УДК 7.012:391.4 DOI 10.30857/2706-5898.2024.4.2

YEZHOVA O., SHYBOVSKA YA., BOIKO D., IVANYTSKA A.

Kyiv National University of Technologies and Design, Ukraine

PRESERVING TRADITIONS THROUGH UPCYCLING: DESIGNING CLOTHES IN UKRAINIAN ETHNIC STYLE USING SECONDARY MATERIALS

Objective. The aim is to develop a design project of women's clothing that combines upcycling with Ukrainian ethnic fashion, contributing to the preservation of cultural traditions through the use of reused materials.

Methods. The study employs synthesis and analysis methods of scientific and professional sources in the research direction. The research is conducted in accordance with principles of sustainable development. Applying patchwork techniques and modern corsetry methods allowed for creating volumetric spatial forms in line with the collection's concept.

Results. The article introduces novel ideas concerning the decorative development of internal volumetric structures, color solutions of women's clothing models, and constructive-decorative and functional elements unified in the collection's models, including corsets, trousers, dresses, and skirts. An analysis of the consumer audience informed the development of a creative collection concept, providing a description of the future consumer's artistic image. A collection mood board for women's clothing was created, identifying new silhouette lines and internal form segmentation.

Scientific novelty lies in advancing clothing design principles that merge upcycling technologies of textile materials with Ukrainian ethnic style, promoting both sustainable fashion and the preservation of Ukrainian cultural heritage.

Practical value. The article offers a practical perspective on sustainable fashion, demonstrating how upcycling can effectively integrate with traditional Ukrainian ethnic design. It provides designers and educators with a foundation to create clothing that preserves cultural heritage while promoting environmental responsibility. This approach not only reduces textile waste but also enhances respect for Ukrainian cultural motifs, offering new pathways for innovation in eco-friendly fashion. A creative collection of women's clothing was crafted from a diverse range of products, including corsets, skirts, trousers, and dresses.

Keywords: Ukrainian scarf, clothing collection, three-dimensional shape, patchwork, corset, eco-design, clothing design, upcycling.

ЗБЕРЕЖЕННЯ ТРАДИЦІЙ ЧЕРЕЗ АПСАЙКЛІНГ: ДИЗАЙН-ПРОЄКТУВАННЯ ОДЯГУ В УКРАЇНСЬКОМУ ЕТНІЧНОМУ СТИЛІ З ВИКОРИСТАННЯМ ВТОРИННИХ МАТЕРІАЛІВ

ЄЖОВА О.В., ШИБОВСЬКА Я. Я., БОЙКО Д.О., ІВАНИЦЬКА А.Я.

Київський національний університет технологій та дизайну

Mema. Розробка дизайн-проекту жіночого одягу, який поєднує апсайклінг та українську етнічну моду, сприяючи збереженню культурних традицій шляхом використання матеріалів повторного використання.

Методи. У роботі використано метод синтезу та аналізу наукових та фахових джерел за

напрямом досліджень. Дослідження проведене у відповідності до принципів сталого розвитку. Застосування технік печворку та сучасних методів проєктування корсетів дозволило створити об'ємно-просторові форми у відповідності до концепції колекції.

Результати. Стаття містить нові ідеї щодо декоративної розробки внутрішньої об'ємнопросторової структури, кольорового рішення моделей жіночого одягу, конструктивнодекоративних та функціональних елементів, які були об'єднані в моделях колекції, а саме: корсетів, штанів, суконь, спідниць. В результаті аналізу споживчої аудиторії була розроблена концепція творчої колекції, наданий опис художнього образу майбутнього споживача. Створено планшет ідей колекції жіночого одягу. В результаті були визначені нові лінії силуетів та внутрішнього членування форми.

Наукова новизна полягає в розвитку принципів дизайну одягу, що поєднує технології апсайклінгу текстильних матеріалів з українським етнічним стилем, сприяючи як сферам сталої моди, так і збереженню української культурної спадщини.

Практична значимість. Стаття пропонує практичний погляд на стійку моду, демонструючи, як апсайклінг можна ефективно інтегрувати з традиційним українським етнічним дизайном. Він надає дизайнерам і педагогам основу для створення одягу, який зберігає культурну спадщину, одночасно сприяючи екологічній відповідальності. Такий підхід не лише зменшує кількість текстильних відходів, але й сприяє повазі до українських культурних мотивів, пропонуючи нові шляхи для інновацій у екологічній моді. Створено творчу колекцію жіночого одягу з виробів різного асортименту, що включає корсети, спідниці, штани, сукню.

Ключові слова: українська хустка, колекція одягу, об'ємно-просторова форма, печворк, корсет, еко-дизайн, конструкція одягу, апсайклінг.

Problem Statement and Its Connection to Important Scientific and Practical Tasks. In the modern world, significant attention is given to issues of sustainable development and resource regeneration. One field where these issues become particularly relevant is fashion. The use of secondary materials in clothing design can be a crucial step in reducing the fashion industry's environmental impact. Additionally, incorporating ethnic motifs in fashion serves as a means of reproducing and preserving the cultural heritage of various peoples. This approach helps to maintain the diversity and uniqueness of cultural traditions, while fostering mutual understanding and tolerance among nations.

Therefore, research on clothing design in ethnic style using secondary materials is of great importance both for the fashion industry and society as a whole. It contributes to environmental conservation, supports cultural diversity, and promotes sustainable lifestyles.

Analysis of Recent Publications. Recent literature on fashion education highlights the integration of upcycling and sustainable practices within the curriculum.

Burns [1] discusses a pedagogical approach that encourages undergraduate students to upcycle old clothing, fostering creativity and sustainable design through fabric manipulation techniques. Similarly, Aus et al. [2] explore the potential of integrating upcycling into mass garment production, emphasizing the need for transparency and adaptation of design processes to accommodate waste materials. An important literature review on the topic of upcycling conducted by Yu Haemin and Chun Jaehoon [3] identifies three types of textile waste used as upcycling materials: post-production, preconsumer, and post-consumer. Upcycling work is categorized into three techniques: redesign, reconstruction, and handcraft.

The issue of sustainable development in the fashion industry is a focal point for researchers. For instance, the article by Abramova et al. [4] is dedicated to the use of patchwork as a method for creating new garments from textile waste in the development of a creative clothing collection. Marques et al. [5] detail a fashion upcycling contest that showcases the creative reuse of airplane textiles, highlighting the importance of circular economy principles in fashion design. The article by Pashkevich et al. [6] addresses the problem of eco-design in underwear. Kamble and Behera [7] provide a comprehensive analysis of the challenges and innovations in upcycling textile waste, noting the environmental impact of fast fashion and the necessity of efficient waste management systems. Bigolin et al. [8] propose innovative methods for upcycling in fashion practice, focusing on "material inventories" and "garment ontologies" to explore the reuse potential of secondhand materials. This research

collectively emphasizes the need for sustainable practices and creative approaches in fashion education to address environmental concerns and promote circular fashion.

In the article by Remenieva and Kolosnichenko [9], an innovative eco-technology is proposed for using living materials produced by encapsulating live biological cells in an inert matrix, ensuring their mechanical strength and the ability to create spatial patterns.

The objective of this research is to develop a design project of women's clithes that combines upcycling and Ukrainian ethnic fashion, promoting the preservation of cultural traditions through the use of repurposed materials.

Presentation of the Main Results and Their Justification; Conclusions and Prospects for Further Research

The modern fashion industry is increasingly focused on ecological awareness and responsibility. Many renowned brands and designers are paying attention to the use of eco-friendly materials, efficient resource utilization, and waste reduction. One of the key trends is the growing consumer awareness regarding the choice of clothing that incorporates the reuse of materials. Currently, several key trends influence consumer choices, including creative design solutions and production approaches.

Sustainability encompasses all aspects of modern production, from material selection to product disposal. This is coupled with a trend towards conscious consumption, where consumers increasingly choose high-quality items with extended longevity, avoiding frequent wardrobe changes and making considered decisions.

Ethnic style in modern fashion has gained significant popularity in recent years. Designers increasingly choose elements of clothing, footwear, and accessories that are distinguished by national characteristics and cultural nuances. This approach not only reflects the history and spirit of a nation but also creates contemporary images with profound meaning and sacrality.

The intersection of sustainability and ethnic style is a frequent occurrence. Creating fashion images using ethnic elements and adhering to sustainability principles allows for the production of unique items that emphasize quality, durability, and the integrity of cultural tradition reproduction.

Upcycling in design represents a creative and

ecologically conscious approach. The Ukrainian scarf is a good example of an item that, while no longer popular as headwear, still has great potential for reuse. Instead of discarding outdated items, designers can give them a new life by changing their form, color, and functionality. This could involve reconstructing scarves into dresses, trousers, corsets, accessories, or decorations for other items. Such an approach not only adds exclusivity and individuality to created items but also conserves resources and reduces waste.

One of the key advantages of upcycling is its contribution to the sustainability and ecological consciousness of design products. New items created from old materials can be of higher quality and possess history and value, making them special for consumers. Thus, upcycling in design is more than just a fashion trend; it is an important step towards sustainable development and the preservation of cultural values through creativity and the reinvention of old items in new roles.

In developing the creative collection, designproject principles laid out in the monograph by Kolosnichenko et al. [10] were adhered to. Developing a creative concept for a clothing collection is an idea that underpins the creation of a specific line of clothing. The concept defines the overall style, mood, theme, and character of the collection, serving as a guide for the designer and the entire team from the initial idea to the production launch.

The main steps in developing the future collection at the concept development stage involve first identifying the target audience for the product. The "hourglass" figure type was chosen as the basis for the creative collection, characterized by a relative balance between the upper and lower body parts and a narrow waist.

Concluding the concept development process, it is important to adhere to the overall idea and message of the collection, considering all stages to realize the most in-demand product among target users. The initial data for developing the creative concept include analyzing results from previous research in the project and marketing field, as well as trends in decoration of current clothing collections by world designers, as outlined in the article by Pashkevich et al. [11]. Based on this, a unique vision for the creative concept of a clothing collection designed for a specific target audience was created.

Analyzing fashion trends presented in collections by contemporary designers is crucial in developing the collection. Considering future fashion directions and clothing requirements, along with creative inspiration, a collection distinguished by its modernity in current clothing models is formed. The goal of this clothing collection is also to revive the Ukrainian style, combining rich cultural heritage with modern clothing and highlighting the theme of textile material recycling. Incorporating the Ukrainian scarf in clothing creates a cohesive compositional image. Therefore, an analysis of current fashion trends using Internet resources was conducted to create the collection and select silhouettes and details to be used. The analysis revealed that form-fitting dresses, palazzo pants, and tightly fitting corsets are trending this season. Additionally, a significant focus in seasonal collections is on color choices: in 2023, the world was captivated by a soft pink color, which became very popular following the release of the movie "Barbie 2023." These trends influenced the color scheme in forming the creative idea for the collection.

In this project, the clothing collection is designed for a standard figure (170-88-92). Creating fashionable clothing that replicates the silhouettes and shapes of chess pieces requires careful consideration of geometric images and details to convey a sense of lightness and elegance. Choosing chess pieces as a creative source for a women's clothing collection is an interesting and unconventional approach. The collection incorporates graphic elements reminiscent of chess squares or pieces in the design or decoration of the clothing. Palazzo pants resemble the shapes or silhouettes of chess pieces, while accent details on skirts or corsets evoke a horse's mane. This approach can imbue the collection with a unique character and create interesting new forms. The most important aspect is to maintain a balance between the chess theme and the femininity of the clothing to create a harmonious and stylish collection.

The study of consumer demand, analysis of fashion trends, and work with the creative source resulted in a series of graphic sketches, material samples, fittings, and ornaments to create an "idea board," a collage of images (Fig. 1). The collage is a visual tool used in the fashion industry to create and convey the concept, mood, style, and aesthetics of a fashion collection.

The main focus of this idea board is images of interesting and inspiring constructive elements. These include images of silhouette forms, various sleeve constructions, and the main decorative elements used in creating the collection.

In the next stage, preliminary sketches for the collection were developed. The primary purpose of these preliminary sketches is to determine the



Fig. 1. Idea Board for Developing the "Symphony of Cultures" Collection

technical parameters of the collection and to visually assess the coherence of the color palette with the designed garments. These sketches also help align the visual idea with other team members, ensuring consistency throughout the development and production process. Based on these preliminary sketches, designers create full artistic sketches of the project and technical sketches for production launch. Preliminary sketches of the future collection were created, featuring detailed construction lines in the chosen color palette (see Fig. 2).

Following the analysis of the preliminary sketches, the most refined designs were selected, and five sketches of women's clothing sets were developed based on these, considering the collection's concept. An important stage in the collection creation process is the justification for the choice of materials. The primary textile materials for the collection should blend well with the scarf, maintain their shape during sewing, and be durable.

The reuse of textile materials and clothing is gaining popularity in modern fashion. Methods are implemented through recycling,



Fig. 2. Preliminary sketches of the collection "Symphony of Cultures" (Shybovska Ya., 2023)

re-manufacturing, restoration, and combining various materials. Restoring and transforming clothing help conserve valuable resources and extend its use. Recycling methods involve disassembling products into components that can be used to create new items. Upcycling as a recycling method includes creating new items by combining different textile materials. Old items can be turned into patchwork products or decorative elements. Combining materials allows for unique textural and visual effects. For the created collection, the main fabric chosen was "Barbie" suiting in two colors: milk-white and pink. The Ukrainian scarf was used as a decorative material to create interesting decorative and constructive elements.

The created and manufactured creative collection of women's clothing includes various items: corsets, skirts, trousers, and a dress (see Fig. 3). The items are made from a combination of plain suiting fabrics in milk-white and pink colors and floral print fabric that imitates an ethnic scarf.

Conclusions and Prospects for Further Research

The study revealed that eco-design and ethnic style are current significant trends in fashion design. Through the analysis of the consumer audience, a concept for a creative collection was developed, and a description of the artistic image of the future consumer was provided. An idea board for the women's clothing collection was created, defining new silhouette lines and internal



Fig. 3. Fragment of the collection "Symphony of Cultures" (Shybovska Ya., 2023)

form partitioning. By analyzing creative sources, new ideas for the decorative development of internal volumetric-spatial structure, color solutions for models, and constructive-decorative and functional elements, which were incorporated into the collection models, were developed. A series of sketches for the collection models was created, and the choice of fabrics, materials, and fittings for the collection models was justified. The collection was produced in material, confirming the effectiveness of the adopted design decisions.

Список літературних джерел

- 1. Burns A. Upcycling Classics Sustainable Design Development through Fabric Manipulation Techniques in Fashion Design Education. International Journal of Art & Design Education. 2024. Vol. 43. №2. C. 272-288. DOI: 10.1111/jade.12502.
- 2. Aus R., Moora H., Vihma M., Unt R., Kiisa M., Kapur S. Designing for circular fashion: integrating upcycling into conventional garment manufacturing processes. Fashion and Textiles. 2021. Vol. 8. Nº 34. DOI: 10.1186/s40691-021-00262-9.
- 3. Yu Haemin, Chun Jaehoon. A Study on Upcycle Fashion Design Based on the Characteristics of Materials and Techniques. Journal of the Korean Society of Clothing and Textiles. 2020. Vol. 44. № 5. C. 984 1003. DOI: 10.5850/JKSCT.2020.44.5.984.
- 4. Абрамова О. В., Єжова О. В., Чистякова Л. О., Кудревич І. О. Дизайн-проєктування авторської колекції одягу з використанням техніки печворк. Art and Design. 2020. №1. С. 28-40. DOI: 10.30857/2617- 0272.2020.1.2.
- 5. Marques A. D., Moreira B., Cunha J., Moreira S. From waste to fashion—a fashion upcycling contest. Procedia CIRP, Meeting 29th CIRP Design Conference (CIRP Design). 2019. № 84. DOI: 10.1016/j.procir.2019.04.217.
- 6. Pashkevych K. L., Yezhova O. V., Gerasymenko O. D., Protsyk B. O., Kolosnichenko M. V. Ecological design of underwear: technological and educational approaches. Man-Made Textiles in India. 2024. №52(2). C. 65–74.
- 7. Kamble Z., Behera B. K. Upcycling textile wastes: challenges and innovations. Textile Progress. 2021. Vol. 53. №2. C. 65-122. DOI: 10.1080/00405167.2021.1986965.
- 8. Bigolin R., Blomgren E., Lidström A., Malmgren de Oliveira S., Thornquist C. Material inventories and garment ontologies: advancing upcycling methods in fashion practice. Sustainability. 2022. Vol. 14. №5. C. 2906. DOI: 10.3390/su14052906/.
- 9. Ременєва Т. В., Колосніченко М. В. Застосування еко-концепцій у декоруванні принтами сучасних дизайн-продуктів . Індустрія моди. Fashion Industry. 2023. №4. С. 45-52.
- 10. Kolosnichenko M. V., Pashkevich K., Krotova T. F., Yakovlev M. I., Nikolayeva T. V., Ostapenko N. V., Vasylieva I. V. Fashion design in a multicultural space. UK Technical University of Košice, Slovakia. 2020. 258 c.
- 11. Pashkevich K., Liu J., Kolosnichenko O., Yezhova O., Gerasymenko O. The use of decorative trim in clothing collections of designers from around the world. New Design Ideas. 2022. Vol. 6. Nº3. C. 273-284. URL: http://jomardpublishing.com/uploadfiles/files/journals/ndi/v6n3/pashkevich_et_al.pdf/

References

- 1. Burns, A. (2024). Upcycling Classics Sustainable Design Development through Fabric Manipulation Techniques in Fashion Design Education. International Journal of Art & Design Education, 43(2), 272-288. https://doi.org/10.1111/jade.12502.
- 2. Aus, R., Moora, H., Vihma, M., Unt, R., Kiisa, M., & Kapur, S. (2021). Designing for circular fashion: integrating upcycling into conventional garment manufacturing processes. Fashion and Textiles, 8, 34. https://doi.org/10.1186/s40691-021-00262-9.
- 3. Yum, H., & Chun, Ja. (2020). A Study on Upcycle Fashion Design Based on the Characteristics of Materials and Techniques. Journal of the Korean Society of Clothing and Textiles, 44(5), 984 1003. https://doi.org/10.5850/JKSCT.2020.44.5.984.
- 4. Abramova, O., Yezhova, O., Chystiakova, L., & Kudrevych, I. (2020). Designing of the author's fashion collection using patchwork techniqu. Art and Design, 1, 28-40. https://doi.org/10.30857/2617-0272.2020.1.2.
- 5. Marques, A. D., Moreira, B., Cunha, J., & Moreira, S. (2019). From waste to fashion a fashion upcycling contest. Procedia CIRP, Meeting 29th CIRP Design Conference (CIRP Design), 84. https://doi.org/10.1016/j.procir.2019.04.217
- 6. Pashkevych, K. L., Yezhova, O. V., Gerasymenko, O. D., Protsyk, B. O., & Kolosnichenko, M. V. (2024). Ecological design of underwear: technological and educational approaches. Man-Made Textiles in India, 52(2), 65–74.
- 7. Kamble, Z., & Behera, B. K. (2021). Upcycling textile wastes: challenges and innovations. Textile Progress, 53(2), 65-122. https://doi.org/10.1080/00405167.2021.1986965.
- 8. Bigolin, R., Blomgren, E., Lidström, A., Malmgren de Oliveira, S., & Thornquist, C. (2022). Material inventories and garment ontologies: advancing upcycling methods in fashion practice. Sustainability, 14(5), 2906. https://doi.org/10.3390/su14052906.
- 9.. Remenieva, T.V., & Kolosnichenko, M.V. (2023). Application of eco-concepts in print decorating of modern design products. Fashion Industry, 4, 45-52. https://doi.org/10.30857/2706-5898.2023.4.2.
- 10. Kolosnichenko, M. V., Pashkevich, K., Krotova, T. F., Yakovlev, M. I., Nikolayeva, T. V., Ostapenko, N. V., & Vasylieva, I. V. (2020). Fashion design in a multicultural space. UK Technical University of Košice, Slovakia.
- 11. Pashkevich, K., Liu J., Kolosnichenko, O., Yezhova, O. & Gerasymenko, O. (2022). The use of decorative trim in clothing collections of designers from around the world. New Design Ideas, 6(3), 273-284. http://jomardpublishing.com/uploadfiles/files/journals/ndi/v6n3/pashkevich_et_al.pdf.