

ECO-ORIENTED FUNCTIONAL CHARACTERISTICS OF OUTDOOR CLOTHING AS AN UPDATE TO ITS DESIGN SOLUTIONS

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Abstract. The article is devoted to the study of the functional characteristics of outdoor clothing, which in recent years has turned from clothing for tourism and outdoor activities into the development of streetwear in the structure of the modern fashion industry. The authors defined the main prerequisites for the development of a suitable range of clothing in a given segment of the fashion clothing market and outlined the main characteristics of increased comfort during its design. The article describes the chronological and technical stages of the formation of the outdoor industry, from the development of tourist equipment to the formation of models of everyday attire and clothing for outdoor activities. The main activities of leading designer brands operating in the outdoor clothing segment (from the 1960s to the present) are formulated. The main stylistic features of creating outdoor clothing in the conditions of modern environmental-oriented design trends and current fashion trends are determined. The basic principles of collaboration between designer brands of the outdoor segment and segments of creating pret-a-porter project images of the modern fashion industry are characterized. The conceptual principles of creating of youth streetwear are proposed, based on the styling of the basic characteristics of outdoor clothing. The functionality of clothes in the study is substantiated as compliance with the everyday life, the type of human activity, its appearance and psychological characteristics. It was determined that the development of active and extreme recreation, tourism, innovations in textiles and clothing production contribute the formation of current design trends in outdoor clothing, which is valued primarily for its functionality, rationality, and versatility. The main characteristics of the design of outdoor clothing and the differentiation of its design, both for use in the field of tourism and active recreation, and as a sample of street clothing, based on the typology of clothing design within the casual style direction, are formulated.

Keywords: *outdoor-clothing, fashion design, eco-oriented clothing, upcycling, street fashion, high-tech clothing, designer brand.*

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1. Introduction

High-tech clothing has long moved away from its traditional purpose and has successfully integrated into urban environments. The creation of modern clothing is increasingly focused on improving the functionality of the outfit, so the introduction of innovative technologies for the development of clothing and materials for it encourages the development of the most comfortable, convenient and at the same time modern clothing.

The popularity of sports recreation every year becomes a driving force for creating

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new types of clothing and introducing new innovative materials for their implementation. But annual fashion trends make adjustments to the stylish variety of outdoor clothing, in particular to the assortment composition, as well as color and decoration, as modern travelers seek not only comfort from clothing, but also unique stylistic options for garments (Scapeoutdoors, 2022).

For several years in a row, the formation and development of fashion trends in the outdoor clothing segment has been influenced by the Scandinavian concept of "Friluftsliv" (literally-"life in the open air"), which is so ingrained in the culture of many people that some European companies take it into account when forming the working week for their employees. Today, this concept is increasingly used to justify any manifestation of active recreation or lifestyle: walking in the woods, relaxing by the lake, cycling or cross-country skiing, etc. (Savage, 2017).

As the number of adherents to this concept steadily increases, it encourages the steady growth of the fashion sector associated with the research of sought-after properties and the design of new types of outdoor clothing. In turn, this opens up new broad opportunities for new and existing brands in this sector of the fashion industry, combining statistics from pre-project research and current fashion trends. The priority vector of investment in this sector of fashion design is circularity, reuse and, where possible, disposal of waste from the production and consumption of such clothes (for example, through collection of used items in stores or mail-back programs). Such upcycling programs are implemented by leading companies (in particular, Greater Goods) in the development of new clothing models, based on the transformation of old, used models. The aesthetics of combining decorative and coloristic elements (in particular, a more eco-friendly approach to color with the effect of scuffs or fading), creating multi-layered sets (combining streetwear with increased comfort characteristics, such as water resistance or climate control) and transformative details (with extra bulky pockets or details on straps) are key (Ltp Group, 2022).

2. Analysis of previous research

The theoretical basis for the study was the work on the definition of the main functional and technological characteristics of materials for designing clothes with increased comfort, the research works of scientists and technologists of designer brands and companies specializing in the development of equipment and clothes for tourism and active recreation, scientific developments on the shaping of clothes and implementation of fashion trends in the modern fashion industry, etc.

Thus, in Pashkevich et al. (2016), on the basis of a comparative analysis, authors determined the main tectonic and physical-mechanical characteristics of fabrics that affect the shaping of sewing products and can be used in the design of clothes of different volumes of shape. In further research Pashkevich et al. (2018a), the authors conducted an expert assessment and determined the degree of significance of the properties of materials for the development of tectonic forms of clothing with high comfort characteristics that can be used in the design of individual and mass-produced clothing. As a result of complex step-by-step studies, the authors have identified groups of fabric characteristics that affect the design of high-comfort clothing, taking into account the compositional features of models and the characteristics of materials (Pashkevich *et al.*, 2018b). In addition, this article considers the results of research by a team of KNUTD scientists in the field of improving methods for evaluating the characteristics of materials,

their impact on shaping and comfort criteria for clothing and equipment products, including physical and mechanical properties (Goetzendorf-Grabowska *et al.*, 2014; Suprun *et al.*, 2003; Beloshenko *et al.*, 2017; Suprun, 2003). On the other hand, the design activities of brands operating in the fashion industry are determined by the factors and criteria studied in Ganushchak-Efimenko *et al.* (2018), which defined global trends in doing business in the framework of sustainable development, socially responsible strategic partnership for the formation of brand capital of integrated business structures; N. Chuprina, which describes the specifics of the multi-vector activity of designer brands, which can be extended to the design of street and outdoor clothing (Chuprina, 2014). The place and significance of street fashion, and outdoor clothing as its integral part, considered from the point of view of determining the factors influencing the functioning of the fashion system, as well as the formation and implementation of fashion trends as a result of design activities; revealed relationships in the structure of fashion as a cyclically closed system of formation, production, distribution and consumption of fashion standards and fashion products (Chuprina *et al.*, 2020).

When determining the motivation of consumers especially young people regarding the use of outdoor clothing, the authors relied on the results of a sociological survey given in Kim and Lee, (2016). Lee study, which identified three themes in motivating teenagers' preferences for branded outdoor jackets: media effects, peer pressure to conform, and parental suggestion. Also of interest to the present study are three themes regarding the meaning of wearing branded winter jackets outdoors: the development of a hierarchy, the internalization of this hierarchy, and a framework for use with other fashion brands.

Also in this article, the authors agree with the conclusions of the researchers of School of Fine Arts and Design (China) Ya Zhou ta Yun Shi, who determined that the improvement of living standards is accompanied by the change of consumption concepts. Consumers' requirements for clothing products have become more artistic, healthier, and more ecological, and they look forward to more and better safety clothing to meet their health needs (Zhou & Shi, 2022).

In addition, the study analyzed scientific developments of designer brands specializing in the design of tourist equipment and outdoor clothing: Osprey, The North Face, Patagonia, Arc`teryx, Rab, Napapijri, Columbia, Fjällräven, etc. In particular, the means of using waste in clothing design, abstraction from the primary function and focus exclusively on material, formal, tactile and perceptive potential have been studied. This means to challenge conventional notions about things, to show the fragility and unexpected possibilities of the material, to combine aesthetics and constructive characteristics with technological innovations. An analysis of the use of the results of research of these brands by such designer fashion brands as Dior, Prada, Loewe, Bottega Veneta, Burberry and other permanent residents of fashion weeks.

The purpose of the work is to characterize the functional and technological properties of the design of outdoor clothing, with the aim of developing models of youth clothing with improved functional properties and smart design solutions.

3. Methods

The methodology of the conducted research is based on a complex of methods of object-oriented analysis, which gave grounds to determine the evolution of the development of needs and functional characteristics of outdoor clothing, both within the design of clothing for active recreation and street casual clothing. For a detailed study of

the aesthetics of outdoor clothing and its visual and design characteristics, a review of scientific research was conducted based on publications in monographs and scientific journals on this topic, photographs, using the Internet and even using found vintage and rare things and objects. Thanks to the conducted comparative analysis of informational and visual sources of information, the aspects of the formation of these directions, and what is very important, fashion trends, values and priorities that existed in certain periods of time and are priorities for the development of this segment of the fashion clothing industry in the 21st century, were systematized. All these factors contribute to a detailed analysis of the formation of the principles of aesthetics and functionality of outdoor clothing, its use in outdoor conditions and for active recreation.

The article uses tools of comparative typological (implementation of constructive and technological innovations in the creation of models of outdoor clothing for various purposes), historical and analytical methods (the stages of creating a modern assortment of outdoor clothing and accessories based on the design of tourist equipment are described) and comparative analysis: from the results of design activities of leading design brands and companies operating in the segment of sports equipment development and outdoor clothing models and collections that have had a significant impact on the development of clothing with improved functional properties and upcycling ability in the manufacturing and consumption process are identified and analyzed.

4. The main results

As the history of the formation of the modern fashion system and the fashion clothing industry shows, a great brand begins with an idea. It would seem that the giants of the outdoor clothing industry, like Osprey, The North Face or Scarpa have always existed, but most of them started with enthusiasm and were ordinary garage brands in the beginning. Only later, thanks to hard work, smart planning and, sometimes, lucky coincidences, they became what they are today.

The first development was the Rucksack backpack with integrated frame. At that time, tourists and mountain climbers suffered with heavy and bulky backpacks with an external frame and therefore light, roomy, with nylon zippers, Rucksack immediately won the sympathy of customers. The novelty of The North Face was much lighter (only 1.85 kg), stronger and more comfortable to wear than the canvas backpacks that were common at the time, which allowed tourists to move faster and further on the route. This was an impetus for others to make the equipment lighter and more functional.

Of course, there are many well-known outdoor clothing brands that started their journey several decades ago and are now rightfully considered leading and revolutionary. They have become classics in the world of fashion and have earned the right to be at the top among smart clothing brands. The North Face, Patagonia, Arc`teryx, Rab, Napapijri, Columbia, Fjällräven and others have long been creating a so-called solid and unapproachable foundation for other lesser-known smart clothing brands. But it is The North Face that rightfully holds the title of the most successful timeless classic. The huge contribution of this brand to the history and development of the outdoor industry cannot be ignored. It was The North Face that became the starting point for the real success of the outdoor segment in the market and the popularization of high-tech clothing among street fashion. The brand changed the world's outdoor clothing and became one of the most popular players in the street wear arena.

The history of The North Face began with two things: a love for the outdoors and a shortage of quality outdoor gear. But when its founders opened the store, they initially did not even plan to launch the brand. The founders of the first store, The North Face, which opened in 1966 in San Francisco, were rock climber enthusiast D. Tompkins and his wife Susie. Both loved hiking, met while hitchhiking, and decided to start a common business. This was facilitated by the shortage of equipment for skiing, rock climbing and mountaineering. In the 1960s, it was bought mainly in military stores, where the remains of equipment for American soldiers in Vietnam were sold. Douglas and Susie decided to open a store where outdoor enthusiasts could buy full-fledged equipment not only in khaki. They named it after the north face of the mountain, which has the lowest temperature and, accordingly, the most difficult climbs.

Initially, The North Face practically did not produce its own clothes and equipment, with the exception of sleeping bags, and even those were sewn to order in the production of another outdoor brand. Eventually, the couple realized that they would not be able to sustain the production of specialized clothing, so they sold The North Face brand in 1968 to a graduate of the Stanford Business School, K. Klopp, for \$20,000. K. Klopp was one of the first customers of the store and saw prospects in the development of the outdoor business, so he decided to develop the company as a full-fledged brand. Thus ended the history of The North Face retailer and began the history of The North Face outdoor brand.

To make the brand recognizable, K. Klopp closed his first store, started his own production and opened a new store in Berkeley, and one of the first updates to the brand was its logo. The North Face logo follows the silhouette of the north face of Half Dome mountain in Yosemite park, it was also placed on the first items of the brand in 1968 and has not been changed since then.

Another landmark decision for The North Face was the selection of materials: the team began to buy up the remains of military equipment. For example, aluminum fittings and lightweight aviation structures, parachute nylon and lightweight ripstop, which other outdoor brands have barely used before. With their help, The North Face managed to create clothing and equipment that weighed much lighter than the usual hiking gear at the time.

One of the first such silhouettes was the Ruthsack backpack, named after designer Stuart Ruth. It was not only roomy, but also light, due to the aluminum frame and nylon zippers, so it became one of the most popular models of The North Face (its variations are still produced).

In the same year, the lightweight Sierra Parka down jacket was released, which became one of the universal prototypes, and the brand also became one of the first partners of the Gore-Tex company, equipping its clothing with waterproof membranes for the first time in 1977. The Gore-Tex membrane is known for its good wear resistance and waterproofness. With a little tweaking, W. L. Gore & Associates has put the production of this material on stream, adapting it for use in the widest range of areas – from the original design for space applications, to the production of waterproof sneakers, Gore-Tex jackets, gloves and Gore-Tex boots. Due to the special design of the material, the Gore-Tex membrane does not allow water to pass through it, since all its numerous pores are too small for this. At the same time, it offers the couple to come out freely from the inside. Later, they were added to the Mountain Jacket, released in 1985, which became one of the most famous silhouettes of the brand.

Shortly after the launch of backpacks and the first jackets, The North Face released sleeping bags made of synthetic insulation, which allowed to reduce their weight without

sacrificing resistance to the cold. But the biggest revolution was made by tents in the form of the Oval Invention geodesic dome, which the brand introduced in 1975. It was inspired by the geodesic domes of the American architect and futurist R. B. Fuller.

At the beginning of the 1990s, The North Face realized that it would not work to maintain the brand with only a focus on outdoor equipment: the situation on the verge of bankruptcy made it clear that The North Face would have to exit the niche. At that time, the brand already produced basic items like T-shirts and hoodies, but the increased interest from young people pushed the brand to develop a lifestyle direction. And so soon Nuptse jackets acquired lifestyle colors, and Mountain Jacket climbing jackets came to the city streets and became one of the catalysts for the mania for things with Gore-Tex technology. This was a turning point in the company's takeover of the streetwear segment.

Another prerequisite for creating new technologies in outdoor equipment was the issue of nature protection and environmental problems. The first steps in this matter were taken by the founder of the Patagonia brand. Yvon Chouinard was concerned about environmental problems caused by a large number of extreme athletes causing irreparable damage to the rocks using iron hooks. Then the researcher created aluminum chockstones, leaving no traces on the rocks. Aluminum chockstones should not be driven into the crack with a hammer, but wedged by hand. «I started as a craftsman, making climbing gear for my friends and myself, then got into apparel. As we began to witness the extent of global warming and ecological destruction, and our own contribution to it, Patagonia committed to using our company to change the way business was done. If we could do the right thing while making enough to pay the bills, we could influence customers and other businesses, and maybe change the system along the way. We started with our products, using materials that caused less harm to the environment. We became a certified B Corp and a California benefit corporation, writing our values into our corporate charter so they would be preserved. More recently, in 2018, we changed the company's purpose to: We're in business to save our home planet» (Chouinard).

Later, in the 1970s, the climbing community used a traditional clothing pattern: cotton, wool and down. Patagonia was looking for new solutions and turned to the experience of fishermen in the North Atlantic, who used to have sweaters made of synthetic fleece that keep warm and at the same time do not accumulate moisture. This was another step in the transition to synthetic materials and environmental protection. The idea of a warming and at the same time quick-drying layer was great, but finding and testing the appropriate material was not so easy. In the end, I. Chouinard's wife, Malinda, went to the largest center of wholesale trade in Los Angeles, where she found what she was looking for – the Malden Mills company, to which today's fashion and industry owe the appearance of fleece and which at that time was on the verge of bankruptcy after the collapse of the artificial fur market.

The first samples of Patagonia's synthetic clothing tested in the mountains had many drawbacks: the new fleece clothing was bulky, even clumsy, the material did not have the best appearance, but at the same time the clothing turned out to be surprisingly warm, especially when used with an outer protective layer, continued to warm even in a wet state and also dried quickly.

In partnership with Malden Mills, everything was gradually refined. First came the softer material Bunting – a synthetic wool with less pile, and then the iconic Synchronia® – an even softer material that, unlike its predecessors, had no pile at all, the well-known fleece today.

Patagonia's strong commitment to research and development persists to this day. At the same time, the brand does not just create outdoor clothing, but calls for raising awareness and protecting the interests of the environment. For example, in the mid-1990s, the brand opposed cotton grown using toxic pesticides. Since then, the company has been producing apparel only from organic cotton. It also recycles plastic to create a strong fabric.

In 1989, The North Face together with Patagonia, REI and Kelty organized the Conservation Alliance foundation, to which they contribute every year from a portion of their profits to sponsor organizations that fight to preserve unspoiled nature areas in the United States. Today, the foundation is supported by almost all major North American outdoor brands, as well as organizations related to sports and recreation in the bosom of nature.

Another prerequisite for the development and popularity of outdoor clothing was that almost all of it was represented by a boring brown, Marsh green or, at best, blue color. In the early 1980s, the same Patagonia company made another important breakthrough. They had a whole range of bright shades at their disposal. Cobalt, turquoise, French red, aloe, sea wave, mocha with ice... Patagonia's clothing against the background of general pallor was almost blasphemous in its bold colors. However, thanks to the use of bright natural colors, the company gained even more popularity and recognition, and this became an important sign for other outdoor brands.

The bright design, in turn, attracted the attention of street artists, namely graffiti writers, who brought even more popularity to outdoor brands, thanks to the use of these clothes in street life. The beginning of this craze can be called The North Face Extreme Gear collection, which appeared in the 1980s, and in 1985, the famous jacket of the brand The North Face Mountain Jacket, created as an item of mountaineering equipment, and which today is almost a must-have item of everyday street wardrobe.

The use of specialized clothing for tourism and mountaineering in the city gave an impetus to brands to start developing not only the outdoor segment, but also clothing for street life, thanks to which they began to acquire new fans and gain enormous popularity.

Today, the vast majority of consumers choose soft, light, airy and, perhaps, at first glance, even fragile things. The softness of the material and the absence of noise from the product brings a share of peace to modern life. After all, the rustle of clothes is often an additional irritating factor. Especially if it is outdoor clothing that helps you enjoy the sounds of nature and silence. Based on this, today "quiet" and silent materials for clothing are of interest. But you should not always pay attention only to this. In the "smart" outdoor, where there are clearly defined limits set by the requirements of strength and wear resistance, hard textures are also needed. Softer and more delicate materials are ideal for the base and middle layer, while hard textures are still often used for the top layer today. Designers are very careful when choosing materials and designing equipment for outdoor activities. The thinnest siliconized materials, which have low weight and high strength, are gaining popularity both in tent design and in backpack design. Attractive at the same time is not only their appearance, but also an unusual texture, soft and embossed.

Outdoor refers to all types of outdoor activities, not excluding winter sports. First of all, outdoor clothing was intended specifically for them. But recently, technological things are increasingly appearing on the streets of the city.

Outdoor fashion originated in Japan and became an important philosophy. The rhythm of European or American life seems slow to the Japanese, because their everyday life is even more stressful and industrialized. Unity with nature is perceived by the

Japanese as a way to restore internal balance, so long walks, hiking in the mountains and to the sea are a special need for them, and comfortable clothing is an important component of it.

For outdoor, fashion isn't just about colors and textures. Appearance and compliance with rapidly changing trends, – this is the prerogative of traditional fashion. In outdoor clothing, technology, functionality, effective combination of things and many other things that are imperceptible visually are in the first place. The higher the percentage of functionality in a product, the more valuable it is. In outdoor, unlike high fashion, there are no great stylists. This is due to the fact that creating a collection involves the work of a large team of specialists: a designer, constructor, technologist, as well as an athlete or amateur – that is, someone who can test the product for durability in the field. As a result, the entire company or brand acts as a stylist.

The design of outdoor-clothing is based on such components as weight, professional purpose and versatility. Narrow specialization and at the same time universality of outdoor products do not contradict each other, on the contrary, they allow you to create truly functional things. The technical characteristics of individual materials and their combination in the finished product are of great importance. If in the outdoor industry design is based on functionality, then in the fashion industry – from emotions born of colors, shapes, smells and sounds. It may seem that outdoor and fashion – two opposite poles, but in fact, as poles should, they attract and affect each other. The trend is becoming more noticeable when the very involvement in an active lifestyle becomes fashionable. Fashion has realized this and therefore borrows more and more design solutions from outdoor collections.

Fashion designers find a source of inspiration and, based on it, build a collection with completely new forms and materials. Outdoor designers, on the contrary, seem to grow their collections, complementing them with new products that go through a long way of development and testing. First of all, they focus on new materials and technologies, and only then on fashion trends with its silhouettes, colors and textures. Another feature of working on an outdoor collection is that there is practically no difference between men's and women's products. Differences persist mainly in the design and colors, and in the product range – extremely rarely. Therefore, there is no need for a separate presentation of men's and women's collections.

So, in particular, the forecast proposals of leading outdoor brands regarding leading fashion concepts for short-term and current fashion trends, published on their official websites (Fig. 1 – 3) (Ltp Group, 2022), deserve special attention.



Fig. 1. MM6 Maison Margiela X The North Face (2022)
(image source: <http://www.maisonmargiela.com>)



Fig. 2, a-b. Craft & Hike Trend Board (a), Doorstep Adventure Trend Board (b) (2022), (image source: www.chantellfenton.com)

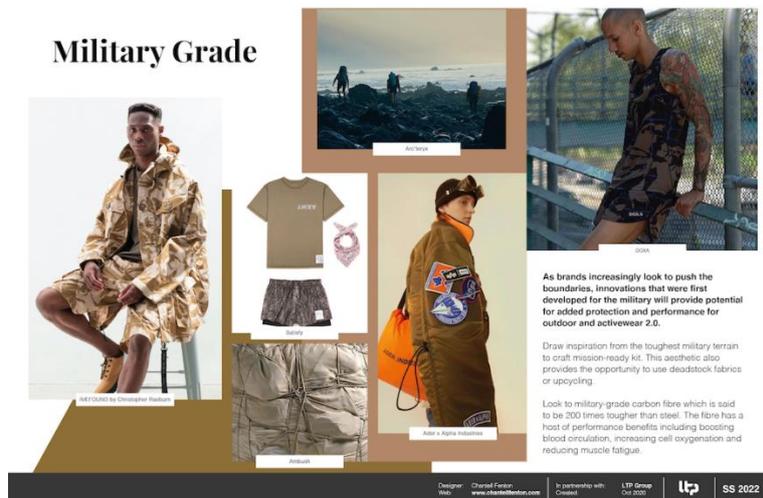


Fig. 3. Military Grade TrendBoard (2022) (image source: www.chantellfenton.com)

The increased attention to outdoor brands is explained by the buyer's interest in the idea of "authenticity". Of course, outdoor brands have been on the market for many years, but they have gained new significance due to the global trend in the fashion industry, built on the opposition of high fashion, which deliberately neglects functionality.

Smart clothing, which was primarily created to protect against external weather factors, has long been preparing its arrival in everyday fashion. In extreme conditions, outdoor has proven its effectiveness and functionality, and since about the 1950s it has been tested for relevance and durability in terms of fashion compliance. Trench coats, anoraks and parks suitable for cold conditions were invented by the peoples of the North and Siberia, mountaineering storm and down jackets – all of them, having proved their irreplaceability in extreme conditions, soon became part of urban everyday life. The fashion industry did not hesitate to adapt all available technologies, borrowed unusual aesthetics and accustomed the public to it. If once outdoor ambassadors were mountain climbers and polar explorers, now they have been replaced by show business stars. As an example, we can take the appearance of T. Scott at New York Fashion Week in a Calvin Klein fleece or rapper O. Drake, who performed in Stone Island winter gear at the Adult Swim party. And since outdoor bestsellers have turned into IT items, such as Napapijri anoraks, Canada Goose parkas, the North Face Down Jackets or Patagonia fleece jackets, leading design brands have decided not to stand aside. Their own versions of anoraks,

down jackets and other clothing are shown every season by Dior, Prada, Loewe, Bottega Veneta, Burberry and other permanent residents fashion weeks around the world.

Smart clothing appeared to save lives – for example, the inventor of the down jacket, J. Finch returned from Mount Everest, and the remains of his namesake, competitor and connoisseur of layered wool clothing J. Mallory wasn't found until seventy years later. However, now outdoor clothing can also be a salvation for the fashion industry, which now requires something more important than beauty.

Why fashion needs outdoor is clear: the current trend, technologies, decades of accumulated expertise... But why does outdoor need fashion? Because it works best to be popular. Outdoor brands have always followed technology in clothing design: their items initially solved specific functional tasks and, if they adhered to aesthetics, they were as simplified as possible. Today, the difference is noticeable, as outdoor recreation – from extreme mountaineering to innocent trekking – is becoming increasingly popular among those who consider themselves fashionistas. Heat retention, water-repellent and windproof membrane fabrics, welded seams – this is not enough for them.

Design in this outdoor segment has always been on the sidelines (due to the different primary purpose of these products), but changing trends have made this aesthetic attractive to broad fashion. For a long time, brands have and have had lines that differ in their own visual language: for example, the Nike ACG collections or the iconic Steep Tech series from The North Face, which was produced from 1991 to 1997. Regular lines of these brands are increasingly influenced by their technology divisions that develop products for outdoor. But thanks to the fact that new fashion brands are taking over the outdoor area, everyone wins, as they learn from each other: some - technologies, others - the ability to create relevant things for everyday life.

But there are also those who have accumulated outdoor and fashion in the DNA of their brands from the very beginning: local design brands that have built brands on aesthetics high-tech clothing, putting your future on this trend. Among them is the Japanese brand Nanamica, which combines classic silhouettes with experiments on technological materials, the Swedes Fjallraven, who became famous not only due to the famous Kanken backpacks, but also thanks to the line of everyday items of the British company YMC, which under the slogan "You have to create your own style" since 1995 integrate the aesthetics of workwear into outdoor, mixing it with the stylistic features of fashion trends of the 1970s and 1990s.

Summarizing the results of the study, it should be noted that the introduction of increased characteristics of comfort and functionality of outdoor clothing for outdoor recreation in the modern street urban wardrobe is one of the current and expected trends in the design of modern clothing. Therefore, in this work, the development of sets of youth street clothes was carried out, based on the adaptation of technological characteristics that were accumulated and used in the development of equipment for tourism and active recreation for decades. The concept of the youth clothing collection is based on an in-depth study of the relevance of outdoor stylistics today, the impact on modern fashion and the development of silhouette forms, as well as the definition of the basic principles of development and artistic and compositional techniques for decorating clothes.

Determining the consumer segment for the developed collection requires referring to the description of the main characteristics of the target audience, justifying significant preferences, lifestyle and attitude to fashion, which gives brief information about potential buyers of this range of clothing.

Thus, the image of the consumer is defined in the following main aspects: a male of 20-35 years old, who primarily strives for comfort, simplicity, functionality and versatility of clothing. He strives to be discreet and not always noticeable among strangers, refuses to express his individuality and creativity through clothing. His style of clothing is comfortable in various fields of activity: from hiking in the mountains to parkour or even to rebellious hobbies like painting graffiti on train cars. He always has a backpack or shoulder shopping bag with him, since the functionality of this element of the project image cannot be overestimated.

As you know, a capsule wardrobe is a set of items that are perfectly combined in style, color and texture. The selected items are put in capsules that can be combined with each other (only 10-15 sets). *When creating a capsule wardrobe, you should always start from personal needs and lifestyle.* By analyzing all the daily activities of a potential consumer and putting capsules under them, you can minimize the time spent choosing an image in the morning to get a balanced, versatile look throughout the day.

The developed clothing sets are designed for everyday wear, active lifestyle, short hikes, as well as for night antics and adventures. In this project image, there is no division into castes and occupations, which is reflected in clothes. It is quite athletic, individual, creative, so clothes help its owner maintain lightness and dynamics in his movements, regardless of what he is doing. The range of presented models consists of loose pants and shorts of various cuts, a t-shirt with a yoke and rolled-up sleeves, a sweatshirt, and membrane jackets of various cuts. Several types of fabrics are offered for these models: membrane fabric for jackets, raincoat cloth and knitwear. For pants and shorts, nylon fabric is chosen, as well as cotton and denim. A fleece fabric with a long pile is used for a sweatshirt, and a loose cotton fabric is used for a T-shirt.

The presented clothing sets can be used in the hectic conditions of everyday life. Clothing will be comfortable both for normal walks and for a more active life, skateboarding, cycling, etc. – that is, clothing can be used daily (Fig. 4). In these products, you can feel comfortable and safe during night antics and adventures. At the same time, it creates a sense of secrecy and helps to hide your identity.



Fig. 4. Sets of everyday youth outdoor clothing (Source: Author's design)

The designed set of clothing sets (so-called modules) that can be combined with each other multiple times and are used for a number of occasions (for everyday life, tourism, working conditions, night outs and outings). They belong to one person and take into account their lifestyle and the specifics of their fields of activity. All things within one module such as a Lego constructor fit perfectly with each other, all bottoms and tops are interchangeable. One capsule provides outfits with one area of life (office, nature

walks, meetings with friends, etc.). This approach to things saves money, reduces the number of rash purchases, and teaches you to use fewer things. Thus, for one season, it is advisable to determine and form several sets of clothing, depending on the variety of activities of each individual person.

5. Discussion

The analysis made it possible to determine the main characteristics of outdoor clothing design and differentiation of its design, both for use in the field of tourism and active recreation, and as a model of streetwear based on the typology of outfit design within the casual style (Chuprina & Kolosnichenko, 2020). In particular, designer brands pay special attention to multi-functionality and characteristics of increased comfort of created models and sets, including due to tectonic and form-forming features, as well as the development of transformative details and elements of clothing.

Outdoor clothing has high functionality, quality and durability. Now it has become very popular in urban life and you can often see it on the streets, but initially it was created and continues to be created for active recreation and tourism. The creators of outdoor clothing initially took the most serious approach to production, realizing that they are making it for professionals, for extreme conditions. Materials for outdoor clothing are chosen very competently and carefully. Membrane tissue cannot be dispensed with. Membrane is one of the main concepts in the outdoor clothing segment.

A fleece jacket or sweatshirt has long been considered the most popular outdoor clothing. Despite its softness, the material has amazing strength and perfectly retains heat. Special attention should be paid to the technology of gluing seams and rubberized zippers, which are resistant to adverse environmental effects. Moisture does not penetrate through them, and the heat, on the contrary, remains almost completely inside.

6. Conclusions

So, according to the results of the study, it can be stated that the primary factor of compliance of a particular design brand with the criteria of a leader in the world fashion system (Chuprina, 2014) there is not only the passage, but also the formation of ways to develop the main consistently relevant fashion trends, the most global of them:

- the attitude of consumers to clothing in terms of implementing the socio-cultural functions of fashion through it, especially in the field of self-expression and manifestation of their own individuality. This trend strongly lobbies for the democratization of fashion, a diffuse, and often eclectic, approach to fashion and fashionable clothing;
- expanding the use of ecological materials and creating ecological technologies for the design and operation of fashion products. The relevance of this trend is being justified more and more actively in the modern world, and accordingly it is widely developed in the activities of all subjects of the fashion system;
- the development of high information and computer technologies that make it possible to create, process and use materials with improved properties, as well as contribute to the development of clothing models with increased functional and operational advantages;
- cultivating a healthy lifestyle among an increasing number of potential consumers of fashion products, which on the other hand emphasizes the advantages of unisex

clothing and the use of environmental and information technologies in the design of fashion clothing.

It is this model of functioning at this stage that is the highest priority for global design brands operating in the segment of unisex street fashion and outdoor clothing, since it combines the advantages of project efficiency of various models of design activities.

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