SUMMARY

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DESIGN METHODS AT THE MODERN STAGE OF ORGANIZATIONAL CHANGES IN MAN-MADE ENVIRONMENT

The article defines the essential connection between the organization of the man-made object environment and the organization of activities connected with creation and use of man-made objects. In relation with a historical tendency characterizing the development of man-made environment, its modern state is seen as possessing systematical changes. Consequently, the methods of design today also contain systematical changes comparing to the traditional forms of design activity.

Keywords: man-made form, structural organization, design, methods.

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UDC 94 (47).083

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EXPERIENCE BY REPLACEMENT OF THE CLOTH IN CAUCASIAN COSSACKS UNIFORM IN THE EARLY TWENTIETH CENTURY

In this work an attempt in 1900 to replace the factory cloth of uniforms of Caucasian Cossacks by cloth of local manufacture is described. The author lists aesthetic and technical differences between factory cloth and handicraft production cloth of that time, gives economic arguments of this replacement and technological reasons of its unprofitability and inefficiency.

Keywords: cloth, beshmet, circassian coat, tunic, uniform, handicraft, factory production, Caucasian Cossacks, Kuban Cossacks, Terek Cossacks.

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UDC 669.017:671.1:67.02:67.017

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FEATURES OF DESIGN PROCESS OF MODERN JEWELRY

The features of the design process of modern jewelry products are considered, taking into account the materials used, the serial production, the consumer sector, and the technological capabilities of production. The ways of forming the design idea of the future jewelry and the main stages of design process are described. It is shown that the original artistic design of the product may undergo significant changes in the design and manufacturing process.

Keywords: jewelry, design, process, materials, technology.

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RETROSPECTIVE ANALYSIS OF WEDDING DRESSES FROM THE XXth AND XXIst CENTURIES

The article shows results in contemporary and historical bridal fashion analysis. The authors described silhouette shapes of dresses from the XXth and XXIst centuries, determined common features in dresses styles, and created new classification of contemporary wedding dresses.

Keywords: wedding dress, silhouette shape, prototypes of clothes design, parameters of clothes shape, qualimetry of clothes, clothing design.

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UDC 739.2

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PARAMETRISN AND DESIGN OF JEWELRY

The world of jewelry is diverse, and each article is unique. And, even though jewelry art is one of the most ancient kinds of decorative art, the approaches to designing articles are constantly being improved. As known, modern requirements for the jewelry design make designers increasingly turn to complex spatial forms created based on "parametric" design. Parametrism is a new style with a unique potential that allows to create completely new in design jewelry

Keywords: parametrism, patterns, style, series of rings, Voronoi's diagram, Rhinoceros, Grasshopper.

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TECHNOLOGICAL ASPECTS OF THE USE OF MOTIVES OF PAINTING WORKS IN THE DESIGN OF A MODERN COSTUME (TO THE QUESTION ABOUT THE USE OF THE CREATIVE HERITAGE OF THE MASTERS OF THE RENAISSANCE IN MODERN FASHION COLLECTIONS)

The article provides an overview of various technologies for transferring images to textile materials. The analysis of modern catwalk collections has been carried out and examples of the use of individual techniques and technologies for obtaining patterns on fabric associated with Renaissance paintings have been presented.

Keywords: painting, Renaissance, fashion, fabric printing.

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CRITERIA FOR EVALUATING THE QUALITY OF A CHILDREN'S CLOTHING ASSORTMENT IN A SEGMENT OF INDUSTRIAL PRODUCTION

The article discusses the criteria for assessing the quality of products in the range of children's clothing in the conditions of modern industry. Formulated the basic requirements for this type of clothing. There are tables that allow to systematize the process of assessing the quality of products for children.

Keywords: children's clothing, industrial production of children's clothing, criteria for assessing the quality of children's clothing.

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UDC 72.17

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PARAMETRIC MODELING AS A METHOD OF CREATION OF ANTHROPOMORPHIC MANNEQUINS FOR DEMONSTRATION OF GARMENTS

This article highlights the potential of parametric modeling in creating three-dimensional human figures for clothing exposure. The aesthetic and technological properties of such design solutions are analyzed. The study is carried out on the basis of a sample made by the described method. The study was able to identify significant functional potential of such solutions, their implementation, and to identify the prospects of the evolution of the anthropomorphic aesthetic of commercial equipment.

Keywords: parametric modeling, mannequin, anthropomorphic volume object, design of retail space.

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UDC 687.18

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THE STUDY OF DEFORMATION PROPERTIES OF THREAD SEAMS WHEN CONNECTING PARTS OF THE JACKETS FROM THE COMBINATION OF MATERIALS

The results of the study of aesthetic indicators of the quality of thread seams that affect the appearance of garments are presented in the article. Stitch and decorating seams with one or two lines of decorating, in the performance of which there is a longitudinal deformation, are used in women's jackets from a combination of materials to connect parts most often. This defect is manifested in the connection details on a curved path particularly. Indicators of landing and tightening of connecting seams are defined and recommendations for their reduction are given.

Keywords: jacket, combination of materials, thread connection, the quality of the seams, the longitudinal deformation of the joints.

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UDC 679.8

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USE OF POUNDED BURNED ROCKS AS DECORATIVE COATINGS

The article describes results of experiments on processed of burned rocks from the coal deposits. The authors suggest methods of waste treatment of the stones. Low decorative varieties of the burnt rocks and waste treatment of the hight decorative ones are suitable for the production an imitation of enamel decorative coatings. There are demonstrated the possibilities of the using this enamel coating in the jewelry design.

Keywords: processing technology, burned rocks, enamel decorative coatings, jewelry design.

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UDC 687.01; 7.011

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THE CONCEPT "NEW THE IMAGE OF THE WOMAN OF THE XX CENTURY" IN DESIGN OF COLLECTIONS ON THE EXAMPLE OF EVE SAINT-LORANA'S CREATIVITY

The article is devoted to the role of the creative concept in the work of the famous couturier Yves Saint Laurent. The influence of his work on changing the image of a woman of the twentieth century in the process of expanding the female wardrobe with garments borrowed from a man's costume is considered in detail.

Keywords: design concept, women's tuxedo, collection, costume.

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UDC 677.494

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APPLICATION OF MODIFIED AMINO-ALDEHYDE OLIGOMER AND PLASMA TREATMENT TO IMPROVE THE ADHESION STRENGTH OF COMPOSITIONAL MATERIALS BASED ON POLYAMIDE FIBERS

The possibility of modifying the surface of polyamide fibers with an amino-aldehyde oligomer was experimentally established in order to increase their adhesion properties to polymeric binders. The processes of efficient deposition of an aminoaldehyde oligomer on the surface of polyamide fibers using pretreatment in plasma of a high-frequency capacitive discharge of reduced pressure are investigated.

Keywords: polyamide fiber, modified amino-aldehyde oligomer, adhesion, high-frequency capacitive discharge, non-equilibrium low-temperature plasma, composite material.

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COSMOLOGICAL PHENOMENON OF SOLAR MYTHOLOGY IN CREATING IMAGES OF OBJECTS OF DESIGN PRESENTED JEWELLERY IN THE DEVELOPMENT OF THE VEDIC TRADITION SURYA SADHANA

Studies of the Vedic Hindu epic «Mahabharata» and «The book of Veles» on creation of cultural code image parjury, which defined the Visual cognitive dynamic information system (VKIDS) «man-Sun-jewelry products „Surya sadhana"». Compositionally considered artistic morphology image jewelry, which is based on the development of stylistic peculiarities of solar mythology of ethnic Eastern traditions «Minakar» and «Kundan» in modern culture.

Keywords: design, cultural code, system, structure, semiotics, space, Sun, culture of India, jewelry, history, science.

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WATERCOLORS BY KARL WALOF LARSSON AS THE BASIS OF THE" SCANDINAVIAN STYLE " DESIGN IN SWEDEN

This article discusses the important aspects of the formation of the "Scandinavian style" design in Sweden. K. Larsson's watercolors are the basis of this style. Larsson's works are studied in the context of the development of architecture and art in Sweden XIX–XX centuries.

Keywords: watercolor, design, Scandinavian style, Sweden, Karl Larsson, architecture.

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THE IMAGE OF THE TORQUE IN THE TRADITIONAL ART OF EASTERN HINDU KUSH (KOHISTAN, KAFIRISTAN)

The article examines the torque, the traditional neck ornament of the peoples of Eastern Hindu Kush, in terms

of history, design and technology. The authors explore the significance of the symbolism of these ornaments in the applied arts of the region.

Keywords: Torques, applied art of Afghanistan, Kohistan, Kafiristan, men and women jewelry and accessories, jewelry.

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BANKNOTE DESIGN: ON THE USE OF BIBLIOGRAPHIC SOURCES

The article provides an overview of information sources on the study of the design of Russian banknotes. Paper money in Russia has different aspects of research — economics, history, collecting — and the study of banknote design is a new field of art history.

Keywords: banknote design, money production, synthesis of artistic and security elements.

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JAPANESE TRADITIONAL TEA CEREMONY AND COMPOSITIONALLY-ART MORPHOLOGY FOR HER UTENSILS AND ACCESSORIES

In this paper, learn how to create images of the national Japanese utensils for tea ceremony, provided by cast iron Kettle, providing direct water heating mode to obtain needed food flask.

Keywords: Japan, tea ceremony, culture, art, design, ornament.

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DEVELOPMENT OF METHODS OF INCREASE OF COMPETITIVENESS OF ARAMID TEXTILE MATERIALS ON THE BASIS OF COMPUTER PREDICTION OF RELAXATION-DEFORMATION CHARACTERISTICS

To improve the competitiveness of Russian aramid textile materials and products based on them, as well as to solve the actual problem of the Russian economy on import substitution of products, it is proposed to use comput-

er forecasting of relaxation and deformation properties of these materials, as well as methods of system analysis.

Keywords: relaxation and deformation properties, mathematical modeling, computer forecasting, system analysis, aramid textile materials, competitiveness.

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CREATING A VIRTUAL MUSTUM OF DESIGN IN THE PROCESS OF TEACHING STUDENTS

The article discusses the creation of a virtual museum by ITMO students studying computer technologies in design. Students develop separate modules of the museum or "exhibition", dedicated to the design of different authors and countries in order to study the history of design development as well as the acquisition and improvement of skills in working with digital technologies.

Keywords: virtual museum, industrial design, education, history, digital technologies.

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FEATURES OF USING UNIVERSAL COMPUTER GRAPHICS FACILITIES AT THE STAGE OF SKETCH DEVELOPMENT

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The article discusses the features of working with a creative sketch of clothing models. The description of the main stages of developing an artistic image of a costume based on a creative source is given. The main qualities of sketches are noted. The ways in the creative process of computer technology are shown.

Keywords: fashion industry, costume, computer graphics, model sketch, artistic image.

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UDC 004.921

GAME LEVEL RECIPE: ADDING EXTRA SOMETHING

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This article is devoted to an important part of the computer game development — level design. The main purpose of the article: to consider the problem of formulaic levels and ways to solve it. The main ways to make the game level memorable were analyzed.

Keywords: video game, game level, level design, raisin, sample performances, unexpected element, memorable moments.

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UDC 004.925

USING 3D MODELING FOR 2D ART PRODUCTION

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The article is devoted to the main methods of implementing (handling) 3D graphics to create 2D illustrations, concept art, comics and graphic design, as well as the relevance of those implementations (steps, applied measures).

The functions of different software that makes it possible to work with 3D elements were also explored. A review and classification of the main methods of combining three-dimensional and two-dimensional graphics were carried out based on the results of the research.

Keywords: computer graphics, render, 3D software, 2D software, digital art, illustration, concept art, comics.

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DEVELOPMENT OF METHODS TO STUDY THE ELASTIC–DEFORMATION PROPERTIES OF TEXTILE ROPES

The article studies the methods of studying the elastic-deformation properties of textile ropes, allowing a qualitative assessment of the operational and functional characteristics of these materials. The study is based on mathematical modeling and computer prediction of relaxation and creep of textile ropes.

Keywords: polymer textile ropes, mathematical modeling, elastic-deformation properties.

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