



DEVELOPMENT OF FORM AS A FORMATIVE ELEMENT IN THE INDUSTRIAL FASHION PRODUCT

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**Jordan Efremov^{1,*}, Verica Naumova^{1,a}, Vangja Dimitrijeva Kuzmanovska^{1,b},
Aco Janevski^{2,c}, Marija Ananijeva²**

¹Art Academy, Goce Delcev University, Stip, North Macedonia, Krste Misirkov, 10A,
2000, Stip, North Macedonia,

*e-mail: jordan.efremov@ugd.edu.mk, ORCID ID: 0009-0007-4074-1347

^ae-mail: verica.naumova@ugd.edu.mk

^be-mail: vanga.dimitrijeva@ugd.edu.mk, ORCID ID: 0009-0004-7903-4306

²Faculty of Technology, Goce Delcev University, Stip, North Macedonia, "Krste
Misirkov" No. 10-A, Republic of North Macedonia,

^ce-mail: aco.janevski@ugd.edu.mk, ORCID ID: 0000-0002-7406-6665

ABSTRACT: *The main function of design is to shape usable objects from various fields. Design emerged with the advent of the industrial revolution and the serial, automated, mass production of various goods for an unknown consumer. Design seeks to anticipate the tastes and needs of individual categories of buyers. The design must be attractive and meet the taste of the consumers for whom it is intended. Although, it is often equated with style, design, in addition to the simple shape of the product, must meet additional criteria. First of all, these are: functionality, technical quality, attractiveness, reliability and the creation of a relationship of trust between the product and the consumer. Good design is actually a combination of a classical attitude, similar to that of the Renaissance, which is combined with today's technology, which would create what the world did not know was missing at that time of the Renaissance period. The task of good design is to create a used object, which will achieve a certain progress in relation to the already common stereotypes and thus will enable economically more profitable production, i.e. will bring greater profit. With the advent of the first sewing machine in the 19th century, the mass production of clothing, namely Ready to wear clothing, came, which means that the clothing is already sewn in different ready-made sizes and shapes, so that it can be worn immediately without additional adjustments. With the constant change of styles in art and literature, fashion has changed throughout history, from Romanticism to the present day.*

Keywords: *Industrial design, Fashion, Clothing, Form, Industrial Aesthetic Product.*

RAZVOJ FORME KAO FORMATIVNOG ELEMENTA U INDUSTRIJSKOM MODNOM PROIZVODU



APSTRAKT: Glavna funkcija dizajna je oblikovanje upotrebnih predmeta iz različitih oblasti. Dizajn se pojavio sa pojavom industrijske revolucije i serijske, automatizovane, masovne proizvodnje raznih dobara za nepoznatog potrošača. Dizajn teži da predvidi ukuse i potrebe pojedinih kategorija kupaca. Dizajn mora biti atraktivan i zadovoljiti ukus potrošača kojima je namenjen. Iako se često poistovećuje sa stilom, dizajn, pored jednostavnog oblika proizvoda, mora da ispunjava dodatne kriterijume. Pre svega, to su: funkcionalnost, tehnički kvalitet, atraktivnost, pouzdanost i stvaranje odnosa poverenja između proizvoda i potrošača. Dobar dizajn je zapravo kombinacija klasičnog stava, sličnog onom iz renesanse, koji je kombinovan sa današnjom tehnologijom, što bi stvorilo ono što svet nije znao da nedostaje u to vreme renesansnog perioda. Zadatak dobrog dizajna je da stvori upotrebljiv predmet, koji će postići određeni napredak u odnosu na već uobičajene stereotipe i time omogućiti ekonomski profitabilniju proizvodnju, odnosno doneti veći profit. Pojavom prve mašine za šivenje u 19. veku došla je masovna proizvodnja odeće, naime odeće „Ready to wear“, što znači da je odeća već sašivena u različitim gotovim veličinama i oblicima, tako da se može odmah nositi bez dodatnih podešavanja. Uz stalnu promenu stilova u umetnosti i književnosti, moda se menjala kroz istoriju, od romantizma do danas.

Ključne reči: Industrijski dizajn, moda, odeća, oblik, industrijski estetski proizvod.

1. INTRODUCTION

The main function of design is to shape usable objects from various fields. Design emerged with the advent of the industrial revolution and the serial, automated, mass production of various goods for an unknown consumer. Design seeks to anticipate the tastes and needs of individual categories of buyers.

The design must be attractive and meet the taste of the consumers for whom it is intended. Although, it is often equated with style, design, in addition to the simple shape of the product, must meet additional criteria. First of all, these are: functionality, technical quality, attractiveness, reliability and the creation of a relationship of trust between the product and the consumer.

Contemporary design tries to respond to the demand for formal novelties, which come from the audience, which is constantly "bored" in a society of spectacles, of enjoyment, a society of consumption and communication. When it comes to industrial design in fashion, even the word fashion itself, from the Latin *modus*, which means way, rule, rhythm, time, is a term that denotes popular styles and trends, in various spheres of human activities and thinking related to a certain moment in time [1].

Fashion is a means of identification and socialization, for symbolic communication and expression of hedonism. Fashion as a dynamic act of short duration and it can be placed in the context of transforming the established frameworks, of life and society. Fashion is an interdisciplinary category, inspired by the characteristics of different branches: [2] From art history, sociology, psychology and philosophy, to ethnology, anthropology and

semiology, i.e. the science of signs and their meaning. Fashion is a system of signs that interact with the human body, at a particular time and in a particular space. Fashion is a means of identification, socialization, and symbolic communication. The terms "modern" and "unmodern" are indicators of the conformity of something, together with the current requirements of modern expression [3, 4].

Industrial design is primarily an aesthetic category, and therefore it must not be exclusively or to a large extent, determined by the technical and functional properties of the product. Industrial design represents that aspect of the product that makes the product itself aesthetically valuable, attractive and acceptable to the buyer. Good design creates unity, functionality, economy and expediency, in certain living conditions.

Good design is actually a combination of a classical attitude, similar to that of the Renaissance, which is combined with today's technology, which would create what the world did not know was missing at that time of the Renaissance period

The task of good design is to create a used object, which will achieve a certain progress in relation to the already common stereotypes and thus will enable economically more profitable production, i.e. will bring greater profit [5].

2. AVANT- GARDE OF THE INDUSTRIAL AGE IN FASHION

With the advent of the first sewing machine in the 19th century, the mass production of clothing, namely Ready to wear clothing, came, which means that the clothing is already sewn in different ready-made sizes and shapes, so that it can be worn immediately without additional adjustments. With the constant change of styles in art and literature, fashion has changed throughout history, from Romanticism to the present day. The main characteristic of Romanticism in women's clothing is the appearance of the voluminous, voluminous dress called the Crinoline dress. The construction under the skirt was made of horsehair, linen and cotton, so that it would not be too heavy to wear. The construction consisted of: Large round rings, arranged in size from smallest to largest, and they were connected by transverse straps. These rings created the appropriate shape, with the possibility of the dress being able to fall down, i.e. fall as beautifully as possible and spread towards the floor. These constructive circles are the best illustration of the fact that geometricism in the overall design is especially present in the ranks of fashion. In addition to the crinoline, another main characteristic of clothing during that period was the corset. It gave the female body the recognizable so-called X figure.

In Romanticism, there was a tendency to overload form and decoration, which was achieved with floral applications, circles and lace. Another turning point in that period was the appearance of underwear, which until then had been worn only by selected women, while in the mid-19th century, it was imposed as a necessity, due to the crinoline dress.



Figure 1: Large round rings Arranged by size, from smallest to largest
 The rings are connected by 1bars

In the era of Queen Victoria (1837-1901) the class difference is evident, where Factory-made, i.e. factory-made suits were intended for the lower classes, while Made to measure suits were intended for the upper classes. In 1892, the first issue of the fashion magazine VOGUE was published. The founder of the magazine VOGUE, Arthur Baldwin Turner, had the idea of creating a social magazine, intended for the elite in New York.

In 1851, the first sewing machine, Singer, was invented. Since 1856, the crinoline as the most striking women's clothing, has changed a lot. Crinoline dresses were made of steel, then semi-crinolines were made, until 1868, when this type of designed dress completely disappeared. Since then, volume has been achieved with fabrics, and the emphasis has been placed on a narrower and more slender silhouette. In the early 20th century, during the Secession, i.e. the economic crisis, and the time of the artistic movements Art Nouveau, Fauvism and Cubism, the ideal silhouette of a woman was already completely different from that of the Victorian era [6].

Now the ideal silhouette was considered the so-called S-silhouette, i.e. an emphasized chest and back. The lower silhouette was much simplified, while the emphasis was placed on the wrists, which were enriched with head decorations and ribbons of stuffed swallows and sparrows. Women began to wear skirts - trousers for cycling, as well as hats with scarves and glasses for driving a car [7]. The most important designer at that time was Paul Poiret. Influenced by Orientalism, Poiret in 1905 took the Kimono as a model for designing a collection. In clothes created for the upper classes, he freed women from the corset, while focusing on details and handcraft. Poiret especially popularized Orientalism with his collection called "A Thousand and One Nights".

2.1. Variations of Fashion Product Development

In that way, Poiret contributed to designing the recognizable skirt for women, the so-called Hobble skirt - a narrow skirt, or a skirt in the shape of a bar, as well as designing the Kimono coat, and also introducing large, i.e. long gloves and turbans for the head. The Hobble skirt is a stylized skirt, which was so narrow in the thighs that it hindered women's walking. Hobble skirts were a short-lived fashion trend, which reached its peak between 1908 and 1914. Poiret presented his collections on the streets of cities, with his twenty models [8].



Figure 2: Clothing in the Victorian Era - Poiret contributed to designing the recognizable skirt for women, the so-called Hobble skirt - a narrow skirt or a skirt in the shape of a bar, as well as designing the Kimono coat, and also introducing large, i.e. long gloves and turbans for the head.



Figure 3: The iconic cape, created by Paul Poiret in 1905



Figure 4: Hobble skirt – A stylized skirt that was very tight in the thighs. It even hindered women from walking.



Figure 5: Long pencil skirt - A long, narrow, pencil-shaped skirt, considered a modern variation of the old-fashioned Hobble skirt.

2.2. Fashion Product Development through artistic movements

From 1910 to 1920, various artistic movements were active: Cubism, Futurism, Dadaism, Constructivism and Abstraction. But for the development of fashion in that period, of course, the most significant was the appearance of the fashion designer Coco Chanel. Coco Chanel first appeared as a fashion designer of headwear. The hats she presented herself with seemed much simpler than those created earlier. In 1918, she opened her first

fashion studio in Paris. From 1910 to 1920, various artistic movements were active: Cubism, Futurism, Dadaism, Constructivism and Abstraction. Then, Chanel began to create simpler forms of clothing, following the example of men's clothing, and so on the basis of the men's shirt, she created the women's dress [9, 10].

In 1953, she presented her first collection, in which she introduced her first classical costume (a skirt and sweater) and launched it on the European market. She also designed costumes for the Russian Ballet with the Russian composer Igor Stravinsky, from which sportswear later developed. In 1920, Chanel broke into the American market, with the so-called "Flapper" girl. Flapper girls were a "new breed" of young women in Western Europe and America in the 1920s who showed their contempt for what was then considered acceptable behavior. Women became freer, more aggressive, and refused to be confined to the domestic sphere. The main characteristics of the so-called "Flapper" girl are: A skirt with a length of 3 cm below the knee, short hair, and wearing looser clothing. Modern clothing was lighter and more flexible, better suited to a modern woman like the flopper - the girl who also wanted to play sports. In her dressing, the woman was no longer limited to slim waists and long skirts, but the modern woman of the 1920s had now become an independent and free thinker, no longer following the established rules.



Figure 6: Flapper ski

One of Coco Chanel's most significant achievements is definitely the design of the "Little Black Dress". It is a sleeveless dress, with a length just above the knee, which gives a woman the opportunity, with little jewelry, to wear the dress on various occasions. Many designers later experimented with redesigning this dress and adding additional decorations. Among them: Christian Dior, Balenciaga, Givenchy and many others.



Figure 7: Actress Audrey Hepburn in a black dress created by Coco Chanel

During World War II, ready-to-wear clothing was of great importance. Efforts were made to express creativity through construction, rather than through expensive materials. In Paris, women continued to cultivate high fashion, wearing shoes made of metal, wire, wood, and cork. In England, women wore simpler clothing out of solidarity with the soldiers. Women in England also wore a three-piece suit: They wore a skirt with a straight silhouette, with a length just below the knee, then a shirt and jacket, emphasized by shoulder pads, made of simple inexpensive materials. Pin-up girls were popular in America, because they raised the morale of soldiers on the battlefield [11].

Christian Dior, as one of the greatest fashion designers of all time, first worked as a fashion illustrator for Vogue magazine, and then in 1946 opened his own fashion house "Dior". He presented his first collection called "New Look" in 1947. In this collection, he returned the attributes of a woman: rounded and lowered shoulders, and an upper garment that resembled a corset. He emphasizes the higher waist, the wide pleated skirt, the hips are emphasized with inserts, and as inevitable details he takes gloves, an umbrella and a black hat. The aforementioned Dior collection "New Look" caused protests in America called "Anti New Look". People took to the streets, outraged because Dior's silhouette did not suit either Parisian or American women. But Dior ignored this, preserving the existing look.



Figure 8: Creation by Christian Dior

2.3. Fashion Product Development through the influence of the Hollywood film industry

In the 1950s and 1960s, Hollywood film stars promoted a so-called anti-fashion, especially among men. Legendary actors Marlon Brando and James Dean popularized clothing that was then reserved exclusively for workers or naval officers. The white T-shirt, blue jeans, and black leather jacket became a uniform that expressed a certain attitude of dissatisfaction and reflected the vanity of the individual.

For women, the focus was on designing handbags and hats, promoted by actresses of the time. The youngest designer in the world, Yves Saint Laurent, then only 17 years old, became Dior's personal assistant and created eight fashion collections for him.

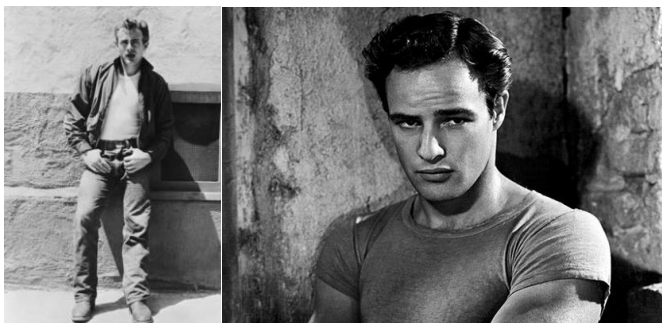


Figure 9: James Dean and Marlon Brando as the embodiment of the fact that the white or black T-shirt, blue jeans and black leather jacket became a uniform that expressed a certain attitude of dissatisfaction and reflected the vanity of the person.

After Dior's death, the young designer, Yves Saint Laurent became the head designer of the Dior fashion house and worked on his first collection called "Trapeze". He experimented with corsetry at the waist, left the shoulders natural, and emphasized the trapezoid shape, more precisely the A-line reaching below the knee. He also left the gloves, still present. In 1966, Dior created a pop art collection inspired by the painter Andy Warhol. In the mid-1960s, designers introduced new unusual materials to create clothes.



Figure 10: Creations by Yves Saint Laurent

Mary Quant is the first designer to use PVC material for the production of coats and boots. In America, clothing called "Paper clothing" appears. An example of this type of clothing is the so-called "Souper Dress" - a dress based on Andy Warhol's painting called "Campbell Soup Cans" - "Campbell Soup Cans" - i.e. soup cans from the Campbell company.

2.4. Fashion Product Development through the Music industry

Then tights of various shapes and colors appear. In 1964, the French fashion designer André Courrèges - André Courrèges created a suggestion of a space look, and thus created a collection that in some way interrupted the conventionality and tradition in fashion. The models were dressed in flat white boots, white or silver pants. He created a collection in which miniskirts appeared for the first time at a haute couture show. They were flat and comfortable skirts, made according to the principles of the Bauhaus design house.

In the seventies, Disco fashion appeared, a period in which traditional clothing was no longer worn. Synthetic materials were used, bright and even very bright colors, shiny elements, short pants, shorts, blouses, etc. were used. It was promoted by actors and singers. Some of the most famous are David Bowie, Gary Glitter and John Travolta, in their music videos and films.



Figure 11: This photo shows the use of synthetic materials, which use bright, even very bright colors, shiny elements, short pants, shorts, blouses, etc. David Bowie, Gary Glitter, and John Travolta are featured in their music videos and films.

2.5. Fashion Product Development through geometric shapes in fashion design

Geometry in fashion appears from the patterns of clothing to the tailored pieces themselves. Geometry does not always have to be noticeable. It can be hidden with cuts that, when sewn together, somehow reduce the visual impression of a geometric shape. Regular geometric motifs are one of the oldest motifs that adorned clothing and jewelry. The expansion and development of geometric motifs in art and fashion appeared after the First World War, with artistic movements such as Cubism and Suprematism as part of Abstract Art.

In the textile industry, the tendency towards geometric motifs is most noticeable in the works of members of the Bauhaus school. Geometric shapes as applications in textile

patterns are very popular even today. One of the most famous collections that have a geometric basis is definitely the collection of Yves Saint Laurent.

It is the minimalist collection, designed after the example of the paintings of Piet Mondrian. Yves Saint Laurent, in his Fall/Winter 1965-66 collection, presented several white dresses, with a simple so-called "A" cut, i.e. a cut in the shape of the letter A. It is a sleeveless cut, and on these dresses he shows several versions of Mondrian's works. On the dresses there are black straight lines, which divide the dress into several parts.



Figure 12: Yves Saint Laurent's creations, inspired by Piet Mondrian's paintings In this picture we see a dress from the front. It has seven parts Of them, three parts are in different colors (red, yellow, blue) The rest of the dress is white The second dress is in four parts in which only one part is red. The last dress is in six parts, one is yellow, the other is red, and the rest are white.

Another designer who wanted to "play" with geometry in some way is the aforementioned André Courrèges. He often used lines in his collections as the basis of the clothes. The skirts were often geometric in shape, while one of his most interesting dresses was a dress with side slits in the form of stacked circles. Sonia Delaunay was an artist and fashion designer who worked in the art direction called Orphism. Her designs are emphatically colorful, full of colors and geometric shapes [12, 13].



Figure 13: In this image we see only some parts of Sonia Delaunay's textile patterns

Andre Courreges, the innovative French fashion designer whose creations spoke of the future, symbolised stylistic freedom and provoked hot dispute over whether he was first with the miniskirt, has died at his home outside Paris. He was 92. According to the Courreges firm, he had suffered from Parkinson's disease for 30 years. One of the most influential couturiers of his time, Courreges won fame for fitting out his models in attire that seemed to suggest not past eras or conventions, but the space age [14].



Figure 14: Geometric creation by André Courrèges. She used lines as the basis of the clothing. The skirts had a predominantly geometric shape. One of her most interesting dresses was a dress with side slits, in the form of stacked circles.



Figure 15: In this image we see how Sonia Delaunay has incorporated her pattern into her clothing. An umbrella with triangles on it, and the same motif extends to the dress and coat, while in the other woman we see a linear motif, which also runs through the entire garment.

Ichiro Suzuki is a Japanese designer who has used geometry to create optical illusions on clothing. Suzuki uses geometric shapes and perspective to achieve a sense of the third dimension [16].



Figure 16: In this image we see a men's jacket, with a cube pattern in isometric projection.

An example of how geometry is not only in patterns, but also in cuts, is the dress by designer Gareth Pugh. In addition to high fashion, geometry is quite common among high street brands. Some of the most famous are Zara and H & M.



Figure 17: In this image we see how some geometric bodies can be part of clothing, such as pyramids in this case.

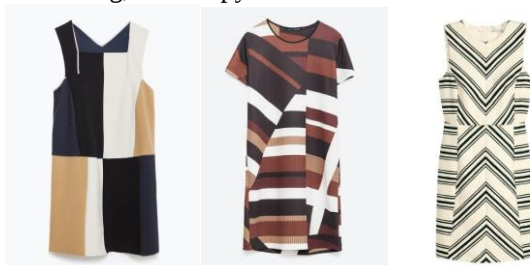


Figure 18: Zara dress Zara dress H & M dress

3. CONCLUSION

Design, which is a consequence of the industrial revolution, is created by the continuous dialectic, i.e. development, which unites technology, skill and society. In the constant development of industrial design, modernists have long defended the position of the differences between the avant-garde, i.e. contemporaries of new design, and kitsch. The avant-garde is considered a way of finding a direction for where it would be possible to continue the development of culture, in a contemporary cultural chaos, even transformed into a kind of cultural and ideological violence. But here the presence of kitsch, as a product of the industrial revolution, is inevitable. It denotes a set of distorted products that constitute mass culture. Because of these observations, classical industrial design, since the 1920s and 1930s, has attempted to use forms produced by the avant-garde.

In industrial design, functional aesthetics, i.e. simplified abstract form, gained a privileged position, giving rise to the so-called formal aesthetics. In that way, in the era of industrial design, there was a public condemnation of any figurative classical aesthetics, which resembled kitsch, although as we have said, kitsch is inevitable even in the era of the industrial revolution. The current evolution in industrial creativity stems from the need to facilitate the process of identifying and re-adapting the product

to today's increasingly complex society. Today, in the era of industrial design, functional objects are of particular importance, as although they are primarily functional, they are also carriers of a certain meaning, thus culturally integrating them into modern society.

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