

## Exposition-educational centers of national arts and crafts

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**Abstract.** Today growth of interest in a subject of "the smart cities" is caused not so much by the growing level of highly effective technologies of the urbanized spaces, but by careful attitude to national values and ecological safety of territories for their further sustainable development. In other words, sustainable development assumes preservation of the environment at the forward development of economy and the public sphere. Brisk economic activity of the central Russia has always been connected with the national arts and crafts in which the whole villages and areas were engaged. The masters and handymen creating unique household items and objects of art often united in the so-called artels and guilds, later transformed to the factories which in fact are the city-forming enterprises. Thanks to the Centers of arts and crafts where traditions of primordially Russian arts and crafts passed from father to son, the glory of these places was carried far beyond its limits, enhancing the advertized properties and a peculiar brand of these territories. The analysis of today's condition of the enterprises of arts and crafts carried out on the territory of the Moscow region has shown that despite interest in folklore creativity growing in the recent years, the existing production base of national crafts is in desolation and decline and the fastest actions for their renovation and modernization are necessary. On the basis of expert polls and studying of perspective tendencies in this area, it was determined that the Centers of arts and crafts apart from manufacturing areas need expansion of educational and exposition functions with the subsequent determination of nomenclature structure and normative squares of new zones and premises. The developed centers of arts and crafts with additional functions will contribute not only to sustainable development of centuries-old skills, but also will provide the brand of any region based on its culture and traditions. The traditional national skills, undoubtedly, are the most notable manifestation of domestic cultural heritage. Therefore introduction of the new types of arts and crafts will help to restore the status of national property of the small towns, will make their social, business and cultural life self-sufficient. The modern centers of national crafts are necessary for implementation of the full tourist projects formed nowadays on the territory of the Moscow region within cluster state policy.

### 1. Introduction

The Russian land has been famous for its rich geography and traditions of folk masters for centuries. Local craftsmen carefully stored stylistic and original features of arts and crafts pieces. These national treasures have always been an integral part of the Russian culture and nowadays they still find love and understanding of people from all over the world. One can state that no country in the world, except Russia, can boast of having 14 branches of the arts and crafts activities. Products from Khokhloma, Gzhel, Palekh, Zlatoust, Kubachi have gained worldwide fame and have become original brands of those territories.



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The processes of branding make different areas unique and recognizable, help the ethnic and national self-identification of the population, give bragging rights. The search for parameters and various qualities and characteristics that distinguish a territory among many others has a significant value, as it gives a powerful incentive for attracting investments, strengthening economic relations and industry development. Unique investment projects should become one of the most effective means of regional image creation. Certainly, the potential of folk arts can be used when creating tourist and recreational clusters to attract visitors, as well as to preserve and develop the arts and crafts traditions of the country.

However, we have to admit that these days this original part of the national culture inspiring world-class designers as industry is absolutely unprofitable and barely alive due to government's grants only. Meanwhile the territories where the arts and crafts centers are located with their 'social infrastructure and the necessary raw materials' [1] have been developed for centuries. Besides there are less and less folk masters and artists owning unique technologies. The goal of safeguarding, as with other forms of cultural heritage, is to ensure that the skills and knowledge associated with traditional artisanry are passed on to future generations so that crafts can continue to be produced within their communities, providing livelihoods to the artisans and reflecting creativity and authenticity. Many craft traditions have age-old systems of instruction and apprenticeship. One proven way of strengthening those systems is to offer financial incentives to teachers and students in order to make knowledge transfer more attractive to both. So, the problem of preserving and developing traditional arts has been raised to the state level, which is reflected in the amendments to the Federal Law adopted on July 29, 2017. No. 234, Articles 39 and 4: "On Culture" and "On Folk Arts and Crafts".

The analysis of the artisan factories preserved since the Soviet times has shown that the main production facilities with their technological funds and workshops are in critical condition and in need of immediate protection, restoration and renovation. At the same time, some volumes of the manufactured products still remain. Based on the results of the research, it is evident that there is a need to expand the range of zones and premises associated with the exposition and educational functions of such institutions.

The research on the design and scientific forecasting of the arts and craft centers development was carried out by scientists and research teams. In particular, there are known works dedicated to the evolution of the folk crafts development by Arbat Y A [2], Rybakov B A [3]; Cheruvimova I Y (the urban aspect is considered especially in detail) [4], Arynova K K (the system of buildings with education and production functions classification was proposed) [5], A V Stepanchuk (the national arts and crafts are considered as a part of cultural tourism) [6]; the research devoted to the economic issues of the art industry development by Kovrigina V M [7], Kurenkova Z M [8]; the data gained by TSNIIEP of urban planning, TSNIIEP of trade and household buildings and tourist complexes; the full-scale surveys data of the current center of crafts in the village of Zhostovo and others. However, despite the available scientific researches in this area, there are still no architectural proposals for national arts and crafts centers, which reveal the current trends of their development with the main and accompanying exposition and educational activities.

Thus, the purpose of this work is to determine the zones and premises nomenclature for exposition and educational centers at existing factories and production facilities.

## **2. Analysis**

### *2.1. Socio-economic factors*

The objects of artisan production, their character and form of activity are under constant influence of socio-economic conditions change. During the years of the Soviet period, these enterprises have developed from handicraft, collective art production, monastery or private workshops and manufactories to the large-scale state or joint-stock enterprises (craft shop, processing plant, factory, association, etc.).

Analysis of the current state of the folk arts and crafts enterprises has shown that their financial and economic situation has significantly declined in recent years, most of them are un-profitable or insufficiently profitable. The overwhelming majority of enterprises lack both finances to purchase raw materials, modernize and upgrade facilities and ability to maintain land plots that are in gratis use. This situation has led to the fact that over 140 enterprises have been closed all over the country since 1990, and in almost 20 years nearly 50 crafts were lost. According to the Federal State Statistics Service data, 15 territorial subjects of the Russian Federation have stopped production processes just in the last 5 years. At the same time, the total volume of production (excluding small businesses) accounted for about 3 billion rubles, which means a reduction by more than 30%.

Meanwhile, the folk art crafts institutions used to have the city-forming functions, being the source of ensuring constant and mass employment of the small towns population. However, today the craft products manufacturing employs slightly more than 30 thousand people across the country, and about 450 people in the Moscow region [9]. At the same time, the number of workers decreases annually by about 10-20%. Nevertheless, in the Ministry of Industry and Science of Russia, 250 institutions registered their samples of folk art crafts articles which are recognized as art dignity.

We stated that more than a half of the craft institutions have facilities, equipment and vehicles with an average wear of 45.1% of their replacement cost. Therefore about 2/3 of the enterprises are on the verge of bankruptcy [10]. General statistics data indicate a fall in the efficiency of the industry. Thus, the total volume of the crafts and arts enterprises production has grown by 1.7% in current prices, but a relapse in comparable prices has been more than by 6%. Out of 60 territorial subjects of the Russian Federation, a relapse in comparable prices occurred in 40 regions and in current prices it happened in more than 30 regions. There is also a low level of the average monthly earnings in the industry - 16,4 thousand rubles, which is twice as less than the average income in the country. In every fifth enterprise the salary is at the subsistence level. There is also a drop in the level of net profit by 7%. The average profitability has dropped by 5.6%. The average profitability of folk arts and crafts products is 9.2%. The average efficiency calculated on profit (negative profit) before taxation has the same value. 18.8% of enterprises have negative profit from sales and 15.9% of businesses have net losses. The positive profitability calculated on profit before taxation has not reached 10% in 55% of those organizations. A third of enterprises has a profitability ranging from 0.1 to 3%. Export accounts 0.2% of total production. Although 70 organizations have gained financial support at the federal level, there are about 200 city-forming industries nowadays which do not receive any subsidies [11].

## *2.2. Spatial and architectural factors*

The full-scale analysis of existing folk arts and crafts enterprises revealed a number of significant architectural and planning weaknesses, which are a consequence of the unsatisfactory functional and aesthetic quality of the arts and crafts enterprises. First of all, it is worth noting that the main spaces intended for the creation of crafts and arts pieces do not satisfy the required conditions, for example, for the miniature painting masters productive work. The above situation has resulted in empty production spaces, while the artisans have to work at home. This is the issue at the Fedoskino miniature painting factory (figure 1), where 52 artists (60% out of 87) are working off the factory.

The enterprises lack the premises and zones for additional functions whereas the existing ones are not appropriately equipped for the successful products exposition or too cramped (figure 2, figure 3) and do not satisfy the visitors needs. In accordance with the above analysis we have come up with a hypothesis that the modern arts and crafts enterprises should include the zones for education and exhibition activities, sales etc in addition to the main production spaces.

In order to determine the preferable set of the exposition-educational centers functions, as well as the functional planning requirements for both nomenclature of the required spaces and standards for the occupied area, we conducted pilot studies that identified the needs of potential visitors (figure 4).



**Figure 1.** The view of Fedoskino factory miniature painting, 2017



**Figure 2.** The premises for lectures at the Zhostovo factory, 2016



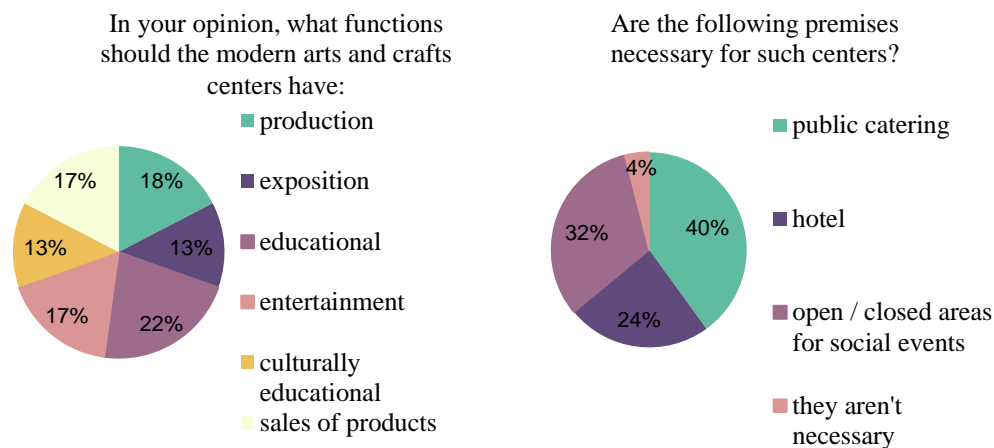
**Figure 3.** Shop with finished products at the Bogorodskaya factory of artistic woodcarving, 2016

35 people have been interviewed, uneven-aged respondents have been involved in the study. The majority of the participants of the survey pointed out at the equal necessity of all the proposed functions, in particular: production, exhibition, entertainment, sales of products as well as cultural and educational functions, with special emphases on the educational aspect. Zones for housing public catering (40%), open / closed areas for social events (32%) were considered necessary auxiliary areas which make the centers to be the cultural core of small towns. The majority of respondents (52%) also considered an excursion together with the production process show exciting, reasonable and educational, another 35% stated that they were interested in getting acquainted with the process of creating arts and crafts products, at the same time emphasized the necessity of spatial isolation of visitors and employees in order to ensure safety of the production process.

### *2.3. Architectural and artistic factors*

The conducted studies revealed that the vast majority of the arts and crafts industries were designed in the Soviet period, without taking into account the unique features of the specific craftsmanships. Today such buildings represent the notorious "boxes", which don't comply with both the local environment and low-rise buildings predominantly. Undoubtedly, it is necessary to seek new approaches to the architectural and artistic interpretation of the arts and crafts building massing and facade composition designed to reflect the essence of artistic creativity and folk traditions. Additionally, it is necessary to develop informational and visual semantic images and brand symbols





**Figure 4.** Results of a sociological survey using the questionnaire method

(identity), which purpose is to mark out iconic images of the arts and crafts centers in order to draw more tourists attention to them in the competitive economical environment. Such an approach can give a new status to the buildings and facilities of the arts and crafts centers and will have a positive impact on the entire infrastructure of the industry in general.

### 3. Research methodology and results

#### 3.1. Research methodology

The research methods are based on the integrated and the systematic approaches, which include: 1) analysis and synthesis of the printed sources, the Internet sources, standards, normative and project materials on the research theme; 2) carrying out field studies to assess the existing objects of artistic folk crafts within the research boundaries; 3) analysis of domestic experience in the design and construction of the arts and crafts centers and the systematization of the material using the grapho-analytical method; 4) modeling, prototyping and sketching; 5) sociological research methods (surveys, questionnaires); 6) sociological information processing methods (graphs, tables, diagrams).

#### 3.2. A technique for designing the exposition-educational centers of national arts and crafts

The technique for designing the exposition-educational centers of national arts and crafts was offered, including two stages:

- the environment analysis is carried out: city-planning, natural-climatic, compositional qualities of environment are investigated;
- the architectural solution is designed

The development of a design solution is a sequence of the following stages:

- the scenario plan development, which is the basis of creative design;
- to achieve the maximum expressiveness of the main buildings, comprehensive design investigations on the massing concept and compositional integrity of the Exposition-educational centers of national arts and crafts are carried out; the number of stories, architectural dominants, directions of dynamic development of building massing are determined; the overall design solution is analyzed;
- for the purpose of modeling the external surface of massing, methods of facade plastics and textures are revealed according to the specific types of folk art. The macro / micro pattern of the facade composition, the color solution of the used materials are determined.

#### 3.3. Architectural typology of the exposition-educational centers of national arts and crafts

In accordance with the hypothesis put forward, the scientifically based recommendations of the exposition-educational centers should include the following nomenclature [12] of the main zones and premises:

- exhibition space, representing equipped premises for exhibiting and storing collection works,

including multifunctional zones, which can be used as lounge zones or as additional exposition areas;

- zones for products sale, which will legitimately lead to an increase in revenues from tourism and sales, and therefore, provide the impetus for modernization of production, conservation and development of the artisanry;
- space for conducting lectures (assembly hall), including such forms and trends of the procedural art as "performance" and "happening" with interactive and leisure functions for high-quality performance of theatrical performances and celebration;
- space for large-scale master classes, including restoration workshops which provide a methodically competently organized educational process;
- auxiliary spaces, for example, space for loading and unloading processes for catering organization, including food court.

For such centers it is possible to provide a possibility of creation of small hotels near them.

The developed architectural typology of the arts and crafts centers with the exposition-educational function will provide a variety of such institutions, adapted for introduction into different conditions of location and functioning and expressed in typological development of all elements of the system. Moreover, each of the proposed types of the arts and crafts centers with exposure-educational function reflects the functional purpose of each element of the system, availability of equipment, the maintenance system, the zoning of planning elements and their interrelation.

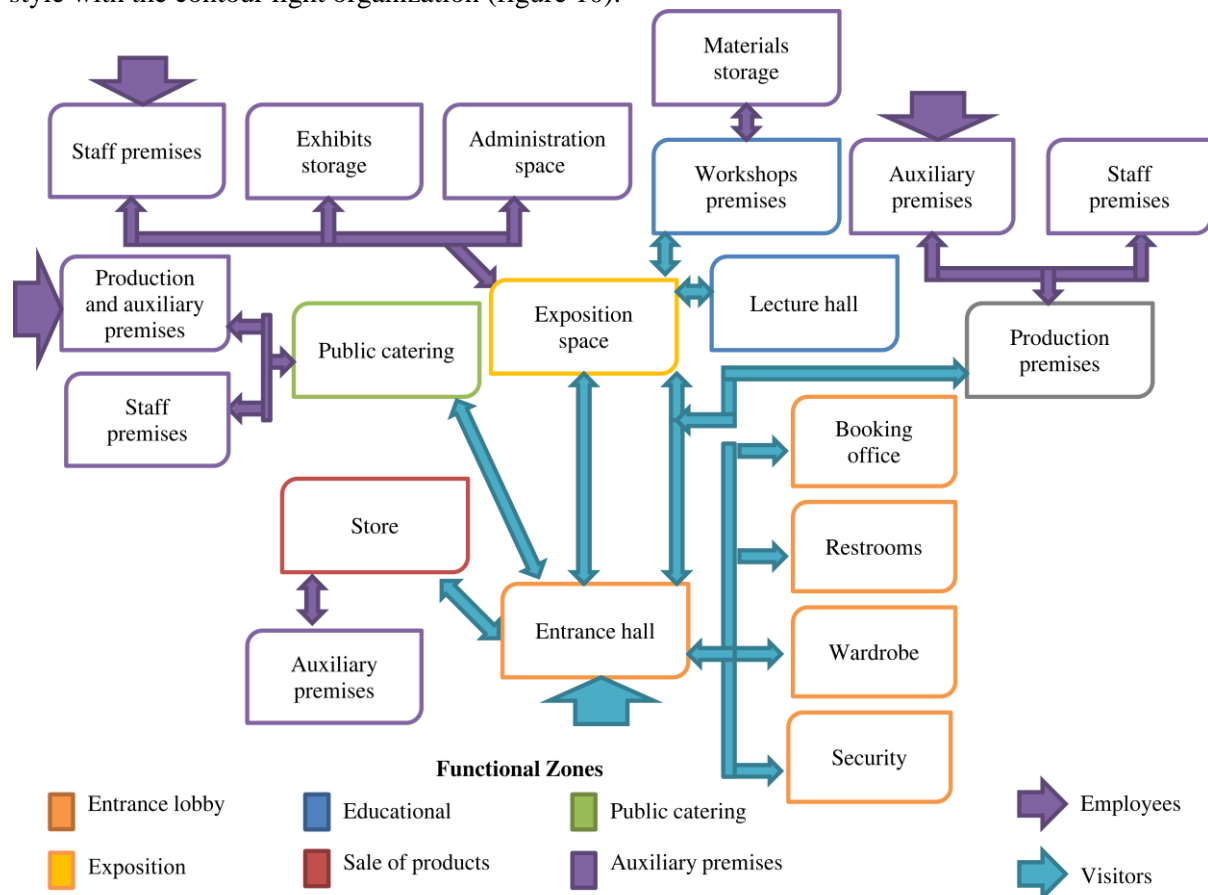
The following models of these the arts and crafts centers are identified and arranged:

- I type of the arts and crafts centers with exposure and educational function for short-term visits, which includes the following set of architectural objects and functional zones:
  - exposition -  $\sim 150\text{m}^2$
  - educational area -  $\sim 60\text{m}^2$
- II type the arts and crafts centers with exposure and educational function for short-term visits, which includes the following set of architectural objects and functional zones:
  - production
  - exposition -  $\sim 200\text{m}^2$
  - educational area -  $\sim 160\text{m}^2$
  - products sale area -  $\sim 50\text{m}^2$
- III type of the arts and crafts centers with exposure-educational, residential and recreational functions for long-term visits, including the following extended set of architectural objects and functional zones:
  - production
  - exposition -  $\sim 350\text{m}^2$
  - educational area -  $\sim 220\text{m}^2$
  - products sale area -  $\sim 100\text{m}^2$
  - public catering -  $\sim 150\text{m}^2$
- IV type of the arts and crafts centers with exposure-educational, residential and recreational functions for long-term visits, including the maximum set of architectural objects and functional zones:
  - production
  - exposition -  $\sim 450\text{m}^2$
  - educational area -  $\sim 280\text{m}^2$
  - products sale area -  $\sim 120\text{m}^2$
  - public catering -  $\sim 250\text{m}^2$
  - 1-3 star hotel according to the Philippines accreditation system
  - recreation area

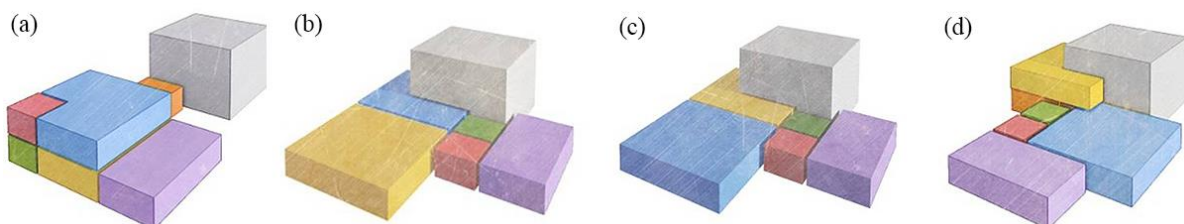
Functional-planning connections between groups of premises and zones for III, IV types (figure 5) are determined. Various layout layouts of the functional-planning zones of the arts and crafts centers with the exposure-educational function are singled out (figure 6).

### 3.4. Architectural artistic and compositional solutions

Possible interior and facade offers for the exposition-educational centers of national arts and crafts are presented, taking into account the individual approach to the specifics of each artisanry. This is achieved through various ways, such as the application of facade glazing in the style of Zhostovo painting (figure 7). Elements of painting were also used in the interior when creating the stained glass ceiling. In case of designing the center of the Abramtsevo-Kudrinskaya carving, the dynamics of the facade is emphasized by elements decorated with carving (figure 8). The Pavlovo-Posad exposition-educational center is designed as partial buried mass, which repeats the bends of the Pavlovo Posad shawl. Flowerbeds repeating the floral patterns of the Pavlovo-Posad style are designed on the green roof (figure 9). Concept of the Gzhel center includes the metal facade panels' perforation in the Gzhel style with the contour light organization (figure 10).



**Figure 5.** Scheme of functional planning organization



**Figure 6.** Variants of space-planning decisions: a - the production part is separated from the main part; b - facilities with educational function integrated into the production space; c - the exposition part passes through the production one; d - the exposition space is attached to the production part.



**Figure 7.** Variants of conceptual architectural-artistic and compositional solutions for the Zhostovo center



**Figure 8.** Variant of conceptual architectural-artistic and compositional solution for the the Abramtsevo-Kudrinskaya carving center

**Figure 9.** Variant of conceptual architectural-artistic and compositional solution for the Pavlovo Posad center



**Figure 10.** Variant of conceptual architectural-artistic and compositional solution for the Gzhel center

#### 4. Conclusions

- Based on the analysis of socio-economical, architectural-spatial and architectural-artistic factors, scientifically grounded proposals for the introduction of new types of the arts and crafts centers – the exposition-educational centers of national arts and crafts - at existing factories and production facilities, harmoniously coordinated with the low-rise residential buildings and reflecting the uniqueness of national arts and crafts.
- The formation of the arts and crafts centers with an exposition-educational function will favorably affect the preservation of the historical and cultural heritage of traditional crafts, and will also have a beneficial effect on the development of infrastructure and services, with the subsequent creation of new workplaces.
- The exposition-educational centers of national arts and crafts will lead to a qualitative increase in the living standards of the small towns population due to the development of new types of activities and attraction of investments, which will certainly increase the regional identification of those territories as a part of recreational and tourism clusters.



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