

The Role of Environmentally Friendly Textiles in the Field of Fashion and Clothing Design

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Abstract

Textile design in the field of fashion and clothing design is a variable field based on the continuous replacement of new designs with the aim of economic exploitation. But today, attention to preserving the environment and using resources has become an important challenge in the path of human life continuity, and in the field of textiles, replacing recyclable materials, durable materials and using production methods that comply with environmental standards and it has been proposed as an alternative to conventional production and a new challenge in the field of design. In this regard, to realize this, designers have turned to new methods for designing textiles, such as using natural and recycled materials and reusing used textiles. Therefore, with the aim of achieving different criteria of bio-sustainable textiles, the current research has investigated the theories governing this field and with the descriptive-analytical method and library resources, it is trying to present the criteria resulting from this design method. Examining the experiences of designing in this way in recent time show this strategy, with ethical attitudes and phenomenological design, seeks to develop the personal experiences of the consumer through familiarity, transformation of values, attention to cultural values and rejection of opportunistic beauty.

Keywords: fabric design, bio-sustainable textiles, bio-sustainable design, aesthetics, design ethics.

Introduction

In the contemporary era, the world is facing a great challenge. Man's way of life after the industrial revolution and his attitude towards the world and its reserves in the form of resources to meet the ever-increasing human needs and looking at nature as a tool for profit-seeking, human beings with important problems and dangers in the continuation of life [1]. Earth facing global warming, the high volume of pollution of substances that cannot be returned to nature, dwindling resources and uncoordinated trade and exploitation of labor force, the result of a wrong attitude towards progress and the category of mass production and consumption, have placed man in a historical situation that must be change your attitude towards life [2]. At the Earth Summit in 1992, the cause of the deterioration of the global environment was recognized as the unsustainable pattern of consumption and production, especially in industrialized countries, and the category of sustainable development was recognized as a new strategy in the contemporary world with the aim of optimal use of resources and their preservation as a capital for future generations was considered [3].

Meanwhile, textile plays a very important role due to the use of large amounts of agricultural pesticides, water pollution, chemical pollution of the environment, energy consumption, and as the most polluting industry. In addition, the clothing industry is also constantly trying to mass produce and create a basis for consumption [4].

Changing the fashion of various clothes and changing people's tastes with the aim of stimulating them to buy, many pollutions in the field of chemicals used for processing, collection of non-recyclable fabrics, collection of energy loss for washing and ironing during use and short life of clothes has caused many experts to focus on this art-craft to control this category [5]; this has led to the formation of a new field of thinking, called sustainable textiles and environmental fashion, all of which strive to reduce industrial pollution in this field by creating a kind of social change in people's attitude towards beauty [6]. The science of textiles, reduce their desire to consume and pass from the domain of fleeting fashions [7]. This means a major change of attitude in the role of the designer as a person who tries to change people's tastes towards fashion and tries to change the image of fashion and the textiles used in them [8]. But the answer to these questions must be answered in the traditional field of design judgment, i.e. cost, implementation and aesthetics [9]. The field known as sustainable design has responded to the first two cases; but does the design in the mentioned way have the ability to change the appearance of the design or does it only affect its content? Many traditional designers do not show much interest in this category and ignore it. This is because many of them consider the category of bio-sustainability to be related to technical issues; not the creation of artists that takes place in this area [10].

However, looking at the designer in this research is not a traditional look as a determinant of textile motifs. In this article, design in its broadest sense and as a tool to shape the world around us, and the decisions made by designers determine not only the unique features of the products, but also how they are fulfilled on a larger scale [11]. It defines the construction of human needs and the organization of the life structure, and in order to challenge the existing situation, it involves changing the environmental, social, and economic factors and in order to compensate for the past misbehavior, to solve them with the aim of creating new paths for innovation [12].

Therefore, the aim of the recent research is to establish a relationship between fashion and clothing design and the attitude of sustainability, as a thinking that governs the contemporary period and based on the attitude to the world, as the basis of human life, and to express the idea of fashion and clothing design. As a result of this change of attitude, it is considered not as a new and fleeting style, but as a kind of change of attitude towards biological concepts [13]. The present article tries to change the attitude towards bio-sustainability from the level of a technical attitude, to the level of a type of idea that governs the design process and is effective on fashion and clothing design, as one of the pillars of design, and the question of the present research is how The effect of sustainable bio-attitudes in fashion and clothing design is this kind of textiles.

This research, on two theoretical levels and examining the experiences of a group of leading designers in this field, tries to examine general strategies and a set of approaches in this field and to analyze fashion and clothing design in these works.

Textile industry and bio-sustainable textiles

Sustainable development is committed to human development, preserving the environment and paying attention to the needs of future generations and eliminating cultural and social deficiencies and proportionate and coordinated economic and social progress and preserving cultural diversity. Paying attention to these concepts has two major contradictions with the textile industry; a contradiction that includes its industrial aspects and the second contradiction, towards the cultural and social aspects of this industry [14].

And it is based on the premise of mass production and continuous fashion changes, in order to achieve maximum production and gain economic profit. In the present section, we will examine these two fields and the efforts of the textile industry to respond to the component of bio-sustainable textiles [15].

The idea of sustainable textiles is not a new concept; but until recently, the development of the textile industry, with the aim of meeting the needs of production and mass consumption, has focused on the aspects of cost reduction and the development of production technology, and the low price of the product and the increase in productivity have dominated the working methods of producers, sellers and designers. This was reflected in its cultural form as the formation of many fashions with the aim of maintaining the needs of production. Therefore, the rapid changes and creation of new demands for the consumer and creation of value through the revision of design methods have caused the introduction of the category of sustainable design, not as a new opportunity for a business method. Rather, it should be considered as a negative approach resulting in a decrease in profitability [16].

But in the 70s, discussions about ethical and environmental issues grew among the public, and over the next two decades, it became public knowledge, and currently, the category of bio-sustainability in the field of textiles, through the ongoing biological crisis and increasing awareness in this field has become a general issue. Also, the concept of sustainable consumption was developed in the sense of exploitation and consumption of

resources without disturbing their natural processes and a stable and healthy economy for workers, communities, consumers and society [17].

The first changes occurred in the field of raw material selection; the choice of raw materials is an essential part of the aspects of sustainability and fashion and clothing design. This attention to raw materials from the point of view of resource consumption, energy consumption, pollution level, processing method and attention to increasing the long-term health promotion of the society, and consequently, it is a subject that has a social reflection and is effective on the fashion system and textile design [18].

Many of the world's famous clothing brands follow sustainable approaches through a kind of long-term transformation and by creating a type of eco-friendly trademark, creating environmentally friendly packaging, organic raw materials, natural color, reducing the use of Leather, fur and natural resources at risk, reducing water consumption and using renewable energies as well as social activities in this area, are trying to create an image of themselves as an environment-friendly institution [19].

Paying attention to sustainable textiles does not mean using natural fibers; because the processing cycle of some natural fibers, through the use of environmentally harmful chemicals, in order to create trust in the consumer, giving an ethical dimension to the consumption of a range of products and contrasting other products with them, while encouraging consumers, it encourages other producers to want to improve the image of their commercial name and products in this direction [20].

Fashion and design of bio-sustainable clothing and textiles

It can be seen that the issues raised in the previous section are not only summarized in the field of industry; any change in the industry, if not met with public favor, is doomed to failure and change of approach or return. Therefore, some kind of cultural transformation is necessary to achieve bio-sustainable textiles. This means identifying the aspects of common fashion and moving away from it [13].

Therefore, moving away from the taste promoted by changing fashions, that is, responding to the third category governing the design structure, will be necessary for this, because fashion and sustainability are contradictory concepts. Fashion implies fastness and change; while sustainability in the production of textiles used in clothing has an ethical approach and uses renewable resources and socially responsible approaches [8].

Ready-to-wear fashion and design since the 1860s. Beginning in the 1870s it became widespread and developed with changes in quality and raw materials in the 20th century. In the period after World War II, with the changes in industry and trade, the production of clothes became international and influenced the change in the concept of consumption and production of textiles and clothing. Fashion and clothing design should be considered separate concepts from each other; clothing is a concept of material and immaterial fashion and is a cultural process, product and industry that shapes our cognitive aesthetic dimensions and clothing behavior, and regardless of the level of durability or wear, it is always linked with the concept of originality, and in this sense, it can be used for the category sustainability is problematic. Fashion, before it is related to the real cycle of consumption, is associated with change and discarding in order to reproduce. Fashion goes back to human's natural appetite for innovation and is not related to issues such as identity, belonging, creativity and ethics. Fashions often use the combination of different things to stimulate consumption, and if we look at the shape of all of them, the volume of false changes is more than permanent and stable creations in this field [21].

In addition to this fashion, it does not only seek to change the way of responding to the satisfaction of basic needs; rather, it is a powerful tool in shaping personal expression. Mod operates in two main sectors; High fashion, with expensive products, high quality and a kind of indicator of social status, which follow their development with a slow and calm process, as well as fast fashion, that is, transitory, cheap and accessible fashion. The dominance of fast fashion can be seen in all sectors of this industry [7].

This has many negative costs for the society and the environment, and is linked to problems such as mass imports for non-competitive countries, reduction of domestic jobs, and unfair global labor conditions in order to reduce the price of fast fashion products. Despite the economic and social problems, a large amount of used fabrics lacks the necessary quality and efficiency, and it is not possible to recycle many of them [13].

Therefore, it can be seen that designing in the field of sustainability of textiles is a broader matter than the meaning of mere visual aesthetics and a designer with his work should change people's attitude towards material and texture, recycled products, clothing maintenance, social values of production, etc. also reflect and promote it as an effective factor on the people's desire for sustainability, so that in this way it becomes the driver and leader of the social changes necessary for this area. This means changing the position of fabric design from the complex, creative world dominated by fashion consumption, towards an aesthetic culture of sustainable values [22].

Therefore, one of the features of sustainable design in recent years has been adding ethics to beauty and replacing these two words together, through changing the appearance of products and presenting an appearance that fits these concepts. Because fostering innovation in the field of sustainable economy is aimed at transforming social issues and replacing the why of consumer needs, instead of what is the need for a product and deep emotional, psychological, social, cultural and moral utilitarian reasons among them. A thing that,

while changing people's way of life, will also lead to a new way of sustainable design, and because of that, sustainable design will find the ability to deal with fast fashion design and mass production of non-environmental textiles and meet the needs of the market [23].

Strategies and approaches to designing bio-sustainable textiles

Some of the thinkers and designers in the field of designing bio-sustainable textiles and clothing have tried to change the attitude towards fashion in the society by adopting strategies and approaches and to replace the increase in consumption as its most important economic driver. Some of their approaches are aimed at changing culture through designing and producing new values; because one of the interesting methods of sustainable approaches is to achieve some kind of change in design attitude and a new way of thinking in the relations between designers, producers and consumers. A strategic change in the consumption pattern and paying attention to what services should be provided to the consumers, in the sense that identifying the demand and user experience and revising the values. He acts as the main factor that causes changes in the clothing industry and moves the usual design plans in the path of sustainable development. Therefore, bio-sustainable design can be seen as an effort to design eco-friendly products with a cultural and aesthetic aspect, which tries to change the consumption patterns of societies in line with these goals. In postmodern art, the category of aesthetics has undergone many transformations and according to the nature of this art, it has found an ontological nature [24].

Morality is the most important factor in modern aesthetic discourse and the most important category necessary for education. The role of designers in designing a discourse of education for consumers about the conditions of production of a product, in order to change their aesthetic landscape and the type of social transformation, is of great importance; because the level of awareness is one of the most important variables regarding consumers' willingness to buy a bio-sustainable product, and this means their understanding of existence and the world is variable, and its purpose is to create institutional values in consumers such as products. The title of people who are ethical and committed to environmental values, have an understanding of the wealth of the environment and humanitarian values [25].

One of the philosophical approaches in this field is related to Arnhanas, a Norwegian philosopher and the founder of "deep science", who promotes the non-profit attitudes of human societies towards the environment and respect for its intrinsic values and acceptance of the world as a delicate balance in relationships. It is a complex of interdependent beings. Therefore, man should not consider himself superior to the surrounding nature and exploiting it. In this philosophy, a kind of environmental ethics, including simple life, is proposed as a fundamental philosophy for living. In his thought, the experience of the beauty of nature from a gestalt point of view and the understanding of each organism as a part of the whole nature is very important in everyday experience and sustainable life. In this way, aesthetics becomes a step for the ethical practice of sustainable living, in which deep aesthetics is considered a step for it and reestablishes man in the world [20].

This means the establishment of a meaningful relationship between the world and man, in which the contradiction between nature and man, the destruction caused by instrumental and profit-seeking rationality, gives way to reconciliation between man and nature. This will reflect our cultural beliefs, knowledge and attitude towards the world and present the world as a general experience which may be synonymous with Heidegger's phenomenological approach. His thought on deep psychology and its moral attitudes have a great influence on institutions, and he and Theodor Adorno claimed that aesthetic experiences create a potential force for the development of individual ethics and the development of the social sphere [11].

One of the important issues in Heidegger's discussion in this field is his view on the category of "everyday". From his point of view, human being, or Dasein in his interpretation, does not have independence and is always subject to being taken over by others, and as a result of that, being is changed to I am - with others - and he loses his existence in the crowd. This despotic but unobvious state of others causes him to identify himself with a mass without identity and individuality in his daily life. To put it more simply, Heidegger considers a philosophical interpretation of a person abandoned in a social mass lacking identity as a factor for a person's distance from thinking about his own being and being trapped in everyday life. Borrowing from Khirk Hagur, he believes that the way out of this situation is the achievement of original existence and unity, which causes the individual not to return to the community to reduce his existential anxieties and to live his existence in company with others. They do not see is an existential attitude in Heidegger's view finds a social dimension in Adorno's thought. He considers the enslaving forces of people, the process of excessive mechanization of industrial work, homogenization of products and homogenization, which turns culture into a kind of entertainment and falsifies and produces public opinions, which deprives human beings of independent decision-making and freedom of action removes Adorno considers the contemporary culture industry to be a tool of blind rationalism and destructive of nature for the purpose of sales and commercial happiness; something that deprived independent decision-making and freedom of action and replaced it with the easy pleasure of material things and domesticity [26].

Heidegger, in opposition to the problem of modern technology, which leads us towards the mastery of nature by considering everything as quantifiable, and in opposition to it, considers art to be the saving force in a

vague way. This is the actuality and openness of the work of art, which in his view is different from technology and industry, in which the object does not reveal itself, and it is in this way that it is possible to distinguish between the creation of art and other artefacts, and consider them as a change in beings. And he did not know. From his point of view, we are living in an age where technology has dominated and art should be the foundation of a decisive confrontation with the essence of technology. From his point of view, art is not an object, which is a kind of actuality and is like a tool in the hand to open existence. In the same way, human existence is in his eyes not because of his animality, but because of the actuality of man in the position of Dasein, that is, the manifestation and evidence of existence. The work of art is the occurrence of truth and creates a world that he calls the earth, and from his point of view, this is the work of art that allows the earth to be the earth, and the understanding of the world is a work of art and not an object because of the characteristic of actuality. This is in his allegories of village shoes that reveal the social sphere, or the temple that has cultural, moral and spiritual meanings in it, and the bridge that brings the land and landscape to light [26].

It is obvious that his existential interpretations of the earth and place and his idea about settling down in Arai Naas have turned into an ecological landscape. Adorno also considers art as the solution to this lack of identity and considers it a tool for changing the way of life and new thoughts. From his point of view, works of art make people independent and protect them from the manipulations of the culture industry. Also, he considers the beautiful cognitive experience of art and nature as an antidote to instrumental life and a way to achieve a suppressed identity and a new opportunity to think and change the way of life and new thoughts and become an independent existence. The art and the inaccessible beauty of nature are able to confront the self-destructive process of instrumental rationality and the aesthetics of mass consumption, and reconciliation with them leads to the inner salvation of people [23].

These cases should be considered among the general strategies that guide the works of pro-environmental textile designers today. They are trying to reconcile man and nature through changing the experience of identity, which today is caught in the trap of fashion. This art is not intended to meet the needs of the industry, but seeks to conquer and reveal existence by creating a different experience and gives the consumer the opportunity to express himself and achieve his personal attitude about existence. The goal is to remove the distinction between man and nature and a kind of cooperation to create an ethical and aesthetic experience for him [23].

It is something that puts an end to the rationality of the profit-seeking tool and the useless aesthetics and displays the harmony between nature and man in the form of an aesthetic work. In this way, the textile becomes a part of the ontological expression of the individual and acquires a moral dimension. In this thought, place or earth finds a moral concept for us and changes its place to the relationship between man and the world. Promoting awareness of ontological relationships and common meaning for sustainable development that replaces random or individual approaches. The first approach of some designers who intend to bring creativity into the field of sustainable design is to use textiles with organic materials or renewable materials. It is the use of raw materials in textiles and the use of different techniques to produce textiles that can expose the landscape and natural aesthetics to the viewer. The presence of raw material and techniques that replace the texture and natural quality of the fabric is considered as a tool for visual design [14].

For example, the property is made in various colors and patterns such as stripes and special flowers, which is called "Pichon" in the local term, a part of the tar with a very basic design is often patterned with three colors: yellow, green, red, and the wefts are simple and without patterns (Figure 1).



Figure 1: Example of bio-sustainable fabric

The use of heat and the use of the properties of natural material to change the shape against heat, the elastic properties and the change of the shape of the fibers as the natural properties of the yarn for tying, have become a tool for designing textiles. Paying attention to visual beauty from the consumer's point of view, such as appropriate style and color, is very important and highlights the role of designers in creating environmentally friendly fashion. In this regard, some designers try to replace common painting techniques with other techniques. Becky Earley, an English artist, uses the least amount of chemicals, such as using fire or printing natural patterns with the help of plants or recycled textiles from plastic bottles that can absorb light and create patterns on themselves for their designs.

Another method is to fertilize the hidden values within the societies through cultural return. Something that is capable of fertilizing some of the latent values in societies and replacing fashionable and conventional products with samples of textiles produced in a traditional way. The logic of heterogeneity and attention to its environment and culture is the antidote to instability; because in these societies, people will see the impact of their actions on the environment and accept these things. The development of small production systems within the communities is a factor to deal with the high amount of pollution caused by transportation within the communities, and it also provides the possibility of diversity in production. Something has the ability to overcome fashion and can produce the fabric in the required amount and in accordance with limited functionality, and something that is in line with the production of texture that matches the patterns used in clothes or furniture, means reducing waste. It allows the combination of visual and technical design processes. This is a very old method in many societies; for example, an Indian saree is made from one piece of fabric without waste, and now it is possible to do this by using computer patterns [6].

Using the traditions of checkered fabrics, artists produce products suitable for their use, such as clothes, scarves and shawls. The main motifs of the property include kegrah, single point, black jim, silk line, underpants, shirt, night tent, baqcheh and old motifs have been forgotten over time. On the other hand, only part of the thread is patterned with a very basic design and often with three colors: yellow, green, red, and the wefts are simple and without pattern. In the property of colors, they have a special wave and beauty, which is related to the special way of dyeing and patterning [3].

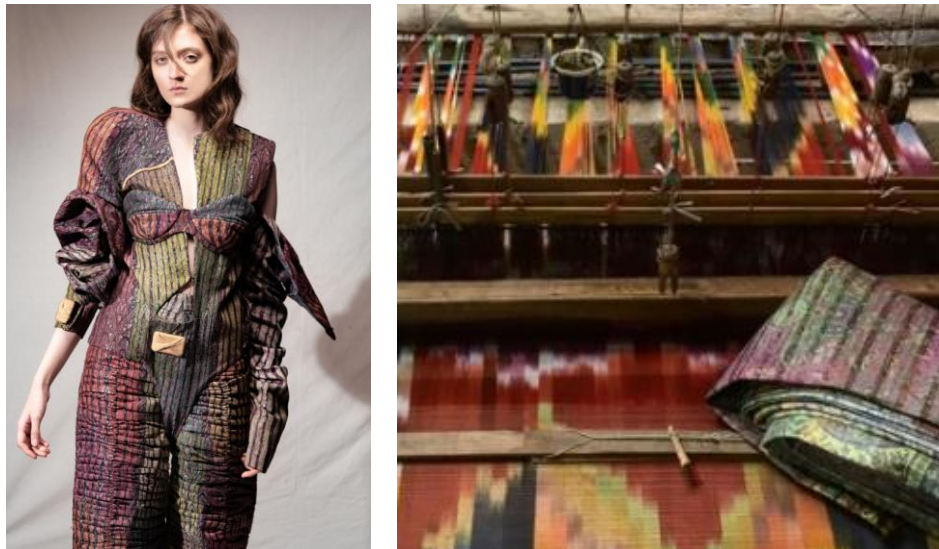


Figure 2: Weaving and design of bio-sustainable textiles

Unique and expensive works do not contain any artificial materials. Moving towards handicrafts is a valuable way to combine skill, creativity, art, emotions and the production process, and it will turn into original forms. Cooperation with Tigran's specialized industry and production of a set of specialties related to the manual production of fibers in the form of crochet, hand printing techniques, digital printing and laser cutting, is a very important field in reviving the traditional and cultural conditions of work within the production system. A thing allows a large number of creative small businesses within a network to do a series of exquisite and valuable works through environmentally friendly products and supporting the workforce. Many of these designers use the method of taking orders through the Internet and producing according to the market's needs for case production and reducing waste and increasing the value of the product by attracting the audience through the promotion of sustainable and unique fashions. One of the other tools to deal with fashion is to take advantage of the traditions of a society in repairing, recycling and reusing fabrics [27].

In a research in the Netherlands with the aim of strategic planning of sustainable families in 2050 AD, in the field of clothing, small number, high quality, uniqueness and repairability were considered as important items. Paying attention to repair and services in this field regarding textiles is considered as a matter to increase its value. This is important because it replaces the use of new and replacement with repair and increases the life cycle of the textile. Attention to recycling includes recyclable items and the use of recycled materials; this leads to the reduction of waste materials for the environment. Reusing fabric scraps and producing forty pieces from them is the revival of one of the creative traditions for reusing textile scraps. Designing and promoting textiles for the fashion market, fabrics and textiles for the body can be functional, fashionable, symbolic or a combination of these three. Handmade production can be a part of the sustainable textile production process and as a symbolic expression and contrast with contemporary mass samples; it strengthens the attachment to a garment. Also, this method for adding unique details to a fabric or garment and emphasizing individuality as well as guaranteeing better quality and a tool to increase the sensory characteristics and exclusivity of a product and be considered as an economic investment [25].

The use of tissue structure to produce complex forms by computer or directly on the mannequin's body can focus on three-dimensional forms and the use of waste as pieces of new clothing patterns, and it is an economic and environmental issue. This is a way to innovate in fashion with regard to the use of scraps, and due to the high degree of complexity, different shades and textures, it has a great value. This has been popular since the past, and many Iranian and Greek clothes and Japanese kimonos have been produced in this way. In this way, according to the needs of the new fabric from the point of view of design, weight, decorations and color, the designer creates a new and unique fabric by separating the pieces of the previous fabric and using organic fabrics and recycling some of the consumer's clothes. He finds that due to recycling, it is an environmentally friendly solution and because of its uniqueness, it is in line with fashion innovation [21].

He tries to recycle used fabrics by creating forty modern pieces. The main difference in their aesthetic change is in the use of natural and amoeba-shaped forms or traditional forms inspired by plants, in order to develop creativity in a traditional way. The presence of trained and creative designers is one of the aspects of innovation in sustainable textiles. In this way, inside a traditional tailor's house, from the combination of traditional and modern methods, a kind of experimenting and experimenting with materials, form and arrays of fabric occurs to lead to the discovery of new ideas. From the point of view of the use of textiles in fashion, one of the ways to deal with it is to pay attention to the so-called classic clothes that have been offered for a long time with high quality and high prices and are used to express status, identity and personality [21].

And clothes can make him accept many of the defects of a work. Exclusivity is one of the key ways to create an emotional connection and to prolong the life of a product, which can be done traditionally, that is, ordering a tailor's house and the consumer's decision to use the design and the use of details that fit his interpretation of the cover and change. It is a unique and satisfying dress. Of course, achieving satisfaction is a complex matter. Because there are different criteria for people and it depends on the mentality of the individual from the society. Also, initial satisfaction and long-term satisfaction are opposites, and for some, achieving a special brand, instant satisfaction, and the special quality of the cycle, the lasting and long-lasting pleasure of use and turns them into a personal class of that person. Therefore, one of the factors of changing fashion is encouraging individuality. One of the needs is change and diversity of style. It is a business mode in which identifying the consumer and how to shape the value and lifespan of the product and creating a process in which the user finds an active and continuous role in the design of the product and obtains satisfaction through it. This makes it possible to develop a special quality of life for value consumers and turns them into creators instead of consumers of value [28].

The value related to the lifetime of consumption is among the cases that will be effective on the deep satisfaction of the consumer and pay attention to sustainability, and has the ability to change the nature of competition. Participatory design is a method of activity in the field of design, to create an active role for the consumer. In this idea, the wearer is involved in the design process and develops a unique idea according to his opinion. In this collaborative process, this can be a transparent approach of the attitudes, cultural, political and biological components of the user on the production of the final product. Because increasing the life cycle of a textile through increasing the relationship between the user and the product and the effect of consumption, through the responsiveness of a product to the deeper and more poetic needs of humans and turning a technology-oriented matter into a rich part of the field of interactions and durable experiences and transforming it depends on a work of art that evokes some kind of sympathy [29].

Entering the consumer into the field of working conditions and his cooperation in production and handing over a part of the production process to him, while making him familiar with the issues behind the curtain of an industry and its concerns, has become a part of his entertainment process and the relationship between it increases the yield. These things should be placed in the heart of a thought in which calm design is proposed as an alternative to traditional design, and all efforts in this way are to respond to the real needs of the consumer, instead of imposing designers' ideas on him. One of the ways is to move towards the calm mode; in contrast to fast fashion, not only from the point of view of time speed, but also through valuing local resources, distribution

economy and reducing middlemen and environmentally friendly products. In which maybe the method of restored clothes or re-surgery of clothes by a skilled tailor, in order to obtain new clothes in order to develop the product cycle and create a kind of cultural value through it, is a way of consuming and spending ironically in key sources. All textiles and fashion, even though they have been used for a long time, have a long life and after that it is felt necessary to discard them. At this time, reselling them for second-hand clothes have a long tradition of donating clothes to subordinates. Also, the feeling of comfort has a great effect in increasing our use of a product. Dissatisfaction with a product due to low quality and vulnerability is the most important factor in discarding it. Being multi-purpose is another factor that is related to the principles of adequacy and efficiency; contrary to the usual practice of designing different clothes for different times and situations, clothes that are more compatible with different conditions. This allows us to have a garment that has a longer psychological lifespan than a garment designed for specific purposes, and this is an optimization in the use of resources and reducing consumption [30].

Conclusion

The purpose of this article is to investigate bio-sustainable textiles and how fashion reflects the view of this design method on bio-sustainable textiles and fashion designed in this way in two strategic and approach areas. At the beginning, the research addressed the needs of the contemporary period to pay attention to this category, its necessities and the transformations that occurred in the field of textile industry, and then it examined the strategic views of theorists in the field of textiles and sustainable living fashion and analyzed the views of Philosophical supporter of the aesthetic attitudes of this field and the approaches of its designers, as a reflection of these views.

The results of the research show that it is possible to search for the method of design of these works within the schools of deep ecology, phenomenology and critical school, all of which emphasize on creating an aesthetic experience with the help of nature and moral attention to it. They are trying to look at art as a tool to get rid of the instrumental dominance of the industry and its mass-like aesthetics and its commercialism, and move towards a kind of deep and existential experience of the world, rejecting the mass-like beauty and harmonizing with the beautiful. They know natural science. Something that in the works of designers in this field, in the form of changing the attitude towards textiles in its common sense and increasing familiarity with a consumer item, moving towards value creation of manual skills and replacing uniqueness instead of mass production and reviving the culture of textiles and its recycling. And making it possible for the consumer to participate in the design or recycling of a garment, with the aim of creating personal value and increasing his attachment and increasing the psychological life of the products, has been reflected and has become a manifestation of this attitude in its aesthetic dimensions.

References

1. Arasinah, K., Nornazira, S., Rahimah, J., Rodiah, S., & Farah Najwa, A. P. (2018). Environmental Sustainable Apparel: Recycle, Repairing and Reuse Apparel. *The International Journal of Social Sciences and Humanities Invention*, 5(1), 4249–4257.
2. Bauer, B., et al., 2018, Potential ecodesign requirements for textiles and furniture, Nordic Council of Ministers, Copenhagen.
3. Deschamps, T. C., Carnie, B., & Mao, N. (2017). Public consciousness and willingness to embrace ethical consumption of textile products in Mexico. *Textiles and Clothing Sustainability*, 2(1). <https://doi.org/10.1186/s40689-016-0017-2>
4. Ellen MacArthur Foundation, 2017, A new textiles economy: redesigning fashion's future, Ellen MacArthur Foundation, accessed 21 January 2022.
5. Beton, A., et al., 2014, Environmental improvement potential of textiles (IMPRO Textiles), Publications Office of the European Union, Luxembourg, accessed 24 March 2020.
6. Henninger, C. E., Alevizou, P. J., & Oates, C. J. (2016). What is sustainable fashion? *Journal of Fashion Marketing and Management: An International Journal*. 20(4), 400-416.
7. Iran, S., & Schrader, U. (2017). Collaborative fashion consumption and its environmental effects. *Journal of Fashion Marketing and Management: An International Journal*, 21(4), 468–482. <https://doi.org/https://doi.org/10.1108/JFMM-09-2016-0086>
8. Euratex, 2021, '2021 must be a turning point for the European textiles and clothing industry', European Apparel and Textile Confederation, accessed 28 September 2021.
9. Watson, D., et al., 2017, Stimulating textile-to-textile recycling, Nordic Council of Ministers, Copenhagen.
10. Khan, M.M.R. and Islam, M.M. (2015). Materials and manufacturing environmental sustainability evaluation of apparel product: Knitted T-shirt case study, *Textiles and Clothing Sustainability*, 1(1), 1-8.

11. Kozłowski R., Handbook of natural fibres, Volume 1: Types, properties and factors affecting breeding and cultivation. Ed. Woodhead Publishing in Association with The Textile Institute, Series in Textiles No. 118, Oxford-Cambridge-Philadelphia-New Delhi, 2012
12. Kozłowski, A., Searcy, C., & Bardecki, M. (2018). The reDesign canvas: Fashion design as a tool for sustainability. *Journal of Cleaner Production*, 183, 194–207. <https://doi.org/10.1016/j.jclepro.2018.02.014>
13. Pappas, E., 2021, 'Latest trend keeps clothes out of landfill', *Horizon — The EU Research and Innovation Magazine*, accessed 7 January 2022.
14. Östlund, A., et al., 2020, Investor brief: sustainability in textiles and fashion, *Mistra Dialogue*, Stockholm, accessed 30 August 2021.
15. Lundblad, L., & Davies, I. A. (2016). The values and motivations behind sustainable fashion consumption. *Journal of Consumer Behaviour*, 15, 149–162. <https://doi.org/10.1002/cb>
16. Lujan-Ornelas, C., et al., 2020, 'A life cycle thinking approach to analyse sustainability in the textile industry: a literature review', *Sustainability*12(23), p. 10193.
17. Lehmann, M., et al., 2018, Pulse of the fashion industry 2018, *Global Fashion Agenda and Boston Consulting Group* () accessed 29 September 2021.
18. Laitala, K., et al., 2015, 'Making clothing last: a design approach for reducing the environmental impacts', *International Journal of Design*9(2), pp. 93-107.
19. Malakahmad, A., Abualqumboz, M. S., Rahman, S., Kutty, M., & Abunama, T. J. (2017). Assessment of carbon footprint emissions and environmental concerns of solid waste treatment and disposal techniques: A case study of Malaysia. *Waste Management*. 70, 282-292
20. Mcneill, L., & Moore, R. (2015). Sustainable fashion consumption and the fast-fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 39, 212–222.
21. Mcneill, L., & Venter, B. (2019). Identify, self-concept and young women's engagement with collaborative, sustainable fashion consumption models. *International Journal of Consumer Studies*, 1–33.
22. Quinn, L. J. & Sinclair, A. J. (2016). Undressing transformative learning: the roles of instrumental and communicative learning in the shift to clothing sustainability. *Adult Education Quarterly*, vol. 66(3), pp. 199-218.
23. Šajin, N. (2019). Environmental impact of the textile and clothing industry What consumers need to know. *European Parliamentary Research Service*. Available online: http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633143/EPRS_BRI.
24. Sharifah, S., & Arasinah, K. (2019). The sustainability in the industry of green apparel: Are we ready? *International Journal of Psychosocial Rehabilitation*, 23(4), 973–983.
25. Shen, B. (2014). Sustainable fashion supply chain: Lessons from H&M. *Sustainability*, 6(9), 6236–6249. <https://doi.org/10.3390/su6096236>
26. Shim, S., Kim, J., & Na, Y. (2018). An exploratory study on up - cycling as the sustainable clothing life at home. *Fashion and Textiles*, 5(14), 1–15. <https://doi.org/10.1186/s40691-018-0129-1>
27. Toprak, T., & Anis, P. (2017). Textile industry's environmental effects and approaching cleaner production and sustainability, an overview. *Journal of Textile Engineering & Fashion Technology*, 2(4), 429–442.
28. Dissanayake, G., and Sinha, P. (2015). An examination of the product development process for fashion remanufacturing. *Resour. Conserv. Recy.* 104, 94–102. doi: 10.1016/j.resconrec.2015.09.008
29. Elle Fashion Team (2020). *24 Sustainable Clothing Brands That Are Anything but Boring*. Available online at: <https://www.elle.com.sg/2020/08/20/best-sustainable-clothing-brands-fashion/> (accessed Jun, 21, 2021).
30. DeLong, M., Heinemann, B., and Reiley, K. (2014). Redefining, redesigning fashion: Designs for sustainability. *Fashion Pract.* 6, 125–130. doi: 10.2752/175693814X13916967095073