

## CREATIVITY RECREATION

**Nikolay F. Metlenkov**

Recreational activity is represented as a form of the person's creative potential development

**Keywords:** Recreational activity, creative potential, creative person

## RECREATION SPACE: XXI CENTURY

**Sergey B. Pomorov**

Rest and recreation are considered as the social and cultural phenomena. The factors stimulating development of the sphere of a recreation at the present stage are allocated: social and economic transformations, intensive urbanistic processes, the latest scientific and technological revolution. Cluster approach as the perspective direction of designing of recreational and tourist systems is designated. The expansion of physical borders of space of a recreation aimed at space is noted.

**Keywords:** rest, recreation, tourism, tendencies, recreational resources, tourist clusters, space tourism.

## RECREATIONAL TURKMENISTAN

**Valery V. Aurov, Jennet M. Bayramova**

Historical and cultural monuments on the territory of Turkmenistan have an important role in tourism development. There is proposed the concept for arrangement and functional planning organization of cultural and tourist facilities in the areas of architectural heritage. A variety of recreational potential of Turkmenistan attracts visitors with different travel destinations. The government is investing a lot of budget funds for the development of Caspian Sea resorts, but there is still remained an unsolved problem of tourist centers formation in the areas of architectural monuments concentration. Development of the hotel complexes system and creation of optimal conditions for acquaintance with the historical and cultural monuments - a way to preserve the cultural heritage and at the same time their modern use, which leads to an increase in cross-cultural exchange between the countries.

**Keywords:** Turkmenistan, cultural heritage, tourism, the Silk Road, cultural and tourist complex.

## RECREATIONAL AND TOURIST SPACES OF THE REPUBLIC OF KAZAKHSTAN

**Aizhan T. Akhmedova**

The article is devoted to the development and propagation of tourist and recreational areas in the Republic of Kazakhstan; the detection of regional features in the formation of tourist routes. One of the main problems of the development of tourism in Kazakhstan is the excessive dispersion of the territory of tourism facilities, long distances between them, frequently low level of transport communications, and as a result of all of these reasons - the underdeveloped and sometimes absent tourist infrastructure. Another feature is the low popularity of Kazakhstan, as well as the misconception about the country and its inhabitants. Today the main task is the formation of the Kazakhstan tourist brand and the choice of the way of its formation and implementation. This article is devoted to these issues, as well as to the experience of educational designing on the: "Tourist route" at the Faculty of Design of the IEC KazGASA - Kazakh Leading Academy of Architecture and Civil Engineering in Almaty, Republic of Kazakhstan.

**Keywords:** recreational areas; the subject-spatial environment of tourist route; Kazakhstan tourist brand.

## INTEGRATION OF TOURIST ROUTES AND TRANSPORT IN THE MEGAPOLIS

**Natalia G. Blagovidova, Ksenia A. Baranova**

Article considers a role of public transport in shaping the touristic routes in Moscow, London, Vienna. There are developed by the authors examples of tourist routes in the areas adjacent to the Moscow Central Circle. It was determined that there are 86 architectural monuments in the zone of Moscow Central Circle influence those were registered in the register of monuments of cultural heritage.

**Keywords:** tourism, transport, Moscow Central Circle, monuments of culture and nature, tourist routes.

## **LANDSCAPE REGIONAL PLANNING APPROACH TO BAIKAL TOURISM DEVELOPMENT CHALLENGES**

**Andrey G. Bolshakov**

Article about the regional planning aspect of the landscape concept of the Baikal region. The regional boundaries are defined by the Baikal Law as the Central Ecological Zone. We consider the kinds of landscapes, types of environment within the boundaries of the rift valley, along the watershed ridges surrounding the lake. They are characterized by ecological and economic features of the territory. On this basis, we suggest the landscape and urban zoning of this part of the Baikal natural area. Revealed serious problems of the territory use, which led to the problems of nature conservation and the tourism pattern. The recommendations for the strategic transformation of the region's infrastructure in according to the challenge of nature protection and tourism development are made. The concept of sustainable development strategy of the territory, including the environmental, economic, social, historical, cultural, aesthetic and spiritual values and motivation of land use is developed. Ways to resolve conflicts of preservation and development of an unique natural site, which has become tourism area is shown.

**Keywords:** environmental and regional planning problems of Lake Baikal; kinds of Baikal landscapes; landscape-planning zoning; recommended land use transformation of the areas; tourism; motivations and development strategy

## **ARCHITECTURAL TOURIST AND RECREATIONAL ENVIRONMENT OF CENTRAL BLACK EARTH REGION RUSSIAN FEDERATION**

**Alexandre Ye. Yenin, Anna.N. Azizova-Poluektova**

Tourist and recreational potential and architectural tourist and recreational system of the Central Black Earth region have been considered from the point of view of a systematic approach and analysis, as well as demoecology. Such an approach to the consideration of the current state of infrastructure development in the Black Earth Region allows competently to build a hierarchy of a plurality of elements and form a correct vision of the organization system for the foreseeable future.

**Key words:** tourism and recreation architectural environment, systems approach, system analysis, historical and cultural heritage, Central Black Earth Region, hierarchical structure, demoecology.

## **SPACES OF CIVILIZATION TOURISM AND ARCHITECTURAL HERITAGE OF THE MONASTIC SPIRITUAL CENTERS**

**Svetlana V. Ilvitskaya**

Article is devoted to urgent development of civilization tourism and entering of the new tourist destinations connected with revival of spirituality in our society and rough development of cult heritage. This process is caused by insufficient adaptedness of modern infrastructure of monastic ensembles and temples which at the same time, are keepers of spiritual, art and cultural heritage of the country, and also the place of pilgrim and informative tourism.

**Keywords:** space of civilization tourism, cultural heritage, monastic ensembles and temples, new tourist destinations.

## **PRIMORYE TOURISM AND RECREATION RESOURCES AS TOURISM CLUSTER FOUNDATION**

**Alla V. Kop`eva, Olga G. Ivanova**

The article analyzes tourism and recreation resources in order to highlight factors contributing to the tourism industry development in Primorye. The paper aims at making general suggestions for Primorye tourism and recreation complex improving. To this end, tourism trends most attractive both for Russian and foreign tourists have been determined; project suggestions for Primorye tourism clusters forming have been analyzed.

**Key words:** tourism and recreation resources, tourism and recreation complex, tourism trends, tourism cluster, Primorye.

## **PEDESTRIAN STREET AS OBJECT OF ART IN DESIGN OF THE MODERN CITY**

**Sergey M. Mikhaylov, Alexandrina S. Mikhaylova**

In the article pedestrian street as art object in design of the modern city is considered. Features of emergence of this idea, her realization in projects in Tatarstan are revealed. Evolution of pedestrian streets in the European cities with new forms of improvement and functional saturation, transformation in the conditions of post-industrial society from city ideal to element of prestige and change of the doctrine of pedestrian street as art object reveals.

**Keywords:** art object, pedestrian street, design of the city, ideal city, design of a pedestrian street, post-industrial design

## **FORMATION OF STRUCTURE OF TOURIST AND RECREATIONAL AREAS IN BELGOROD REGION CONSIDERING REGIONAL FEATURES**

**Margarita V. Perkova, Elena I. Ladik**

Article discusses the features of formation of tourist and recreational structures in a territory with limited natural resources. The authors analyzed the modern state of tourism and recreation areas in the Belgorod region, identified regional characteristics of the natural, historical and cultural, transport and tourist infrastructure-frame area, conducted a comprehensive assessment of tourist and recreational potential of municipal districts. Were suggested the principles of planning organization of tourism and recreation areas given the regional specifics of the Belgorod region, aimed at strengthening and regeneration of the natural frame by using limiting factors as characteristics of the regional identity. Proposed a theoretical model of the spatial and prospective development of tourism and recreational areas of the Belgorod region.

**Keywords:** sustainable development, recreation, tourism, regional characteristics, tourist and recreational areas

## **SPACE OF TOURIST DESTINATIONS. ECONOMIC AND MARKETING CONCEPT**

**Tatiana V. Rassokhina**

The article deals with modern concepts of transformation of tourism space in space tourist destinations. The territory is considered as an economic and marketing concept. The concept and classification of tourist destinations. It is shown that the problem of space travel destinations - providing high-quality tourism product in demand in the tourism market. Characterized by managerial forms of space travel destinations: special economic zone of tourist-recreational and tourist-recreational clusters.

**Key words:** tourism space, space of tourist destinations, the classification of tourist destinations, tourist and recreational clusters.

## **RECREATIONAL COMPLEX IN CHELYABINSK REGION. REVIEW. FEATURES. PROSPECTS**

**Alexey J. Khudyakov**

The article considers the concept of the "recreation complex". The are analyzed recreational resources of the Chelyabinsk region. The measure for the areas of the region development was proposed in the field of the recreational activities. The system of the separation of the Chelyabinsk region for recreational clusters was offered.

**Keywords:** sustainable development, recreation facility, urban planning, sustainable architecture, settlement system, recreational cluster.

## **CROSS-BORDER BIG ALTAI AS SPACE OF TOURISM AND RECREATION**

**Fedor S. Pomorov**

In article the cross-border territory of Big Altai as the prospective site for tourism development is considered. Experience of designing and a construction is analysed. Results of assessment of tourist and recreational potential of the territory for the purposes of architectural and town-planning designing are provided. Models of the international tourist route are offered and recommendations about a typology of tourist and recreational complexes are made.

**Keywords:** Big Altai, international cooperation, tourism, recreational resources, typology of tourist complexes.

## **ASPECT OF USING MAGNESIUM OXIDE WALLBOARD IN CONSTRUCTION**

**Marina V.Gravit, Oleg V.Nedryshkin, Artem A. Vaytitskiy**

Construction and decoration material (magnesia board, magnesium oxide wallboard, SML) based on magnesia binder in last 5 years is considered in Russian construction practice as a modern ecological building material of new generation. It uses as facing in ventilated facades manufacture, interior decoration of residential and industrial premises, removable and nonremovable formwork for foundation filling and for the purpose of structural fire protection of building structures. The authors analyzed the current research in the field of magnesia board application, revealed that the material has a number of drawbacks, the most important of which is the formation of moisture in the form of concentrated brine on the surface, under certain climatic conditions. Using magnesia boards may cause corrosion on the frame the steel structures and mold on wooden structures. In addition, there is no clear distinction between the types of magnesia board, which differ in density and quality, resulting in a potential situation of counterfeiting and spoofing more expensive material with stable specifications, cheap and low quality. The data from foreign sources with recommendations not to use SML for specific buildings and premises is provided. The conclusion is made about a necessity of formulating of the Russian standard which will include the classification and technical requirements.

**Keywords:** Construction, finishing materials, Magnesium Oxide wallboard, facade claddings, Sorel cement.

## **THE PROBLEM ZONES OF RUSSIAN ARCHITECTURAL EDUCATION**

**Nikolay F. Metlenkov**

The range of problems of contemporary Russian architectural education arising around the interpretation and practical application of the concepts "creativity", "creator", and "innovations" is discussed.

**Keywords:** modern architectural education, creativity, creator, innovation.

## **ARCHITECTURAL EDUCATION AS A SUBJECT OF ACADEMIC RESEARCH AND REFLECTION**

**Konstantin V. Kiyanenko**

Architectural education is a rare object of study, but publications on it are even a greater rarity. This article compares two arrays of research papers on architectural education, Russian and English. The aim of this text is to find out what topics architectural educators explore, what they consider to be the problems of the field, how they propose to overcome those problems, where the two academic and educational civilizations move. A thematic analysis and grouping of texts on the key concepts is conducted, the semantic similarities and differences in the interpretation of the concepts are indicated. As a result, the main "thematic fields" in the study of architectural education are isolated, their content and the specific approaches of the two cultures are shown.

**Keywords:** architectural education, research papers, subject classification, Russian-English comparative analysis.

## **THE HISTORY AND FUTURE OF ARCHITECTURAL EDUCATION**

**Henry Sanoff**

The discipline of architecture can be traced to the seventeenth century when it was given official recognition by the French government. Louis XIV established the Academie Royale d'Architecture, which then became known as the Ecole des Beaux-Arts (Egbert, 1980) a school for training architects. To understand such things as the design of ornament, mathematics, surveying and all the details related to the construction of buildings, it was necessary to go to different masters to be instructed in each area, which prolonged the time to complete all the studies. As a result, Francois Blondel formed a School of the Arts, in which several professors proficient in each subject would teach in the same place in order to instruct the student in architecture through the analysis of precedent and the application of reason.

## **TEACHING ARCHITECTURAL PROGRAMMING: CULTIVATING A CULTURE OF AN INQUIRY-BASED AND A PROCESS-CENTRED DESIGN PEDAGOGY**

**Ashraf M. Salama**

This paper aims to accentuate the need for inquiry-based and process-centered architectural design pedagogy as a proactive approach to some of the negative tendencies that continue to portray mainstream teaching in architecture. Building the case for this approach is a key step towards recognizing it; this involves key juxtapositions of the product-based approaches to design pedagogy versus the inquiry and process-based approach. Utilizing architectural programming as a fundamental and ethical approach to architectural practice, two approaches are identified to meet the articulate the inclusion of architectural programming as design adopting an exploratory process and for design advocating a multistep feedback/feed-forward process. Key merits of these approaches are offered as part of a concluding discussion that contributes and advancing current thinking on design pedagogy.

## **A NEW ORGANIZATIONAL AND METHODOLOGICAL STRUCTURE OF URBAN-PLANNING EDUCATION IS NEEDED IN THE DIRECTION OF "URBAN-PLANNING"**

**Yuriy V. Alekseev**

The first experience in the preparation of bachelors, masters, and graduate students showed that it is necessary to improve education in the direction of "Urban Development". First, the staff of teachers is required for training in humanitarian and technical disciplines, which reveal the peculiarities of performing professional functions in urban planning and design. Secondly, it is necessary to create two graduating departments that meet the objectives of urban planning and

design and, accordingly, two interrelated curricula. Thirdly, a system of measures is required for the organization of pre-university, university and postgraduate urban planning. Fourthly, it is necessary to harmonize the system of training in the direction of "Urban planning" and the requirements of the Higher Attestation Commission, based on the creation of two scientific specialties (instead of one, as now) that correspond to the specifics of the activities of the two Chairs.

**Keywords:** urban-planning education, urban planning organization.

## **THE CULTURAL DYNAMICS OF ARCHITECTURAL EDUCATION: FROM ETERNAL ROMANTICISM TO A NEW PRAGMATISM**

**Natalia V. Bagrova**

In article the condition of transitivity of architectural education systems as the response to challenges of our time is stated. Cultural dynamics of architectural education is considered in processes of diversification of a professional subject, interdisciplinary convergence and change the status of social responsibility of the architect.

**Keywords:** architecture, architectural education, is reforming.

## **THE ISSUES OF MAKING UP THE MODEL FOR PROFESSIONAL TRAINING OF THE GRADUATES OF COLLEGIATE ARCHITECTURE SCHOOLS IN RUSSIA**

**Elena S. Bazhenova**

In the paper the questions of how the contemporary higher architectural education meets expectations of architectural profession and the real design practice in Russia is considered. It is noted that the education is in crisis. The initiatives of the Union of Architects of Russia, Union of Moscow Architects and Moscow Architectural Institute are characterized which aim at bridging the gap between practice and education, between standard of professionalism and educational standard. The new forms of practical training for students and graduates, the new organizational structures are analyzed.

**Keywords:** continuous architectural education, standard of the architectural professionalism, internship, educational standards, architect's practical training model.

## **ON GLOBALIZATION AND IDENTITY IN THE ARCHITECTURAL EDUCATION (EXPERIENCE OF INTERNATIONAL COOPERATION NNGASU)**

**Anna L. Gelfond**

The article is dedicated to globalization and identity in the architectural education. The theme is revealed in the experience of international cooperation NNGASU. The author analyzes the features of academic mobility in all of the educational levels – undergraduate, graduate, doctoral degree. The technique of teaching Architectural design at the Higher state school of architecture of Grenoble.

**Keywords:** globalization, identity, architectural education, bachelor, master, post-graduate course, methodic.

## **POSSIBLE SCENARIOS FOR RUSSIAN ARCHITECTURAL EDUCATION: LESSONS FROM SOUTH CAROLINA**

**Tatiana E. Epimakhova**

An architectural school has a great impact on the architectural profession in general, such as competence and capability of specialists, and what are more important things: culture and ethics inside the architectural field. In this article, the author describes some issues with the U.S architectural education through the lenses of author's personal experience. The author emphasizes the milestones in a beginning of the architectural career. The readers are asked what the architectural field in Russia will be, if the best qualities of the foreign educational system are adopted.

**Keywords:** architectural educations, Master of Architecture program, study abroad.

## **THE EVOLUTION OF URBAN PLANNING PROFESSIONAL EDUCATION**

**Natalia N. Zheblienok**

Over the past 200 years, urban planning as an type of activity has evolved from the state of the craft, has found boundaries as a profession and managed to overcome this framework, having become a sphere of activity. All systems of professional urban planning education in the world react flexibly to these changes, we can consider them as an indicator of the state of the entire industry of urban planning knowledge. This article is devoted to a review of evolutionary scenarios for the development of Russian urban planning education and its world analogues.

**Keywords:** urban planning education, profession of urban planner, history of vocational education, evolution of specialty urban planner.

## **FROM UNIVERSAL TO PARTICULAR: TRENDS OF ARCHITECTURAL EDUCATION**

**Peter V. Kapustin**

The required and already manifested, albeit to varying degrees, directions of changes in the content and forms of the architectural education of the last time are discussed. Formulated of the most important, from the point of view of the author, are the updating trends, the reasons for their occurrence and the difficulties in their development. Realistic and humanistic orientation, learning to act in specific environmental situations "here and now" are today the most creative and innovative areas, affirms in the article.

**Keywords:** architectural education, educational content, architectural creativity, abstract and concrete in architecture, individuation of habitats, environment, social interaction.

## **A SPECIALIST ON ARCHITECTURE OR ARCHITECT?**

**Alexey V. Krasheninnikov**

The article examines the criteria for the international validation of the architectural schools, author's translation of the aims and objectives in the preparation of the architects, set out by the IUA-UNESCO Charter, 2011. Based on the RIBA materials, a table is given for the evaluation of a comprehensive architectural design as a study project. A new approach is proposed for the development of master's programs for the enlarged group of specialties Architecture, which should facilitate the conduct of complex studies both in the course of training and in solving practical problems of spatial organization of the urban environment. Architects and town planners are welcome participants in various programs and projects and are included in the diverse forms of professional ". The article continues methodical developments on the curricula of higher professional education of architects and town planners.

**Keywords:** Education Bachelor's and Master's programs, description of international validation of Educational Program, criteria for design assessment in architectural school, the educational standard.

## **PROBLEMS OF CURRENT RUSSIAN ARCHITECTURAL EDUCATION: VIEW OUT OF PROVINCE**

**Sergey A. Malahov, Evgenia A. Repina,**

Text – is a sort of inventory reconciliation of the problems of that part of Russian architectural education, that exist under the frame of traditional high education and is successor of the soviet educational model, transformed by new market reality and province. This sad list – is an attempt of pectoral structuring of that unclear cloud, inside which each of the authors exist for a few decades.

**Keywords:** high education, architectural education, author's method, Russian university, Class University, environmental design.

## **THE CONTEMPORARY PROBLEMS OF THE ARCHITECTURAL EDUCATION**

**Oscar R. Mamleev**

The paper presents a critical analysis of the Russian architectural education. As the reasons of its stagnation the author notes its conservatism, and isolation from the dynamic worldwide processes of renewal. Standardization of architectural education deprives the national school of opportunities to achieve diversity, and depersonalizes architecture of the country. The need to respond to bureaucratic directives from the Ministry of education, gives rise to the amount of

paperwork, unprecedented in former times. In the meantime experimental orientation of the leading schools in the world is mentioned those which rank in the top of the lists, their uniqueness and self-identity. In conclusion, the author offers the ways how to improve architectural education in the country, noting the need for a competitive environment and entering the international educational arena.

**Keywords:** experiment, international educational domain, standards, rating, reforms.

## **WITH HUMOR IT IS IMPOSSIBLE SERIOUSLY ON THE CONTEMPORARY ARCHITECTURAL EDUCATION**

**Mark G. Meerovich**

The article analyzes the current situation in architectural education, related to changes in the ways of assimilation of information, the abundance of knowledge, the possibility of distance learning. Problems are formulated and ways of their solution are suggested.

**Keywords:** Architectural education, personal knowledge, innovative materials and technologies, entrepreneurship and invention in architecture.

## **IN SEARCH OF MODERN MODEL OF EFFECTIVE INTERACTION OF ARCHITECTURAL ART EDUCATION AND REAL DESIGN PRACTICE**

**Sergey M. Mikhaylov, Aleksandrina S. Mikhaylova**

In this article models of interaction of architectural art education and real design practice are considered: "architectural educations as reflection of real design practice (the 1970-1980th)", "design practice in architectural higher education institution (the 1990-2000th)", and modern forms of integration of real practical tasks into architectural and art education in higher education institution. Examples of integration of real practical tasks into educational process at the Kazan architectural and construction university are given.

**Keywords:** model of interaction of architectural art education and real design practice, design seminar of students (Workshop).

## **ON HISTORY OF A CONCEPT OF A SYSTEM OF NATIONAL PARKS AND HISTORICAL-CULTURAL PRESERVES FOR PROTECTING CULTURAL HERITAGE OF THE RUSSIAN FEDERATION**

**Vladimir A. Tsvetnov**

The article explores an attempt made in the 1970s-80s to create a system of national parks and historical-cultural preserves for protection of cultural heritage in its natural environment. It analyzes this concept and the difference between historical-cultural preserves and other types of protection of cultural heritage: museums-preserves and skansens; and comes to the conclusion that the concept should be further developed for current use.

**Keywords:** VOOPIK; historical-cultural preserve; national landscape; national park.

## **MYTHOPOETIC OF THE SCANDINAVIAN AND FINNISH REGIONAL ARCHITECTURE AT THE TURN OF THE XIX-XX CENTURIES**

**Olga M. Sandu**

The article examines the regional architecture of the Scandinavian countries and Finland at the turn of the XIX-XX centuries. Mythopoetic tradition is offered as a mean of reviving the cultural and architectural heritage. The experiences of the mythopoetic styles, such as "kalevala style" and "dragestil", and traditional folk architecture are important for modern attempts to preserve the heritage and give meaningfulness to architectural experiments.

Key words: architectural heritage, regional architecture, "dragestil", "kalevala style".



### **Evolution of architectural education**

**NIKOLAY F. METLENKOV**

The article reveals the problems of understanding and taking into account the regularities of the evolution of architectural education

**The keywords:** evolution of architectural education, studies of architectural education, innovations in architectural education.

### **Contextualism of architectural education at land Surveying school**

**SVETLANA V. ILVITSKAYA, DMITRII U. ILVITSKII, LARISA V. PETROVA**

Article is devoted to urgent development of architectural education and introduction of the new educational technologies connected with a contextualism of education of the architect at land surveying school, revival of spirituality in our society and rough development of cult heritage. This process is caused by specifics of training and adaptivity of architectural education in the conditions of modern land surveying school State University Of Land Use Planning.

**Keywords:** contextualism of architectural education at land surveying school, cultural code, metadisciplinary approach, temple-creation.

### **Clauses (architectural sketching exercise) in the system of ecological education of the student-architect**

**NATALIA G. BLAGOVIDOVA, ANNA M. RAZGULOVA**

The article touches upon the issues of the environmental education of a student at an architectural university connected with an ecological crisis of a global scale. The international practice of forming an ecological outlook in architectural universities is considered. Particular attention is paid to the role of a pilot project (eco-clauses) in the process of continuous environmental education. The article shows the importance of eco-clauses as an interim trial project, in which the synthesis of innovative technologies and architectural or planning solutions for the development of the urban environment is creatively tested.

**Keywords:** student project, clauses, architectural sketching exercise, environmental education, urban environment, ecology.

### **Project method and gamification of teaching architects as means of formation of professional competence**

**ALEXANDER N. GUSHCHIN, MARINA N. DIVAKOVA**

Today, the traditional system of education of an architect as a specialist with system-structural spatial thinking requires modification. A modern architect needs competences related to the design process itself. For example, leadership and teamwork skills. In the presented work, it is shown that the use of the project method and the gaming of the educational process makes it possible to form a diverse set of competences. To prove which competencies are formed, the authors use the interview method. Interviews with students are conducted after the completion of the course. The received interviews are formalized, from them common semantic units are distinguished, which are interpreted in the language of knowledge and skills. Further, the authors use frequency and correlation analysis to interpret the results in the language of competences. The obtained results are compared with the competencies regulated by the educational standard of FGOS 3 ++.

**Keywords**

Education, gamification, business game, role play, competence, frequency analysis, correlation analysis, contingency tables, educational standard FGOS 3 ++.

### **Experience of the International Educational Programs as the Educational Barter or «Petroleumcape»**

**IRINA V. KUKINA**

The experience of education of professionals in the sphere of urban planning and design is analyzed in the article as the integrated part of comfort urban environment development. Adaptation of the newest results of the applied research in mentioned sphere into educational

programs is one the essential part of Russian education. This circumstance notably changed not only urban morphology and environment, but contributed to statehood strengthening through the strategic tacks of urban design in many countries.

**Keywords:** urban design and planning, education, comfort urban environment, international education.

### **About evolution of Architectural Education**

**NIKOLAY F. METLENKOV**

About the laws of the co-evolution of architectural education

**Keywords:** co-evolution of architectural education, research and innovation in architectural education

### **On professionalism, synthesis of buildings and morphogenesis of a habitat**

**INESSA S.SARKISOVA, TATJANA O.SARVUT**

The article analyses: importance for a creator of comfortable living conditions to be possessed of professionalism; relevance of master's authoring originality; knowledge systemacy as generating a specialist.

**Keywords:** architect's creativity paradigm; harmony of spaces; professionalism.

### **Student design bureau as a link between theory and practice (experience of the RUDN Engineering Academy)**

**SALEM MAHMUD KHALABI, OLGA G. PLOTNIKOVA, LARISA V. SAVELIEVA**

The article is devoted to the successful experience of the Student Design Bureau at the RUDN Engineering Academy, which solves the most important problem of architectural and engineering education, combining theoretical knowledge with the practical skills of future specialists.

**Keywords:** education, architecture, construction, RUDN

### **The history of architectural education in Russia XVIII – XX centuries**

**LARISA I. IVANOVA-VEEN**

The evolution of architectural education in the capital's educational institutions of Russia is being considered. The origins of the formation and the main stages of its development are analyzed. The origins of the formation and the main stages of its development are analyzed. A graphic scheme is proposed that reflects the chronology of the consistent development of educational institutions in Russia, in which architects prepared. New information is introduced into the scientific circulation, a number of original student projects are presented.

**Keywords:** architectural education, tradition, training.

### **Review of Russian Architectural Schools in the context of all-union competitions of the best graduation works 1960-1990: based on materials of the periodical «ARCHITECTURE OF THE USSR»**

**ANASTASIA M. USPENSKAYA**

This article examines the development of architectural schools in the USSR during the 1930s and 1990s, identifies some aspects of their impact on the development of architectural education. Architectural schools are considered in the context of their participation in the All-Union competition of the best Graduation Works, which last year celebrated their half-century anniversary. A review of the scientific research published in the journal Architecture of the USSR. Analyzed higher education institutions, which train specialists of Architecture.

**Keywords:** architectural education, All-Union competition of the best Graduation Works, periodical «Architecture of the USSR», Barhin B., Stepanov A.

### **Discipline «Space» in the Moscow and Leningrad schools. 1930's and 1960's**

**STANISLAV S. GROMIK**

The paper first discusses the fragments of surviving documents, evidence of teaching the discipline "Space" after the VHUTEMAS-VHUTEIN. We are talking about a new period of introductory course, which begins in the 1930s in ASI and the Institute.

**Keywords:** discipline "Space", ASI, Leningrad VKHUTEIN, V. Krinsky, V. Balikhin, S. Glagolev.

## **Student works of the Moscow and Leningrad VKHUTEMAS-VKHUTEIN Architecture Faculties**

**ILYA M. LAPIN**

The architectural departments of the Moscow and Leningrad VKhTEAMS-VHUTEIN are compared in the article. Published in collections of two schools in the 1920s, student projects and architectural design teaching methods are analyzed here.

**Keywords:** VHUTEMAS, VHUTEIN, architectural education, Moscow, Leningrad, 1920s.

## **Moscow-Ufa-Moscow: composite intervention**

**JULIA V. RASULEVA, SVETLANA V. TIMERBAEVA**

The implosion method, which is a development of the method by Professor V. I. Loktev (Moscow Architectural Institute (State Academy)), refers to the prototypical compositional techniques and uses a specially designed algorithm to create a view of object research (implosive context, prototype, etc.). In this case, the object under study is a composite strategy of inheritance of different artistic practices and traditions in the architectural ensemble of a post-war Moscow's high-rise, where it becomes the central theme of communication between the skyscraper's volume and urban background. The possibility of using the implosion method is demonstrated by the analysis of compositional exercises on a given topic.

**Keywords:** the method of compositional of Professor V. I. Loktev, implosion, skyscraper.

## **Conditions, features, specificity of the transformation of the landscape of residential development of the 1950s - 1960s with mass renovation in Moscow**

**YURIY V. ALEKSEEV, ALEXEY A. ANUFRIEV**

The problem of urban planning transformation of the five-storey residential development in the 1950s-1960s in the middle zone of Moscow under renovation is considered. The diagrams of the transformation of the residential quarter without demolition and with the demolition of the residential five-story building, due to the specifics of the overhaul, the conditions of resettlement, the availability of a site for the construction of the start-up house, the number of inhabitants, after the renovation of the territory, the capacity of schools and kindergartens, the need for parking spaces and facilities Social and cultural life. The presented transformation schemes reveal the characteristic features of the change in the spatial and spatial environment of residential quarters and enable us to assess the investment potential for selecting the most appropriate solution and to link investment and urban development activities in the administrative districts of Moscow into a single system, which will provide an informed forecast for the sustainable development of urban areas.

**Keywords:** transformation, landscape, renovation of residential five-storey building.

## **The urban development forecasts of the Saha (Yakutia) Republic Arctic Zone**

**OLGA M. BLAGODETELEVA**

The article is devoted to the problems of urban development of one of the northern regions of Russia - the Arctic zone of the Republic of Sakha (Yakutia). In the work were disclosed the socio-economic and natural-climatic preconditions for the development of this territory, and was made the forecast of the town-planning organization of the region. Herewith was made an attempt to solve the problem of interaction between the industrial and traditional model of the development of the territory. For this, was proposed approach to the formation of urban planning systems of the region based on their differentiation in socio-economic characteristics. This made possible to identify 4 different forms of spatial organization of the Arctic zone of the Republic of Sakha (Yakutia), for each of which were determined their own specific features of territorial, architectural and planning development. This approach allows creating the necessary conditions for development and interaction of different population groups within the territory under consideration.

**Keywords:** town-planning development, formation of town-planning systems, settlement, architectural and planning organization of settlements, territories of the Arctic and the North, Arctic zone of the Republic of Sakha (Yakutia).

## **Theoretical bases of formation of structural model of architectural process**

**ANNA V. SVETS**

In article stages of creation of structural model of architectural process are provided. Theoretical bases of its formation are based on the concept of a system structure of art activities of the person which was developed by M. S. Kagan. Creation of structural model of architectural process is possible by means of sequential execution of two stages. In the offered model as fundamental units it is offered to consider activity fields which are in turn created based on four types of activity of the architect.

**Keywords:** The structural model of the architectural process, artistic activities, professional activities.

## **Arhitektonika or wallpaper**

**MIKHAIL TURKATENKO**

The article deals with the principles of the formation of the artistic look of architecture from ancient Greece to the present. The author reveals the binary opposition in the approach to this problem - architectonic or wallpaper ("wrap" of architectural objects in arbitrary composition decoration), concluding the prevalence of the past in modern architecture. In his view, this is evidence of degradation of architecture today.

**Keywords:** integrity, tectonics, wallpaper, composition.

## **Generative architecture: the experience of comprehension**

**VICTORIYA KOSAREVA**

This article is about the personal experience of studying abroad and obtaining a master's degree in architecture with the specialization «Advance architecture». The structure of education in a private institution and it's main differences with the Russian system are described. The analysis of the definition of the concept of «generative» or «advance» design method is carried out and its main postulates are described as well.

**Keywords:** generative architecture, advance architecture, computational methods of architectural design, architectural higher education in Italy, generative algorithms for form-building, digital method, emergent media technologies.

## **Architectural science in bibliography of dissertation works**

**IRINA I. KOMAROVA, ANDREY L. TRETYAKOV**

In this article, researchers examine the fundamental nature of bibliographic science for architectural research. Analyzed defended dissertations on the specialty «Architecture». The information resources containing in their structure the thesis on the area under consideration are described. Attention is focused on the distribution of defended dissertations by years, cities and thematic nests. The social weight of the study for stakeholders is indicated. The thesis devoted to the theory and history of foreign architecture is revealed. In conclusion, the authors draw attention to the need for further large-scale research, which includes an analysis of the entire spectrum of human knowledge, which includes dissertations that relate to one degree or another to architectural science.

**Keywords:** Dissertation on architecture, architectural science, the method of bibliometrics, research, information and resource source, stages of research, systematization.

### **Socialization of architecture**

**NIKOLAY F. METLENKOV**

It would seem that such a phenomenon as the socialization of architecture could not be in principle, since architecture by definition is the material and spatial structure of all social processes and is already an extremely socially loaded civilizational entity. Nevertheless, the socialization of architecture is taking place, and sometimes the demand for it is even increasing, as it is today.

**Keywords:** socialization, object, structure, ensemble, environment, environmental approach, urban design

### **Design of architectural environment – look from within**

**ANDREY V. EFIMOV, TATIANA O. SHULIKA**

On the background of modern trends in the development of the architectural profession the article tells about the history of the specialties of the Department "Design of architectural environment" MARCHI. Lists the possible area of activity of the architect-designer. Describes the basic principles of the methodology of architectural and design engineering, such as attention to environmental context and the relationship of architectural design with the art culture of the 20-21 centuries. Describes the development of promising areas, which are a necessary component of the profession of architect-designer – formative role of the latest construction, artificial lighting and coloring of the city.

**Keywords:** environmental design, urban studies, architectural and design engineering, the latest design, artificial lights, the coloring of the city.

### **Regional higher education: architectural and design school in Altai. Formation, context, prospects**

**SERGEY B. POMOROV**

Formation of the Altai architectural and design school in comparison to other Siberian schools is considered. The directions of scientific activity, feature of a technique of training of architects-designers, the prospects of development are characterized.

**Keywords:** architecture, design, scientific subject, preparation technique, international cooperation.

### **In between university master program of international project TEMPUS**

**EKATERINA S. BUNDOVA**

The article describes the experience of organizing an international master's program in the field of Digital Art under a TEMPUS project grant in nine Russian universities in cooperation with European partner universities. Narrates the stages of the project, the difficulties faced by universities and the results obtained three years after the completion of the project.

**Keywords:** visual communication, digital art, architectural environment, method of teaching, educational program, design research.

### **Design of architectural environment as a method of art integration. Experience of NNGASU**

**MIKHAIL V. DUTSEV**

The article is devoted to the key aspects of the introduction of the author's concept of artistic integration in the preparation of bachelors in the direction of Design of the architectural environment. The questions of the holistic professional environmental thinking, understanding of social responsibility in designing, creating a concept and forming an artistic and plastic image are considered. The article is accompanied by illustrations of course projects, assignments and exercises performed at the DAS NNGASU chair.

**Keywords:** design of architectural environment, concept of art integration, integrative method.

## **Issues of target setting in the development of bachelor's degree educational model for designer (based on the materials of contests of graduate qualifying theses)**

**SERGEY A. MATOVNIKOV**

The article considers the issues of the contents details of the Bachelor's Degree educational model in the field of study of "Architectural Environment Design". The authors show the stages of evolution of the educational model transformation due to the changes in the structure and ideology of the State Educational Standards. The dependence of the contents of Bachelor's Degree training on the changes in the external environment and the internal processes of educational activity have been revealed. The authors suggest considering the possibility to use graduate qualifying theses (GQT) as an instrument for the adjustment of the contents details of educational programmes.

**Keywords:** educational programmer, State Educational Standard, graduate qualifying thesis.

## **Final qualifying work of the master: dissertation or project?**

**SERGEY M. MIKHAILOV, ALEXANDRINA S. MIKHAILOVA**

The article considers the problem of final qualifying work of the master, its form and content. In the article is presented the concept of the final qualification works of master students, which is prepared on the basis of years of experience of the Design Department of the Kazan State University for Architecture and Structure. The concept includes two basic types of master's graduation dissertation: theoretical and applied.

**Keywords:** theoretical diploma work, master's thesis, theoretical thesis, applied science thesis, master's dissertation, masters of design and architecture.

## **Stage "pre-project", as a key component of complex architectural and design projection**

**MARINA A. SOKOLOVA**

In the article, the influence of the pre-project stage, including the study of the environmental context, pictorial-graphic and plastic modeling, on the sequence of educational design and the addition of the design solution, is considered on the example of two complex projects performed at the Department of Architectural Environment Design at the Moscow Architectural Institute.

**Keywords:** design of the architectural environment, pre-project analysis, context, stage design, environmental creativity, plastic modeling.

## **Space and semantic aspects of the east and the west architecture inclusion on the environmental context**

**YURI N. SMIRNOV**

The display in the city space of the symbolic structure of the visible and perceived world naturally appears in the form of a "global" historical and mythological code. The article reveals the content of a chamber-like sense of inner space — a specific and characteristic environmental "interior" of the natural-anthropogenic environment of a man in Western and Eastern architecture.

**Keywords:** symbolism, intimacy, contextuality, anthropocentricity of the environment interior.

## **Complex transformation model and principles of historical existing center of city Haiphong (Vietnam)**

**DO THI HIEN**

In these papers the functional oversaturation of historical existing centre of city Haiphong is examined and the impacts of this process on the planning and architecturally spatial structure changes of this city centre are outlined. A suitable similar experience is regarded in order to determining an optimal and expedient way for transformation and development of this city centre. A model is created and the principles of complex transformation are proposed for implementing this approach.

**Keywords:** functional oversaturation, historical existing centre, optimal approach, transformation, development.

## **High density urban blocks – «porous hybrids»**

**IVAN A. KRASHENINNIKOV**

The article examines examples of residential multi-functional buildings with a high density factor. The analysis of space-planning solutions of urban high-density complexes allows determining the limits of building density while maintaining comfort conditions.

**Keywords:** Urban porosity, high density complex, comfortable urban environment.

## **Russian urbanization path: from the great empire to the prosperous democratic state**

**YIMIN SUN, DARIA LISAIA**

The article studies urbanization process in Russia. The research covers the period from the second half of the 19th century to nowadays, from the time, when industrialization began to make changes in the country's settlements' structure. It is given a chronological analysis of historical events and documents affecting the urbanization development. Conclusions of the article presented, that currently, Russia needs to modernize the economy. In this regard, the completion of the urbanization process through the creation of the united framework of Russian urban settlements' system with a rational distribution of scientific, technological and production capacities throughout the country can be one of the effective solution to Russia's economic recovery.

**Keywords:** urbanization, industrialization, urban development, Russian urban settlements' system.

## **Moscow architecture before and after the 1998 crisis (review of architectural critics)**

**ANASTASIA V. TATARCHENKO**

This article is a brief overview of the main stages of development of the Moscow architecture of the turn of XX-XXI centuries. Draws a parallel between the events occurring in the state in architecture. Identified the main stylistic currents. Analyzed criticism of contemporaries.

**Keywords:** style, freedom, creativity, architectural criticism, crisis, paradigm.

## **Architecture of the dominant: memorial-museum complexes**

**ALEXANDR I. KHOMYAKOV**

The aim of the study is to describe and disclose the phenomenology of memorial and museum complexes as special objects of culture, marked by increased attention of society and power. For the first time an attempt was made to comprehensively comprehend in all its manifestations a special kind of public facilities, previously considered in domestic and foreign theoretical studies only indirectly or fragmentarily. In this work, this type of public buildings, which has been formed since the first half of the 19th century in its main stable manifestation, is an architectural and spatial cultural and historical memorable object (outside the border states: cult sacral complexes, necropolises, memorial interiors, etc.).

Key words: memorial spaces, memorials, museums, memorialization and museumification of important historical events and personalities, spiritual culture.

## **Hand drawing in Architectural University**

**ERNST M. KLIMOV**

Methodological approaches of hand drawing student assignments are aimed to train architects to navigate freely in an imaginable space. Basic hand drawing skill allows specialists to construct any architectural form easily by just imagining them.

**Keywords:** basic, creative, visual, imaginative, real models.

## **Architectural features of online education**

**IRINA N. ASHMARINA**

On the prospects for the introduction of remote format to higher architectural and artistic education in Russia.

**Keywords:** distance education, architectural online courses, architectural-artistic education.

## **Didactics of development of creative abilities in pre-university architectural education**

**VERA YU. MARKINA**

The article analyzes the possibilities of developing creative abilities in the conditions of modern competitions and festivals. Attention is given to the cooperation of higher education and potential applicants, as well as the way to attract attention to the urban space, by modeling small architectural forms, by the forces of adolescents in the process of creative creativity. Different directions of the architectural development of adolescents are considered.

**Keywords:** additional education, architectural development, directions of creative activity, creative self-expression, perception of space.