meanings on this basis. Tolu Coker (Great Britain) is known for its use of the upcycle technique. The designer first of all says that it is necessary to educate culture. Sustainability is not only working with certain materials and technologies. The human factor is important here, the successful implementation of the ecological concept and creative idea largely depends on it. Appeal to "man" can be identified in different eras, all of them were marked by crisis phenomena, and the way out of them was reflected in art and culture. Fashion is no exception here. And eco-orientation is expressed not only in materials and technologies that preserve natural resources, but also in forms and images.

Alexandra Sipa (Romania) has developed her own technique for creating lace from used electrical wires. She intends to further develop her idea. A feature is not only the use of waste, but also the process of creation itself - a return to handicraft production. This turned out to be less costly in terms of resources and made it possible to obtain exclusive items.

The SS Daley brand (London-Liverpool) also conveys sustainability in its work. One of the key techniques is the use of upcycling technology. Available raw materials are used for production - old tablecloths, remnants of fabrics. Collections can be called artisanal, since all materials are produced in the same place where things are created, the concept of collections, respectively, is based on an authentic culture.

Kevin Germanier (France) creates bright clothes for parties by recycling unclaimed materials: leftover fabrics, sequins, beads, Swarovski crystals. Gradually, the designer came to



understand the importance of non-waste technology. The basic element of any model is a rectangle, it is quite difficult to work with such a figure, but it helps to avoid waste. It is waste-free production that becomes the basis for the formation of future models. He emphasizes that at the moment it is not enough just to use certain materials to create clothes, it is important to innovate in the design process: creating patterns, developing finishes, processing, and so on.

The researchers note that at the moment the segment of eco-clothing in the Ukrainian fashion industry is underdeveloped (Hakhova & Yeremenko, 2021). It is represented by individual designers and brands, among which are Slowme, DevoHome, Zerno, Roussin, Litkovskaya, Golub Upcycled Denim Project, RevicloBy Markova, Klapyk fashion, Preapoclo, RCR Khomenko, Postushna, Rehash, Natasha Fishchenko, Chereshnivska, Ksenia Schnaider, Bevza, Imagine, Atelier Handmade, NCYZIP, DZHUS, Avoska, Urbanko, Ochis Coffee and others.

(Hakhova & Yeremenko (2021) identified four main concepts proposed by Ukrainian designers in the direction of eco-fashion, use of organic materials; introduction of upcycling techniques; use of recycled fabrics and recycling techniques; fashion design with elements of transformation. According to them, these areas most clearly reveal the philosophy and essence of brands, their "main environmental concept." Another important feature is the fact that Ukrainian designers are primarily oriented towards the European market, which allows them to develop their brands. The researchers also note that in Ukraine, among the innovations, the most developed technologies are upcycling and recycling (Hakhova & Yeremenko, 2021, p. 69). Nevertheless, Ukrainian brands are increasingly joining global environmental initiatives, this can be seen in the rejection of natural fur and leather, the choice of innovative materials for their products.

At the beginning of 2020, the A.M.G. brand also launched its own sustainable line, the leading designer of which is Alena Bettiar. The line is called IMAGINE and is based on the use of materials that do not harm the environment (organic or recycled). Sustainability is one of the most significant trends in the modern fashion industry.

The first IMAGINE collection demonstrates that a sustainable approach to the creation of clothing

and its appearance can be in perfect harmony with each other.

Bakalinska & Kolosnichenko (2018) wrote, that modern brand should not change its appearance every season, as this leads to the loss of the core, the erosion of the core of the brand. In addition, the brand fundamentally does not use low-quality fabrics, on which the fast-fashion system is now based. The designer notes that it is important for her to show that clothes can be fashionable even after many years, there is no need to change them often. It is on this that the idea of launching a sustainable brand is based, which will not harm the planet and will meet the spirit of the times.

At the moment, an important step is to bring the scientific base under the practical developments of designers (Duriez et al., 2022). In this area, it is necessary to determine the conceptual apparatus, to fix uniform norms and requirements. The publishing house Condé Nast is one of the leading media outlets bringing together diverse print and online media. The Sustainable Fashion Glossary was created in collaboration with the Sustainable Fashion Centre, the London College of Fashion and the University of the Arts London.

All publications of Condé Nast have a significant impact in the global community, as they constantly cover the state of affairs in industries related to overcoming the climate crisis. The position of the publishing house is clear and precise - the emphasis is on public awareness of current problems, the development of a dialogue that contributes to the search for possible solutions. The Glossary aims to provide a science-based terminology that everyone can refer to for a productive dialogue on fashion sustainability.

## Conclusions

The relevance of following the norms of professional ethics and ecology in the modern world is beyond doubt. The fashion industry, as one of the most developed in the world community, demonstrates its desire to raise the level of requirements for all processes and products. This is connected not only with the production and consumption of goods in the fashion industry, but also with other aspects of activity. Thus, sustainable development in the global fashion industry covers more and more aspects every year. However, the personality of the designer, that is, the one who is one of the leaders in most processes, remains practically unattended.

A professional designer in itself is a creative person, a passionate. He sets the development vector for his brand, forms his own philosophy, which is fully projected on his activities and is reflected in the global society. That is why it is so important to explore the processes of implementing sustainable technologies directly through the creative self of the designer. It is his understanding of sustainable fashion that largely forms the general civic position and can influence the level of demand for eco-initiatives in society.

The design process, at certain points in its development, has treated environmental requirements as a kind of constraint. Currently, we can safely talk about the opposite trend - all eco-innovations actually become catalysts for the active development of design ideas. This contributes to reaching a new level of creativity, allows you to balance the ethical and practical side of the issue with the requirements of modern aesthetics.

Thus, it can be argued that the further development of clothing design is increasingly determined by the personality of the designer as a leading specialist not only in design issues, but also in creating an organic combination of all components of the product creation process. New creative searches are due precisely to the vital need for a new philosophy of perception of the world.

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