



Short Communication

Designing Conceptual Dresses with “Water” Content and Protecting Environment Using Hydrogels

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Abstract

This article is descriptive-experimental which presents a collection of conceptual dress designs with environmental protection with water crisis approach. Therefore, dresses were designed that could create this type of feeling in the audience. On the other hand, in designing such clothes, fabrics that are completely environmentally friendly have been used. Today Linen fabric, which is used as an agrotexile in agriculture, as well as hydrogel, which is used in agrotexile as a source of water supply for plants, have been used in the designing these garments to provide the desired feeling and concept to the audience. Finally, clothes are designed to become three-dimensional by collecting water droplets and convey the concept of water value to the audience.

Keywords: Conceptual Dresses; Hydrogel; Agrotexile; Environment; Water

Introduction

Conceptual art is a way of presenting the contemporary work of art in which a particular idea and concept, which is usually individual, complex and general, is abstract and irregular and based on the banishment of the aesthetics of form. Conceptual art is different from “concept” as the content of works of art, but it can be considered as an abstract form of thought that arises in the artist’s mind through meaning and work of art and finally displayed in a proposed structure and in a very diverse order. In this way, the conceptual work of art has a variable property commensurate with the overall performance and public relations between its components. For this reason, among the artists, this movement of meaning of art, the work of art and its relations with human beings, nature and aesthetics are questioned again from the perspective other than modernism [1].

In conceptual works of art, the relationship between the artist, the work of art and the audience is transformed. In this way, the conceptual effect is not the simulations of nature and its various forms, but the artist, relying on his individual logic, utilizes the possibilities of language and direct expression in nature and in life, and in many cases, in addition to what objects, political, social and technological facts constitute his work. In this regard, the audience and sometimes artist is the part of the whole and form of the work of art and its meaning.

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Modern art, conceptual art, and its various manifestations show only the distorted form of art. But the reality is that the evolution of art is unpredictable, and it seems that in postmodern society a patriarchal taste has prevailed over the evolution of art [1].

Conceptual Dress design

The term conceptual dress refers to the design of clothing whose purpose is not to cover the human body, but to display human traits, feelings or thoughts. In fact, conceptual dress is considered to be the means for conveying an inner thought or attribute, not necessarily to cover all or part of one’s body (of course the most important goal in designing clothes), and this is exactly the purpose of conceptual art follows. In the sense that the artist’s action is only a prerequisite for showing the nature of the work of art and idea, and any result of the work is only a preliminary manifestation of a general conclusion that the artist has reached.

In this way, the design of conceptual dresses enters the field of conceptual art, and it can be said that one day conceptual dress will expand to compete with the concept of clothing and occupy a wider space, especially in theater and cinema. This phenomenon is the result of a great change that began in the late twentieth century and reached the third millennium, and introduced a new generation of innovators and thinkers to the world of art and the art of clothes designing [2].

Looking at the history of clothing, it can be seen that cultural, economic, political, industrial, scientific, and artistic developments have continuously affected clothing, taking it out of the exclusive dimension of clothing with a wider dimension. Today, many talented costume designers in the field of art seek to design clothes with the influence of other arts and sciences and immerse in the form of common artistic styles, and provide the possibility of wearing clothes according to qualities, spirituality, emotions, psychological phenomena and human mental imagery. As the painting expresses the feelings of its creator, in the field of the art of clothes designing, the body percept the canvas and means of expressing the feelings or mindsets and the inner and psychological concepts of human beings such as anger, happiness, good and evil, love and hate, desire, etc. Undoubtedly, if conceptual dresses are combined with art such as theater and cinema, will bring completely different and original changes and concepts in the future, whether in the field of theater and cinema will follow in cloth designing.

Following the evolution of art in various aspects of photography, film, layout, video art, etc., where artists decorated their works with signs and concepts from the fashion world, contemporary fashion designers also paid more attention to the subject of their collections and gave a conceptual color to clothes, and gave their performances, by each presenting in a unique way their personal or social concerns to the audience in the costume shows [3].

Conceptual artists with a tendency to design clothes

These artists added more artistic aspects to fashion with their conceptual designs and bold advertising campaigns. Also, showing their clothes were performances that called for the end of the period and the beginning of a new revolution. Costume shows were replaced by executives that were more like performances.

In the 1960s Conceptual artists, like Christo, invented clothing to be dressed as a work of art. Their costumes are key components of the 1960s as "performing arts", and included a variety of new and unusual materials that were made along with clothing and short coats of that time. Thus, fluctuations in the 1960s, in New York, Paris, and London, artists such as Rudy Guernreich, Pakoraban, and Mary Quant emerged in the field of costume design from what was common in an unconventional and different way. Since the 1960s, ideas flowed freely between art and fashion, and we see artists and designers like Mona Hatum and Martin Margilla. They explore a way to establish "identity and originality" through clothing. Other artists, such as Helen Story, Georgina Goodley, and Anne Hamilton, use new ways to display their clothes, with an original idea behind it. Now, the concept of clothing is nearing its boundaries; Artists and designers use a variety of materials such as copper, newspapers, rubber bands, human hair, thorns, porcelain and woven stainless steel to make wearable and non-wearable clothing [3].

Another work is by the French artist Paco Rabanne, who is known for innovative use of materials. In 1960, he responded to the rise and growth of "young culture" by making chain armored clothing, using aluminum or plastic shapes (or, in this case, buttons). Paco Rabanne describes making clothes using pliers instead of thread and needle.

The work of the American artist, Kosama is a point between the art of arrangement and performance, and his clothes origins from a strong desire to glue dirty and unpleasant fabrics together, which reflects his interest in the connection between "personal and formal", "basic and mechanical" and "material and mental" subjects.

Yayoi Kosama is an 83-year-old Japanese woman, painter, layout activist, and creative fashion designer. Her paintings are on the list of the most expensive paintings by living artists in the world. Kosama art is a rare phenomenon in the world of visual art that cannot be properly placed in the field of painting, sculpture or arrangement. The original signature and identity of her works are multiple dots on the surface of objects or places. She can decide in an instant and turn a tree with large and small dots into a beautiful work of art [4].

Since 1967, when hippies became popular, in protest of the Vietnam War, she has performed extensively in Central Park and Brooklyn, New York. In these performances, the body entered her works as a new medium and she painted spotted drawings on the bodies of the audience in the streets and parks.

All the performances of Kosama were filmed and turned into a film called "Anti-Kosama". The 1968 self-produced film won the fourth Belgian International Experimental Film Competition and won the second prize at the Maryland and Ann Arbo Film Festivals. In the same year, Kosama Fashion Company opened, and she began selling her avant-gardes goods through the American retailer Blue Mingdiles. Kosama's costume designs were similar to her atmospheres, so that it is easy to put her environmental works and her clothes in one collection. She personally designed the costumes and painted abstract patterns on most of the costumes using bright plastic colors (Figure 1).

She believed that in order to have a modern society, one had to innovate and not to follow the old ways and the usual trends of clothes design of the last two decades, and for this purpose, she created her own style and designed free models for men, women and sometimes clothes for both. The silver squid is one of her avant-garde designs, which includes a hooded dress that shows the front of the chest.



Figure 1: Yayoi Kosama, Japanese artist in conceptual layout and fashion.

Yohji Yamamoto, a designer who starts 90% of his fashion shows with a black dress, and black is the dominant color of all his clothes. According to his, the color black, shows proudness and balance. For nearly 40 years, he has been very subtle and abstract in constructing and deconstructing fashion boundaries.

This Japanese avant-garde costume designer spends twice as much time as the standard on preparing his clothes. He says, "I was born to be a poet". This poetic feeling is quite evident in the maze of his conceptual clothing. Most likely, this feeling has made the aesthetic sense of his works pleasing to the taste of his audience and, unlike other conceptual artists, it is also economically profitable. Based on Yamamoto's close friendship with Riquakakubo, the two were very similar intellectually. Therefore, Yamamoto also tries to make his designs gender-independent (Figure 2).

Koji Tatsuno is another Japanese creative designer who has been at the forefront of avant-garde style design beyond his time. He is the one who, that in 1997 an interview with the New York Times, pointed to the variety of designs for women's clothing to express their individuality; a point that perhaps few fashion designers at the time had in mind.

Although he was dropped out of school, but learned English-style tailoring in London. In 1986, he launched his own brand; then, with the financial support of Yohji Yamamoto, he expanded his brand and hired Alexander McQueen as his assistant. In Tatsuno's limited works, we see a combination of ancient and contemporary Japanese cultures. His style of dress, while as avant-garde, also embodied simplicity and minimalist style (Figure 3).

Ann Hamilton is an American artist best known for her large-scale arrangements. Hamilton always makes her works with materials that she finds around her or materials that are suitable for the place where the works are exhibited. This effect is on a small scale, a collar whose inner section is sewn with the alphabetical letters and there is a circle of hair on the outer section.

Another artist working in the field of conceptual dress is Lunameno, headquartered in Los Angeles. She is a costume designer who is becoming a visual artist. His works include twelve costumes and their model is related from 1770-1990. He mounts the garments on a rail attached to the ceiling, rotates them on the rail, and thus follows the evolution of the garment in the limbs of moving women. The purpose of this collection is to summon the soul of women and clothes of the past by moving forms. The next image is a design of a dress that conveys the concept of "secret". The secret is like a treasure inside a heavy bag that a person carries on his/her shoulder and can be a source of concern, both for someone who has it in their heart and for someone who is afraid of being exposed. Fashion is interested in entering the scene quickly and being replaced by the best. However,



Figure 2: Picture of Yohji Yamamoto clothes.



Figure 3: Pictures of Japanese costume designer Koji Tatsuno.

there is always an event that deserves praise.

Agrotextile: Agrotextiles or agricultural textiles, are textiles made of natural fibers such as jute, wool, sisal, hemp, linen or synthetic fibers such as nylon, polyester, polypropylene, etc., which are mostly used in agriculture, animal husbandry, and horticulture. The main task of these fabrics is to control the destructive effects of the environment and other environmental factors during the production of product, control and saving water and soil consumption, increase health and safety of the products, as well as protection from strong winds and rainfall, light and heat, UV waves, etc. [5].

Hydrogel: According to the latest pharmacological and medical dictionaries, there is no accurate and comprehensive definition for the word hydrogel. In most cases, the hydrogel is considered to be a water-insoluble substance that absorbs a large amount of water, or it is defined as a simple water-swell able polymer network. According to another definition stated by Hoffman, hydrogels are called hydrophilic three-dimensional lattice polymers, which are composed of two components, water-soluble polymers and cross-links that make the hydrogel insoluble in water. They can swell in water and hold a certain amount of water when placed in an aqueous solution. The polymer mesh can absorb a minimum of 20% and a maximum of 99% by weight of water. Hydrogels that can absorb more than 95% of water are called super-absorbents [6,7].

Practical work and Discussion

In this article, linen fabric is used with the specifications listed in Table 1. Also, Hydrogels and titania were used to complete it. Completion is done as a batch pad. First, the fabric was washed with distilled water and immersed in 1% wt nano-titanium solution for 4 hours and subjected to ultrasound. The treated fabric is then dried

for two hours at room temperature. Then, it was again washed with distilled water to obtain the finished fabric. The hydrogels were then trapped in the fabric layers and then sewn (Table 1).

Table 1: Characteristics of the fabric used.

Type of texture	Fabric	Weight (g/m ²)	Warp density (1/ cm)	Weft density (1/cm)
Wreathy (Tafteh)	100% cotton	120	24	15

Hydrogel water absorption test results

In an experiment the finished fabrics were exposed to water, and over time, the fabric became bulkier and deeper due to the presence of hydrogels, and in fact came closer to the three-dimensional fabrics. The presence of titanium particles accelerates the absorption of water and reduces its evaporation and the resulting volume is kept more on the fabric. At the beginning, many sketches were made, and out of the 15 initial sketches, five designs were approved by the professors, and their color and computer design will be discussed later (Figure 4).

First Design Analysis: Conceptual dresses consider the human body as a means of conveying an idea, in the sense that the artist's action is only a prerequisite for showing the nature of their work of art and idea, and any result of product or embodiment is only the initial manifestation of a general conclusion which was achievable. Because conceptual dress is of a particular place and situation, this cover is suitable for rainy weather. The cover of the garment is of autumn and winter type, so that when it rains, the distances between the cracks on the fabric which is the lining with hydrogel powder that hold water droplets and swell, which displays the depth and three-dimensional state of the garment design.

In the design of clothing, according to the points that are important in relation to the environment and a help to the water shortage crisis, a dry desert image and water-thirst fish in cages was depicted on the fabric design. The pants were made of leather and designed in black according to the color field.

Second Design Analysis: In the design of the clothes, the cuts were made of rain drops from the oval semicircular shape, and the cuff of the sleeves of fabric balls contained hydrogel powder to give a special swollen effect to the clothes when it rains. Hence, before and after rain showed us a new form of sleeves. It is important for most people to be stylish and beautiful. The special weather conditions of every season have caused some colors to be more beautiful in some seasons and to be used more. In the textured clothing section, the use of warm, pleasant, calm colored mustard that will give a good feeling to us and those around us. This color is suitable for those who want to influence their surroundings and convey a feeling of warmth and comfort to themselves and others.

Third Design analysis: In the designing of clothes, the upper section of the body, the running water idea was taken, that because of the hydrogel powder used and when the water was absorbed, the pleats are opened and gave a creased effect; and on the other side, which only showed pleats was because it did not have hydrogel powder, which appeared as a flowing water after displaying a new face. The color used in the clothes is like visualizing a rainy and cloudy sky, this color also has its own audience and is one of the colors that are most sought after in autumn and winter.

Fourth Design analysis: The cape (or mozzetta) is a symbol of legendary power; autumn and winter are suitable season to use a

cape. The cape can be used as protection against rain. Using cape as a raincoat increases the comfort of the style because it is easier to wear and take off the cape when it is raining than any other covers. The collar cuts of the shape, idea is taken from the fish wing, as can be seen from the extra multi-layered with different sizes where the lining is done by hydrogel and applied to the cape shoulder to show up as cushion when it rains.

The color blue is very similar to the Marsala color, it is a little darker than Marsala, and it is enough to consider the color blue suitable for winter and place it in the list of the best colors of the cold season. One can use this color in all clothes such as woven clothes, T-shirts, pants, and coats.

Fifth Design analysis: The dress with long stripes till the waist idea was taken from the fins and tail of the fish. The lining strips as two colors containing hydrogel that swells after receiving water and the resulting dress is different from the initial look. Purple is an attractive color which is suitable for simple wear and some clothes such as scarves and shawls or T-shirts.

Conclusion

In this article, according to the concept of conceptual art and considering water crisis and environmental protection, clothes were

designed that could create this feeling in the audience. On the other hand, in the design of such clothes, fabrics used are completely environmentally friendly. Today Linen fabric is used as an agrotexile fabric in agriculture. As well as hydrogels, which are used in agrotexile as a source of water supply to plants, is used in the design of these clothes, so as to induce the desired feeling and concept to the audience.

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