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EWOLUCJA ODZIEŻY KIEROWCÓW SPORTOWYCH POJAZDÓW ZMOTORYZOWANYCH

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Adnotacja. W pracy dokonano przeglądu ewolucji odzieży kierowców sportowych pojazdów zmotoryzowanych (PZ). Opierając się na wcześniejszych badaniach, zidentyfikowano czynniki wpływające na proces tworzenia odzieży kierowców i jej doskonalenia jako obiektu projektowego. Rozważono założenia powstania sportowego stylu odzieży kierowców PZ i zbadano rozwój jego tworzenia. Dzięki metodom historiograficznym i wizualno-analitycznym opartym na materiałach ilustracyjnych analizowane są przejawy środków ekspresji kompozycyjnej. Podkreśliło to różnorodność i wzbogacenie odzieży kierowców o różne strukturalne elementy funkcjonalne, które nie tylko zapewniały funkcję ochronną, ale także tworzyły połączenia kompozycyjne wewnątrz i na zewnątrz formy w latach 1900-2020. Analiza transformacji sylwetki odzieży kierowców sportowych PZ udowodniła, że jej zmiana wiąże się z poprawą właściwości aerodynamicznych i ochronnych odzieży. Analiza procesu tworzenia i doskonalenia odzieży kierowców jako obiektu projektowego udowodniła zależność czynników postępu technologicznego od cech dyscyplin motorowych. Z powyższego wynika, że odzież kierowców sportowych PZ jest wieloaspektowym zjawiskiem kultury projektowej, która jest w trakcie ciągłego doskonalenia i wymaga dogłębnych badań.

Słowa kluczowe: odzież dla motocyklistów, odzież dla kierowców, odzież sportowa, motocykliści, ewolucja stylu odzieży sportowej.

MOTTO CYCLISTS SPORTS CLOTHES EVOLUTION

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Abstract. The paper deals with the evolution for motorized vehicle (MV) riders' clothing. The influencing factors over the development process for drivers' clothing and its improvement as a design-object were determined based on the previous studies. The sports style appearance prerequisite for MV riders' clothing was considered and the development of its formation was researched. The manifestations of compositional expressiveness means were analysed due to the historiographical and visual-analytical methods based on illustrative materials. That made clear the diversification and enrichment of the riders' clothing by various constructive functional elements, which not only provided the protective function, but formed compositional links as well inside and outside the uniform for the period of 1900-2020. The silhouette shape transformation analysis of sports MV riders' clothing proved that their change was associated with the improvement of the garments aerodynamic and protective properties. The formation and improvement process analysis of the riders' clothing as a design-object proved the dependence of technological progress factors on the peculiarities of sports motor racing disciplines. From all of the above it follows that the sports MV drivers' clothing is a multifaceted phenomenon of design culture, which is in the continuous improvement process and requires an in-depth study.

Key words: riders' clothing, drivers' clothing, sports clothes, sports motorized vehicles riders, evolution of sportswear style.

ЕВОЛЮЦІЯ ОДЯГУ ВОДІЇВ СПОРТИВНИХ МОТОРИЗОВАНИХ ТРАНСПОРТНИХ ЗАСОБІВ

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Анотація. У роботі розглянуто еволюцію одягу водіїв спортивних моторизованих транспортних засобів (МТЗ). Спираючись на попередні дослідження, визначено чинники впливу на процес формування одягу водіїв та його вдосконалення як дизайн-об'єкту. Розглянуто передумови виникнення спортивного стилю одягу водіїв МТЗ та досліджено розвиток його формування. Завдяки історіографічному та візуально-аналітичному методам, на основі ілюстративних матеріалів проаналізовано прояви засобів композиційної виразності. Це висвітлює урізноманітнення та збагачення одягу водіїв різними конструктивними функціональними елементами, які не лише забезпечували захисну функцію, а й формували композиційні зв'язки всередині і назовні форми впродовж 1900-2020 років. Аналіз трансформації силуетної форми одягу водіїв спортивних МТЗ довів, що його зміна пов'язана з удосконаленням аеродинамічних та захисних властивостей одягу. Аналіз процесу формування і вдосконалення одягу водіїв як дизайн-об'єкту довів залежність факторів технологічного прогресу від особливостей мотоспортивних дисциплін. З усього зазначеного вище впливає, що одяг водіїв спортивних МТЗ є багатограним явищем проектної культури, яке знаходиться у процесі постійного вдосконалення та потребує глибокого дослідження.

Ключові слова: одяг райдерів, одяг водіїв, спортивний одяг, спортсмени-мотоциклісти, еволюція стилю спортивного одягу.

Introduction. In the early 1860s, along with the invention of the first motorized vehicles, the motorcycle industry era and the clothes design development history for drivers began. MVs were improved in the course of time due to better power and speed performance, which created the prerequisites for expanding their application areas. In particular, in the 1990s, that marked the beginning of the appearance of new sports and the formation of new types for riders' clothing. Previous studies of the main features of MV historical development stages proved that the drivers' clothing was a kind of companion of the motorcycle industry, which distinguishes and substantiates the application field of sports MVs (Chrichlow, Kolosnichenko, 2020: 151-155). In the historical perspective, the development of the motorcycle industry and sportswear for MV drivers acquired a parallel direction and the indissoluble link with one another. In its turn, the innovative achievements of science and technology created the basis for the drivers' clothing formation under the influence of artistic and aesthetic traditions.

Main part. Purpose. The study of prerequisites of the riders' clothing development process for sports motorized vehicles (MV) and its improvement as a design-object.

Methodology. The work uses a historical analysis and visual-analytical method based on illustrative materials to study the artistic and compositional features of the motorized vehicle riders' clothing.

Scientific novelty consists in the systematization of factors of the MV drivers' sports style clothing occurrence. It has been revealed that technological progress factors and peculiarities of motorsports disciplines are the main factors of sports MV riders' clothing formation process and its improvement as a design-object.

Practical significance lies in the fact that the collected materials, their analysis and theoretical generalization can be used in further applied studies. The conducted study is a promising one for further study of the socially-synthesized art influence on the motorized vehicle riders' clothing and on general trends of the world fashion development.

Results and discussion. Modern clothing of sports MV drivers as a design culture phenomenon was popularized and widespread due to the rapid development of technological and cultural progress. (Kolosnichenko, Baranova, Chrichlow, Mazurenko, Stepanchuk, 2020: 163-170). In the early days of motorsports, the appearance of motorcycle riders' clothing was not given due attention because it was thought that the function, reliability and durability of materials, as well as ease of use, were of high priority. (Golovchanska, Kolosnichenko, 2019: 224-226). However, the aesthetic component of sports MV drivers' clothing very quickly acquired an important significance in the motorcycle industry. In the first half of the twentieth century, the drivers' costume usually consisted of a shoulder garment (shirt, jacket) and a waist garment (breeches) (Fig. 1a). The step-by-step evolution in the formation nature change took place gradually: mainly within the form by introducing new structural elements and the use of new and improved materials.

Let us consider the prerequisites, factors and development of the form-making design of sports MV riders' clothing.

1900s. The sports motorcycle industry originated first and foremost due to the passion of young men for racing (Kolosnichenko, Chrichlow, 2020: 115-118). Consequently, the endurance racing, circuit road racing and long-distance road racing originated, which took place on wooden platforms specially designed to maximize speeds of the earliest sports MVs. Subsequently, races began to be held on racetracks, bicycle race tracks and on special motorcycle race tracks which were closed to pedestrians and public transport. 1908 was an outstanding year in motorsports, the time when the world's first races on a specially built track started in Brooklands, England, where women were allowed to compete alongside men for the first time. (Brooklands Museum, 2021: online). The clothes of the first motorcycle athletes were the comfortable ordinary clothes that met the fashion trends of that time (Kosareva, 2006: 465). Unlike modern motorcycle apparel, such clothing did not have aerodynamic properties and had insufficient protective properties (Fig. 1a). Therefore, serious injuries, particularly to the head, were quite common. They wore a cotton cap or leather helmet to protect them against the wind. (Fig. 1b). An important element that remains topical even today were the high boots. These are the classic engineering boots usually worn by railroad maintenance workers. (Fig. 1c). Later, high leather boots became an essential part of the outfit for all classic bikers (Chrichlow, Kolosnichenko, Struminska, Protsyk, Cass, 2020: 104-113). Having analysed the most common variants of elements of sports MV riders' clothes during the 1900s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 1d).

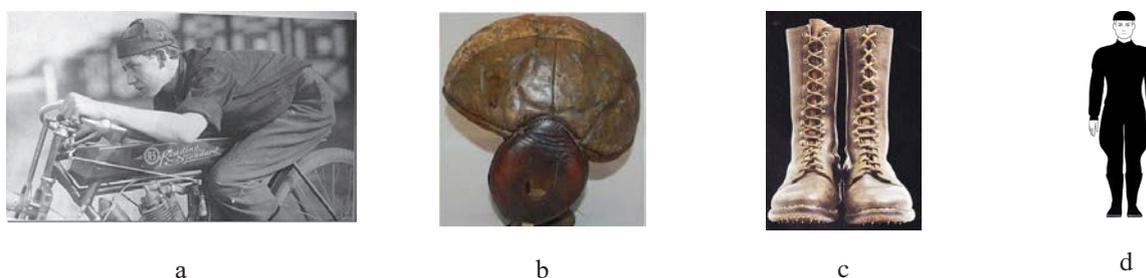


Fig. 1. Outfit examples of sports MV riders in the 1900s: a – outfit example for a motorcycle athlete; b – leather helmet; c – engineering boots; d – combined silhouette of a motorcyclist's outfit

1910s. In 1913, the first annual six-day race, the International Six Day Trial (ISDT), officially included MV testing on challenging roads with rocks and other obstacles. Later these races acquired the status of one of the motorcycle sports runs – Enduro, which suggests an aggressive style of off-road riding (Fig. 2a). Problems of the high injury rate of motorcycle athletes were of increasing concern to doctors and designers. Eric Gardner was one of them when he first designed and tested a silk and cloth helmet in a race during the Isle of Man TT in 1914. The doctor was inspired by sympathy for the athletes he often saw motorcycle injuries on a race track near the hospital where he worked (Fig. 2b). Therefore, he decided to design silk and cloth helmets strong enough to withstand a heavy blow and smooth enough to increase the slide when in contact with the track during an accident (Devitt, 2020: online). In the early 20s of the last century motorcycle racing became incredibly popular, which was the catalyst for the development of new types of clothing. Harley-Davidson Motor Company added the wool sweatshirt to the motorcyclist arsenal. Because of its density, the sweatshirt kept warmth in and out of the wind, and it was easy to put the driver's name, symbols or advertising slogans on it. The availability of a club sweatshirt was a feather in the cap for most athletes. Harley-Davidson was the first company to use this marketing strategy to promote its club, in order to increase motorcycle sales (Fig. 2c). Having analysed the most common variants of elements of sports MV riders' clothes during the 1910s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 2d).

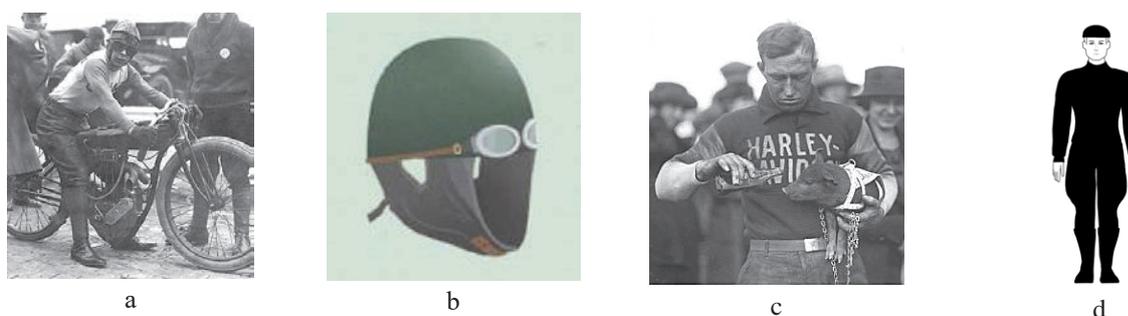


Fig 2. Outfit examples of sports MV riders in the 1910s: a – complete outfit example for a motorcycle athlete clothing; b – cotton helmet; c – Harley-Davidson sweatshirt; d – combined silhouette of a complete motorcyclist's outfit

1920s. It was mostly young men who were interested in motorsports. They experimented all the time, invented new entertainments and competitions (Hall, Jefferson, 2007: 288). Some of them became popular and were further developed as classic motorcycle sport competitions. This is how speedway, road-racing for speed and hill-climbing competitions for motorcyclists appeared. (Fig. 3a). The emergence of new types of competitions was the catalyst to create new sports motorcycles with special technical properties. In turn, the drivers' clothing changed as well in accordance with the new challenges. Clothing and sports motorcycle designers had to meet new challenges to achieve maximum speeds at different distances, which took place both on straight sections of highways and on new tracks (Fig. 3b). Acceleration and braking were not important, but manoeuvrability and controllability on super elevations were the focus of athletes and designers. The 1920s can be considered the time when motor sports shoes began their historical development. So, the first specialized motorcycle footwear appeared in 1928 and were manufactured by two companies only at that time: Chippewa and West Coast Shoe Company (Wesco) (Fig. 3c). Having analysed the most common variants of elements of sports MV riders' clothes during the 1920s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 3d).

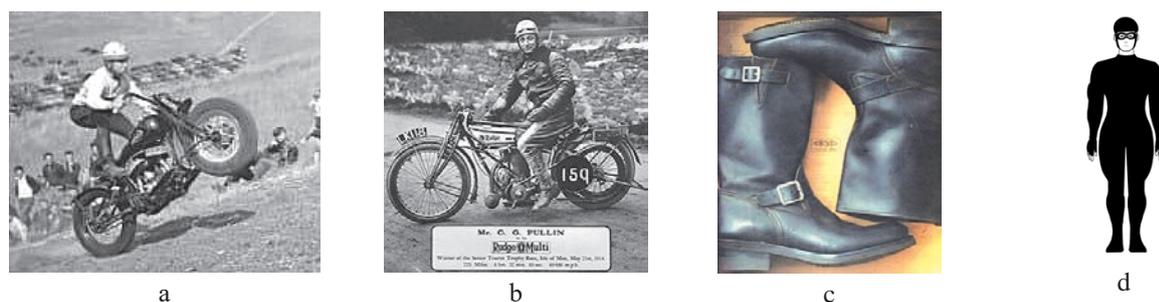


Fig. 3. Outfit examples of sports MV riders in the 1920s: a – complete outfit example for a motorcycle athlete clothing (hill-climbing competition); b – complete outfit example for a motorcycle athlete clothing; c – Wesco footwear; d – combined silhouette of a complete motorcyclist's outfit

1930s, 1940s. The death of British national hero T. E. Lawrence from a head injury sustained in a motorcycle accident in 1935 led to the first major shift in the creation of protective elements in motorsports, in particular the creation of the first crash helmet made of metal and cork (Fig. 4a). Such helmets saved the lives of many motorcyclists (Belstaff, 2021: online). Technological progress contributed to the speed increase of sports motorcycles and improved the quality of sports tracks, which helped the development and popularity of track racing and motorcycle soccer in the 1930s (Fig. 4b). Along with the popularity of motorsports in Great Britain, the need for additional protection for athletes, primarily against the difficult climatic conditions such as wind, mud and rain arose. As early as in the 15th century, sailors created homemade waterproof slickers by coating sailcloth or cotton with oil and grease. The manufacturing method of this weatherproof fabric remained virtually unchanged until the 1930s. Paraffin-impregnated cotton had high water-repellent properties and was soft enough, so it was ideal for motorcyclists' outerwear. During World War II in 1939-1945 and in the post-war years, motorcycling had little development, but later, using the technological advances of the military, it gained new strength and new supporters. After World War II the use of waxed cotton increased and it was used by field sports enthusiasts, gamekeepers, farmers and motorcyclists. The British company J. Barbour & Sons, which previously specialized in military equipment production, was one of the first companies to use cotton with water-repellent properties in its popular motorcycle suit International in 1935. An alternative solution proposed for the design of jackets, textile, unlike leather, was more practical to use, wash, and had a lower cost (Fig. 4c). Barbour International suits were worn by almost every British international team from 1936 to 1977, and in 1964 by actor Steve McQueen and other members of the American team at the International Six-Day Trial. Belstaff becomes the first company in the world to use Egyptian waxed cotton to manufacture "breathable" yet waterproof clothing. (Fig. 4d). Having analysed the most common variants of elements of sports MV riders' clothes during the 1930s, 1940s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 4e).



Fig. 4. Outfit examples of sports MV riders in the 1930s, 1940s: a – crash helmet; b – complete outfit example for a athlete clothing (motorcycle soccer); c – Barbour jacket; d – Belstaff jacket; e – combined silhouette of a complete motorcyclists' outfit

1950s, 1960s. The motorcycle industry began to develop rapidly, the world manufacturers competed in technologies and organized championships. At that time, Europe and America did not yet have leather overalls and textile suits were used for competitions, but they did not provide a high protection level (Kolosnichenko, Pashkevich, Krotova, 2020: 258). But then, Suzuki and Kushitani came up with the idea of a complete leather motorcycle jumpsuit, which was created by combining a leather motorcycle jacket and breeches. In the 1950s such jumpsuits became popular among motorcycle riders, and the company received many orders, working tirelessly to improve the production technology of its leather items. Legendary racer Geoff Duke, six-time TT competition winner and six-time world champion, was one of the first to wear the revolutionary leather jumpsuit in 1950. He was outfitted with tight, zippered boots popular with racers today (Fig. 5a). The motorcycle industry popularity grew considerably and motorcycle racing became a very important part of it. Manufacturers constantly competed with each other, so motorcycle racing accelerated the development of new technologies in the design of athletes' outfit. So, a number of inventions appeared, which were distinctive steps in the motorcycling development: the first riding boots Alpine Stars were introduced in 1965, with the buckle system instead of laces (Fig. 5b); Bell Star designed the world's first crash helmets with full face protection. One of the most famous users of these helmets was the legendary motorcyclist Evil Knievel, who always wore the full-face crash helmet during his stunt ridings. (Fig. 5c). Having analysed the most common variants of elements of sports MV riders' clothes during the 1950s, 1960s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 5d).



Fig. 5. Outfit examples of sports MV riders in the 1950s, 1960s: a – complete outfit example for an athlete clothing (leather motorcycle jumpsuit); b – first riding boots Alpine Stars; c – (Bell Star) the world's first crash helmets with complete face protection; d – combined silhouette of a complete motorcyclists' outfit

1970s. Over time, a new kind of motorsport gained popularity – the figure riding, which began its way from entertainment programs and shows, and in the 1970s it became an independent kind of sports. Footwear, as an important element of the outfit of the early seventies, underwent many changes (Webike, 2020: online). The black leather boots acquired: Enduro-Sole, seven buckles with adjustable straps and an Italian flag sticker on the back side. A version of motocross boots with smooth sole and metal overlay on the toe was manufactured as well. (Fig. 6a). In the early seventies, the Italian company Alpinestars began to use a metal plate for shin protection, which has changed every year. Along with the motorsport development, the need for new types of outfits grew. In 1946 Bruno Held and his son Edgar founded Held Company in Burgberg, Germany. Due to the motorcycle racing popularity in the 70's, the company started production of gloves for motorcycle riders and created the first special gloves designed for European motocross races, which helped to win the first place for Erwin Schmider (Fig. 6b, c) (Dynamicline, 2022: online). Having analysed the most common variants of elements of sports MV riders' clothes during the 1970s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 6d).

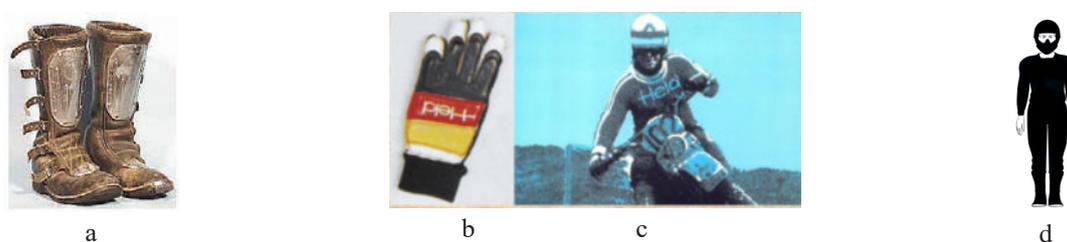


Fig. 6. Outfit examples of sports MV riders in the 1970s: a – Alpinestars boots; b – Motocross gloves; c – complete Held (Hero) outfit example for an athlete clothing; d – combined silhouette of a complete motorcyclists' outfit

1980s, 1990s. The motorsports developed rapidly, so new materials were needed (Gail, Kaur, 2009: 240). A new fabric popular for outdoor sports has come in motorsport fashion. Gore-Tex (common name PTFE – polytetrafluoroethylene, which is better known under the brand name Teflon) is a waterproof, breathable fabric membrane, which was invented back in 1969 and registered by WL Gore & Associates, with the Wind Stopper

model, gained popularity as ideal for motorcyclist clothing. In the 1980s, it started to be used to make gloves for motorsports (Fig. 7a). At the same time, in 1985 a special motorcycle type appeared, the Supermoto, for racing on small circuit tracks (Beckman, 1961: 169). Subsequently, that name was given to the competition and to the driver's sportswear. The track for Supermoto racing has both asphalted sections, like the tracks for ring road races, and unpaved sections, like the tracks for motocross races. Therefore, because of the physical activity during Supermoto races, off-road riders tend to sweat more than other motocross riders. (Fig. 7b). For this very reason knitwear made of thin materials with the ability to absorb moisture keeps the driver cool and dry. The moisture released by the athlete's body is removed due to the hygroscopic property of a material, which has the ability to redistribute moisture throughout the fabric surface, giving it the ability to evaporate faster and the garment to remain dry and fresh. Another way knitwear helps keep the driver cool is the lightness of the material and ventilation holes. Jersey was made of Lycra or net, thin but sufficiently resistant to abrasion. Knitwear primarily served to protect against mud. Some jersey was manufactured with a small amount of built-in protective pads. Most knitted upper body items were designed with a collar and long sleeves. The sweatshirts were designed long enough for athletes to be able to tuck them into their breeches. However, there are different types of a cut-outs. One common in the 1990s was the raglan cut-out. In the mid-nineties, companies began to produce a wide product range for motorsports, from motorcycle boots to thermal underwear. Thermal underwear was manufactured from materials made of synthetic yarns with a complex internal structure, with high hygroscopic properties (Fig. 7c). Some thermal underwear was made of several different weave structures, depending on the application of the clothing (Chepelyuk, Prokhorova, Trubina, 2010: 133-137). The seams in such underwear were designed flat to the outside, or they were completely absent. Hence, modern knitting machines made it possible to manufacture thermal underwear for athletes made of a single thread. Having analysed the most common variants of elements of sports MV riders' clothes during the 1980s, 1990s., we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 7d).



Fig. 7. Outfit examples of sports MV riders in the 1980s, 1990s: a – complete outfit example for an athlete clothing (Gore-Tex); b – complete outfit example for an MVs athlete clothing (SuperMoto); c – thermal underwear (jumpsuit, balaclava); d – combined silhouette of a complete motorcyclists' outfits

2000s, 2010s. Sports competitions Motocross, Moto freestyle Motocross and Figure riding, which emerged earlier in the 2000s - 2010s, gained rapid development and new fans among modern youth.

Along with the technological progress development, in particular in mechanical engineering, the speed and manoeuvrability of motorcycles have improved. In turn, the riders' sportswear received improvements based on the specifics of motorcycle sports disciplines (Fig. 8a, b, c). Rider's clothing was designed according to the needs of ergonomics, safety and driving style (Kolosnichenko, 2014: 386). The aesthetic appearance of MV drivers' clothing, due to the colour solution, formation structure, advertising inscriptions and logos, gained an important place as a means of expressiveness of the image in a design object and forms the composition inside and outside the form (Kolosnichenko, Pashkevich, Lozko, 2019: 87–104). The following were created in such a way: a mask to filter the air and reduce fogging of visor (glass transparent protective panel) of crash helmet, fluorescent materials and built-in light reflectors, which over time became the standard of safety for drivers. Special attention should be paid to the newest design of boots for motorcycle athletes – 'Fox Instinct Boot' with patented system of loops and buckles. An important element is the hinge, which provides lateral support and which locks to stop movement to hyperflexion, while the lightweight buckle system bends smoothly with the protecting cover for easy movement (Fig. 8d). The sole has a new composition of Duratek material for protection against burns, improved traction and durability of boots. Having analysed the most common variants of elements of sports MV riders' clothes during the 2000s, 2010s, we have come to the conclusion that the combined silhouette of a motorcyclist's outfit looked as follows for that time period (Fig. 8e).



Fig. 8. Outfit examples of sports MV riders in the 2000s, 2010s: a – complete outfit example for an athlete clothing (endurance racing); b – complete outfit example for an athlete clothing (track racing); c – complete outfit example for an athlete clothing (motocross races); d – boots Instinct; e – combined silhouette of a complete motorcyclists' outfit

The conducted study provided the basis to analyse the evolution of the combined silhouette transformation of sports MV riders' clothing of 1900-2020 (Fig. 9).

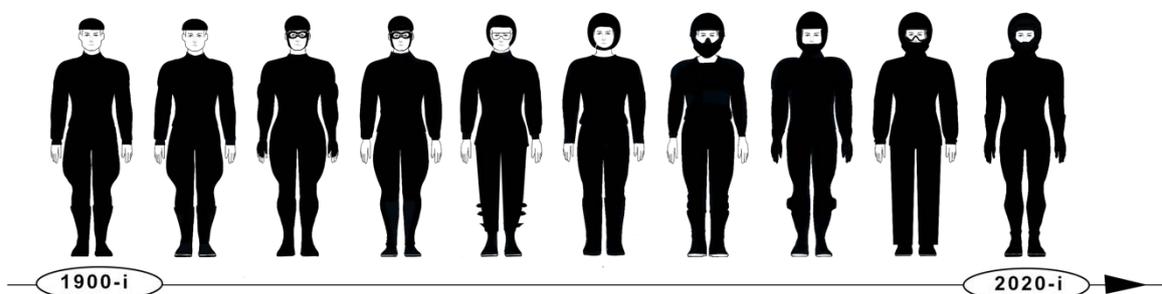


Fig. 9. Analysis of the evolution of the combined silhouette transformation of sports MV riders' clothing, according to the years shown in Fig. 1-8

On the axis we can see that the crash helmet increases as time passes, adding weight to the upper part of the silhouette, in turn, the lower part weight decreases due to the volume decrease of the trousers shape. So, moving along the time vector we can see how the silhouette form gains a clearer geometry and gradually changes the proportions of the ratio of the head to the body. The harmonious ratio canon is 1:7, which we see at the beginning of the axis, and gradually, at the end of the axis, the proportional ratio changes to 1:5. Based on the historiographical study and due to the analysis of the combined silhouette form transformation of sports MV riders' clothes, we see that the form and proportionality of the silhouette changed together with the improvement of aerodynamic and protective properties of riders' clothes. On its part, new materials and technologies stimulated the evolution of the clothing formation development as a design object (Kolosnichenko, 2018: 420).

Conclusions. So, clothes referring to the non-verbal means of perception, always act as identification means. That is why the study of prerequisites and the design development process of sports MV riders' clothing is important for understanding and creating future style trends of sports MV drivers' clothing. The given analytical studies of the evolution of sports MV drivers' clothing demonstrate that at the beginning of the development of motorsports, the aesthetic appearance of motorcycle riders' clothing was not given due attention, but with the appearance and development of various sports motorcycle disciplines, athletes' clothes received special style features in the internal and external form formation, depending on the driving style, the invention of the latest technologies, materials, methods of connections and fastening. The result of the analysis of compositional expression means demonstrates the variety and enrichment of riders' clothing by constructive functional elements, which not only provided protective function, but created also the composition inside and outside the form during the 20th and in the early 21st century. In accordance with the study purpose, the formation process of riders' clothing and its improvement as a design object, threw light upon the dependence of technological progress factors on the specificity of motorsport disciplines and the development of the sports motorcycle style as a separate fashion direction. The study revealed that the various motor sports disciplines require appropriate clothing, which gradually acquire unique style characteristics and are inextricably bound up with the development of motorized vehicles and design. Hence, based on the conducted historiographical study, it can be said that sports MV riders' clothing is a multifaceted phenomenon of the design culture, is in the continuous improvement process and requires an in-depth study.

In its turn, a number of important issues need to be widely studied regarding the design of motorcyclists' clothing, which is important for the theory, methodology and practice of design.

Bibliography:

1. Бекман В.В. Гоночные мотоциклы. Ленинград: МАШГИЗ. 1961. 169 с.
2. Kaur J., Gale C. Fashion and Textiles. Bloomsbury Publishing. 2004. 256 с.
3. Головчанська Є.О., Колосніченко М.В. Становлення fashion-індустрії протягом XX та початку XXI століть. Інноваційні культурно-мистецькі аспекти в сучасній картині світу: матеріали V Міжнародної науково-практичної конференції (11-13 вересня 2019 р.). Херсон: ХНТУ, 2019. С. 224–226.
4. Devitt, Motorcycle industry. History of Motorcycle Helmets in the UK. 2020. Online. access date 10.01.2021. URL: <https://www.devittinsurance.com/guides/a-guide-to-motorcyclehelmets/history/>
5. Dynamicline. Biker fashion. Online. Access date 05.07.2022. URL: <https://dynamicline.es/held-masde-70-anos-de-historia/>
6. Ергономіка і дизайн. Проектування сучасних видів одягу: навч. посіб. / Колосніченко М.В. та ін. Київ : ПП «НВЦ «Профі», 2014. 386 с.
7. Колосніченко О.В., Пашкевич К.Л., Лозко Ю.Я. Художньо-образні особливості спецодягу в дизайні XX століття. *Art and design*. 2019. № 1 (05). С. 87–104. DOI: 10.30857/2617-0272.2019.1.8.
8. Колосніченко О. В. Формоутворення одягу спеціального призначення як об'єкта дизайн-діяльності. Монографія. Київ: КНУТД. 2018. 420 с.
9. Kolosnichenko M.V., Pashkevich K.L., Krotova T.F. Fashion design in a multicultural space. Monograph. – Kyiv: KNUTD. 2020. Published by Academic Society of Michal Baludansky, Košice, Slovakia, 2020. 258p.
10. Колосніченко О.В., Баранова А.І., Крічлоу К.В., Мазуренко О.Р., Степанчук Д.Ю. Розвиток форм костюма XX століття під впливом науково-технічного прогресу. Збірник матеріалів конференції "Інноватика в освіті, науці та бізнесі: виклики та можливості" 17.11.2020 року. – Київ : КНУТД, 2020. С.253-261.
11. Kolosnichenko O., Chrichlow K. The 'Mods' Style influence on the formation of scooter drivers' clothing in the 1950s-1970s. Proceedings of the international scientific-practical conference. Actual problems of modern design. Kyiv: KNUTD, 2020. Vol. 1, pp. 115-118.
12. Косарева Е.А. Мода. XX век. Развитие модных форм костюма. СПб.: Петербургский ин-т печати, 2006. 465 с.
13. Крічлоу К.В., Колосніченко О.В. Еволюція моторизованих транспортних засобів як головний чинник формоутворення одягу водіїв. Proceedings of the international conference. International scientific and practical conference. Cultural studies and art criticism: things in common and development prospects. Venice: Izdevnieciba Baltija Publishing. 2020. С. 151-155. DOI <https://doi.org/10.30525/978-9934-26-004-9-108>.
14. Кічлоу К.В., Колосніченко О.В., Струмінська Т.В., Процик Б.О., Касс Б.В. Виникнення стилів «Байкер» і «Рокер» у сучасній світовій моді. *Art and Design* №4 (12), 2020. С. 104-113. DOI:10.30857/2617-0272.2020.4.10.
15. Webike. Motorcycle equipment: types and purposes. online, access date 20.10.2020. URL: <https://www.webike.com.ru/news/motoekipirovka-vidy-i-naznacheniya/>
16. Brooklands Museum, Race Track, online, access date 10.07.2021. URL: <https://www.brooklandsmuseum.com/explore/our-history/buildings-and-landmarks/race-track>
17. Official website Belstaff, A history of adventure, access date 05.07.21. URL: <https://www.belstaff.co.uk/belstaff-content-inside-belstaff-heritage/history.html>
18. Hall S., Jefferson T. Resistance through rituals. Youth subcultures in post-war Britain. UK, London: Taylor & Francis Ltd. 2007. 288 p.
19. Чепелюк О.В., Прохорова І. А., Трубіна О.А. Концепція проектування структури тканини з урахуванням ергономічних вимог до одягу. *Вісник КНУТД*. 2010. № 6 (56). С. 133-137.

References:

1. Bekman V. (1961). Gonochnye motocykly [Racing motorcycles]. Leningrad: MASHGIZ. 169 p. [in Russian].
2. Kaur J., Gale C. (2004). Fashion and Textiles. Bloomsbury Publishing. 256 p. [in English].
3. Golovchanska E., Kolosnichenko M. (2019). Stanovlennya fashion-Industriyi protyagom XX ta pochatku XXI stolit [The creative process of 21st century jewelry] Innovatsiyini kulturno-mistetski aspekti v suchasniy kartini svitu: materiali V mizhnarodnoyi naukovopraktichnoyi konferentsiyi. Herson: HNTU. 224 p. [in Ukrainian].
4. Devitt, Motorcycle industry. History of Motorcycle Helmets in the UK. 2020. Online. access date 10.01.2021. URL: <https://www.devittinsurance.com/guides/a-guide-to-motorcyclehelmets/history/>
5. Dynamicline. Biker fashion. Online. access date 05.07.2022. URL: <https://dynamicline.es/held-mas-de-70-anos-de-historia/> [in English].
6. Ergonomika i dizajn (2014). Proektuvannya suchasniy vidiv odyagu [Design of modern clothes] navch. posib. / Kolosnichenko M.V. ta in. Kiiv : PP «NVC «Profi». 386 p. [in Ukrainian].
7. Kolosnichenko O., Pashkevich K., Lozko Y. (2019). Hudozhno-obrazni osoblivosti specodyagu v dizajni XX stolittya [Artificial features of education in description of the 20th century]. *Art and design*. №1 (05). pp. 87–104. DOI: 10.30857/2617-0272.2019.1.8 [in Ukrainian].
8. Kolosnichenko O. (2018). Formoutvorennya odyagu specialnogo pryznachennya yak obyektu dizajndiyal'nosti [Formation of special purpose clothing as an object of design]. Monografiya. Kiiv: KNUTD. 420 p. [in Ukrainian].
9. Kolosnichenko M., Pashkevich K., Krotova T. (2020). Fashion design in a multicultural space. Monograph. – Kyiv: KNUTD. 2020. Published by Academic Society of Michal Baludansky, Košice, Slovakia, 258 p. [in Ukrainian].
10. Kolosnichenko O., Baranova A., Chrichlow K., Mazurenko O., Stepanchuk D. (2020). Rozvitok form kostyuma XX stolittya pid vplyvom naukovotekhnichnogo progresu [Development of costume forms of the 20th century under the influence of scientific and technological progress]. Kyiv National University of Technologies and Design. Zbirnik materialiv konferentsii. Innovatika v osviti, nauci ta biznesi: vikliki ta mozhlivosti. Kyiv: KNUTD. pp. 253-261 [in Ukrainian].

11. Kolosnichenko O., Chrichlow K. The 'Mods' Style influence on the formation of scooter drivers' clothing in the 1950s-1970s. Proceedings of the international scientific-practical conference. Actual problems of modern design. Kyiv: KNUTD, 2020. Vol. 1, pp. 115-118 [in Ukrainian].
12. Kosareva E. (2006). Moda. XX vek. Razvitie modnyh form kostyuma. [Fashion. XX century. Development of fashionable forms of the costume]. SPb.: Peterburgskij in-t pečhati. 465 p. [in Russian].
13. Chrichlow K., Kolosnichenko O. (2020). Evolyuciya motorizovanih transportnih zasobiv yak golovnij chinnik formoutvorennja odyagu vodiiv [The evolution of motorized vehicles as a major factor in the drivers' clothing formation]. Proceedings of the international conference. International scientific and practical conference. Cultural studies and art criticism: things in common and development prospects. Venice: Izdevniciba Baltija Publishing. pp. 151-155. DOI <https://doi.org/10.30525/978-9934-26-004-9-108> [in Ukrainian].
14. Krichlow K., Kolosnichenko O., Struminska, T., Protsyk B., Kass B. (2020). Viniknennja stiliv «Bajker» i «Roker» u suchasnij svitovij modi [Biker and Rocker Styles in Modern World Fashion]. *Art and design*. 4(12). pp. 104-113. DOI:10.30857/2617-0272.2020.4.10 [in Ukrainian].
15. Webike. Motorcycle equipment: types and purposes. online, access date 20.10.2020. URL: <https://www.webike.com.ru/news/motoekipirovka-vidy-i-naznachenija/>[in English].
16. Brooklands Museum, Race Track, online, access date 10.07.2021. URL: <https://www.brooklandsmuseum.com/explore/our-history/buildings-and-landmarks/race-track>[in English].
17. Official website Belstaff, A history of adventure, access date 05.07.21. URL: <https://www.belstaff.co.uk/belstaff-content-inside-belstaff-heritage/history.html>[in English].
18. Hall S., Jefferson T. Resistance through rituals. Youth subcultures in post-war Britain. UK, London: Taylor & Francis Ltd, 2007. 288 p.
19. Chepelyuk O., Prohorova I., Trubina O. (2010). Koncepciya proektuvannja strukturi tkanini z urahuvannyam ergonomichnih vimog do odyagu [The concept of designing the structure of the fabric taking into account the ergonomic requirements for clothing]. *Visnik KNTD*. №6 (56). pp. 133-137 [in Ukrainian].