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ARCHITECTURE OF THE CENTERS OF FOLK CRAFTS OF KAZAKHSTAN

ҚАЗАҚСТАННЫҢ ХАЛЫҚ КӘСІПШІЛІГІ ОРТАЛЫҚТАРЫНЫҢ СӘУЛЕТІ

АРХИТЕКТУРА ЦЕНТРОВ НАРОДНЫХ ПРОМЫСЛОВ КАЗАХСТАНА

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Keywords:

Architecture, folk crafts, functional organisation, architectural typology, cultural and educational infrastructure, integration of traditional and modern design.

ABSTRACT

The article discusses the architectural and functional planning features of folk craft centres in the Republic of Kazakhstan as cultural and educational infrastructure facilities. The aim of the study is to identify and systematise the architectural, planning and typological principles of craft centre development based on a comparative analysis of domestic and international experience. The study identifies stable functional zones and spatial relationships that ensure effective interaction between production, educational, exhibition and public functions. Based on the analysis, three basic typological models of folk craft centres have been identified: a compact year-round centre, a pavilion-cluster craft complex, and an adaptive multifunctional space. Each model is considered in terms of its architectural and planning structure, functional organisation, and applicability in various urban and regional conditions. Particular attention is paid to the unification of architectural solutions, taking into account national, regional, and historical and cultural characteristics. The article also reveals the socio-cultural role of folk craft centres as institutions for the preservation of intangible cultural heritage, the transfer of traditional knowledge, and the development of the creative economy. It is shown that a modern craft centre should function not only as a production base, but also as a multifunctional public space that facilitates interaction between craftsmen, students and visitors. The results obtained can be used in the development of architectural and planning standards, the design of folk craft centres, and the formation of regional programmes for sustainable cultural development.

Түйінді сөздер:

Сәулет, халықтық қолөнер, функционалды ұйымдастыру, сәулет типологиясы, мәдени-білім беру инфрақұрылымы,

ТҮЙІНДЕМЕ

Мақалада мәдени-білім беру инфрақұрылымының объектілері ретінде Қазақстан Республикасының Халық қолөнері орталықтарының сәулеттік және функционалдық-жоспарлау ерекшеліктері қарастырылады. Зерттеудің мақсаты-отандық және халықаралық тәжірибені салыстырмалы талдау негізінде қолөнер орталықтарын қалыптастырудың архитектуралық-жоспарлау және типологиялық принциптерін анықтау және жүйелеу. Зерттеу барысында өндіріс-



дәстүрлі және заманауи
дизайнды біріктіру.

тік, білім беру, Көрме және қоғамдық функциялардың тиімді өзара іс-қимылын қамтамасыз ететін тұрақты функционалдық аймақтар мен кеңістіктік өзара байланыстар анықталды. Тапдау негізінде халықтық қолөнер орталықтарының үш негізгі типологиялық моделі анықталды: жыл бойына жинақы орталық, павильон-кластерлік қолөнер кешені және бейімделгіш көпфункционалды кеңістік. Әрбір модель оның архитектуралық-жоспарлау құрылымы, функционалды ұйымдастырылуы және әртүрлі қала құрылысы мен аймақтық жағдайларда қолданылуы тұрғысынан қарастырылады. Ұлттық, өңірлік және тарихи-мәдени ерекшеліктерді ескере отырып, сәулет шешімдерін біріздендіру мәселелеріне ерекше назар аударылады. Мақалада сонымен қатар материалдық емес мәдени мұраны сақтау, дәстүрлі білімді беру және креативті экономиканы дамыту институттары ретінде халықтық қолөнер орталықтарының әлеуметтік-мәдени рөлі ашылады. Қазіргі заманғы қолөнер орталығы тек өндірістік база ретінде ғана емес, сонымен қатар шеберлердің, білім алушылар мен келушілердің өзара әрекеттесуін қамтамасыз ететін көпфункционалды қоғамдық кеңістік ретінде де жұмыс істеуі керек екендігі көрсетілген. Алынған нәтижелер сәулет-жоспарлау стандарттарын әзірлеуде, халықтық қолөнер орталықтарын жобалауда және тұрақты мәдени дамудың аймақтық бағдарламаларын қалыптастыруда қолданыла алады.

Ключевые слова:

Архитектура, народные промыслы, функциональная организация, архитектурная типология, культурная и образовательная инфраструктура, интеграция традиционного и современного дизайна.

АННОТАЦИЯ

В статье рассматриваются архитектурные и функционально-планировочные особенности центров народных ремесел Республики Казахстан как объектов культурно-образовательной инфраструктуры. Цель исследования заключается в выявлении и систематизации архитектурно-планировочных и типологических принципов формирования ремесленных центров на основе сравнительного анализа отечественного и международного опыта. В ходе исследования определены устойчивые функциональные зоны и пространственные взаимосвязи, обеспечивающие эффективное взаимодействие производственных, образовательных, выставочных и общественных функций. На основе проведенного анализа выделены три базовые типологические модели центров народных ремесел: компактный круглогодичный центр, павильонно-кластерный ремесленный комплекс и адаптивное многофункциональное пространство. Каждая модель рассматривается с точки зрения её архитектурно-планировочной структуры, функциональной организации и применимости в различных градостроительных и региональных условиях. Особое внимание уделяется вопросам унификации архитектурных решений с учётом национальных, региональных и историко-культурных особенностей. В статье также раскрывается социально-культурная роль центров народных ремесел как институтов сохранения нематериального культурного наследия, передачи традиционных знаний и развития креативной экономики. Показано, что современный ремесленный центр должен функционировать не только как производственная база, но и как многофункциональное общественное пространство, обеспечивающее взаимодействие мастеров, обучающихся и посетителей. Полученные результаты могут быть использованы при разработке архитектурно-планировочных стандартов, проектировании центров народных ремесел и формировании региональных программ устойчивого культурного развития.

INTRODUCTION

The development of folk craft centres in the Republic of Kazakhstan is a pressing task, driven by the need to preserve, revive and update traditional forms of decorative and applied art. Folk crafts are an essential component of intangible cultural heritage, reflecting the historical experience, worldview and artistic traditions of society. In the context of globalisation, urbanisation and industrial standardisation, traditional crafts in many countries are losing their natural social and spatial environment, shifting to the sphere of museum exhibitions or episodic festival practices. Researchers in the field of cultural heritage note that such a transformation weakens the processes of intergenerational knowledge transfer and reduces the sustainability of craft traditions (Jokilehto, 2005; Chatzigrigoriou P. et al., 2021). The decline in the number of practitioners of traditional craft skills poses a threat to cultural continuity and highlights the need to develop a specialised architectural infrastructure capable of supporting the “living” reproduction of crafts in modern conditions.

In this context, the creation of folk craft centres takes on particular significance. Such centres are seen as specialised cultural and educational infrastructure facilities that combine production, training, exhibition and public functions in a single architectural and planning space. Such complexes not only serve as workplaces for artisans and venues for the transfer of traditional knowledge, but also form public spaces integrated into the systems of cultural tourism and the creative economy. Foreign research in the field of cultural planning emphasises that the architecture of cultural and creative spaces plays a key role in shaping local identity and sustainable development of territories (Evans G., 2009; Montgomery J., 2003). Thus, craft centres act as multifunctional cultural hubs that promote social activity, educational processes and economic diversification in regions.

International experience demonstrates a steady trend towards the formation of specialised craft centres, craft villages and creative clusters that combine production, educational, exhibition and commercial activities. Within the framework of UNESCO's Creative Cities Network and the World Craft Cities programme, the architecture of such facilities is seen as a tool for creating a “living” cultural environment capable of adapting to contemporary socio-economic challenges and changing scenarios for the use of space (Evans G., 2009; Carr J & Dionisio M. R., 2017). For Kazakhstan, with its rich craft heritage and significant tourism potential, the task of developing architecturally sound models of folk craft centres applicable in various urban, regional and rural settings is particularly relevant.

Despite growing interest in the development of craft centres, an analysis of scientific publications shows that issues of architectural typology, functional and planning organisation, and spatial structure of such facilities remain insufficiently systematised, especially in the context of national architectural practice. Foreign studies on the flexibility of public cultural spaces emphasise the need for adaptive and transformable planning solutions capable of responding to diverse user scenarios and the evolution of functions over time (Carr J & Dionisio M. R., 2017; Liu C. et al., 2025). At the same time, the problem of architectural unification of craft centres — as the creation of generalised models that allow for variability and regional adaptation — remains understudied.

The subject of this study is the architectural, planning and typological characteristics of folk craft centres in Kazakhstan, considered in the context of their functional structure, spatial organisation and possibilities for architectural unification in the design of cultural and educational facilities.

The aim of the study is to identify and systematise the architectural, planning and typological principles of folk craft centres in Kazakhstan, as well as to formulate general approaches to their unification based on a comparative analysis of domestic and international experience.

To achieve this goal, the following tasks are set:

1. Analysis of the architectural prerequisites for the development of folk craft centres in Kazakhstan in the context of cultural and educational infrastructure;
2. Identification and classification of typological models of folk craft centres in various urban, regional and rural conditions;
3. Study the architectural and planning solutions of existing domestic and foreign folk craft centres through comparative analysis;
4. Identify recurring functional areas and spatial relationships characteristic of folk craft centres and their impact on the planning structure;
5. Formulate general architectural principles and approaches to the integration of folk craft centres based on a comparative analysis of domestic and international experience.

LITERATURE REVIEW

Research on the architectural organisation of craft-related and cultural facilities has been developed within several interconnected academic fields, including architectural typology, cultural and creative clusters, functional–planning theory, and heritage-oriented design. While the term “folk craft centre” is not always explicitly used in international literature, comparable spatial typologies are examined through studies of cultural districts, creative clusters, and public cultural buildings that integrate production, education, exhibition, and community functions.

Within urban studies and architectural theory, cultural and creative clusters are frequently analysed as spatially concentrated environments that combine creative production with public and cultural activities. A. Markusen and A. Gadwa (2010) emphasise that such clusters are characterised not only by economic concentration but also by specific spatial and architectural configurations that facilitate interaction between creators, visitors, and local communities. Similarly, A. J. Scott (2010) conceptualises the cultural economy as a spatial system in which architecture and urban form play a mediating role between cultural production and public consumption, reinforcing the importance of purpose-built or adapted cultural facilities.

From the perspective of architectural typology, cultural buildings that integrate multiple functions are often discussed in relation to public cultural infrastructure. Research in Environment and Planning highlights that cultural facilities increasingly combine productive, educational, and representational spaces within a single architectural structure, requiring new typological approaches that differ from traditional museum or workshop models (Markusen A., 2006). These studies underline the relevance of typological hybridity and spatial adaptability, which are directly applicable to the design of craft centres.

Issues of architectural typology and functional–planning organisation of craft-related and cultural buildings have also been addressed in the works of domestic researchers, particularly within the Soviet and post-Soviet architectural school. Research by K. K. Arynov (2022) examined the typology and planning principles of educational and production buildings for folk arts and crafts, focusing on the integration of training, production, and exhibition functions. Although these studies did not conceptualise folk craft centres as an independent architectural type, they laid the groundwork for understanding functional zoning and spatial relationships in craft-oriented facilities. Similar typological and planning issues were later developed in studies of cultural and club buildings, where craft workshops were considered as part of broader cultural infrastructure (Stepanchuk, 2016).

Functional–planning organisation and spatial logic constitute another significant research direction. Studies based on spatial configuration theory demonstrate that the effectiveness of public cultural buildings depends on the organisation of movement, visibility,

and functional adjacency. Although not focused exclusively on craft centres, space-syntax-based research shows how the arrangement of workshops, exhibition spaces, and public zones influences user behaviour and social interaction (Hillier B., Hanson J., 1989). This approach provides a theoretical foundation for analysing functional zoning and circulation patterns in craft-oriented facilities.

Architectural research related to cultural heritage further expands this discussion by addressing the role of space in sustaining cultural practices. In heritage studies, scholars argue that architecture can function as an active framework for cultural transmission rather than a passive container for artefacts. L. Smith (2006) introduces the concept of heritage as a cultural process, in which spatial settings enable practices, meanings, and social engagement. This idea has been developed further in architectural research that examines how buildings support “living heritage” by accommodating production, learning, and public participation within a unified spatial environment.

Recent studies on adaptive reuse and cultural infrastructure also contribute to understanding the architectural transformation of spaces for craft-related functions. Research published in *Journal of Cultural Heritage Management and Sustainable Development* demonstrates that the conversion of existing buildings into cultural and craft facilities requires careful reorganisation of functional zones, balancing authenticity, flexibility, and contemporary use requirements (Bullen P. A. & Love P. E. D., 2011). Domestic researchers similarly highlight the potential of adaptive reuse of industrial and public buildings for cultural and creative purposes, emphasising the importance of flexible planning structures and modular spatial solutions (Amangeldikyzy, R. et al., 2023).

Overall, the reviewed literature confirms that both international and domestic research provide a substantial theoretical foundation for analysing the architectural typology and functional-planning organisation of craft-related cultural facilities. However, most studies address cultural clusters, creative spaces, or heritage buildings in a general sense, without focusing specifically on folk craft centres as a distinct architectural type. In addition, existing research rarely proposes unified functional-planning models adaptable to different regional and urban contexts. This gap underlines the need for systematic architectural research aimed at identifying typological models and developing unified planning principles for folk craft centres, particularly in relation to national conditions and cultural specificity, which constitutes the focus of the present study.

MATERIALS AND METHODS

The study is based on a qualitative architectural analysis aimed at identifying the typological and functional-planning principles of folk craft centres. The methodological basis combines comparative analysis, functional and planning assessment, and architectural typology, allowing us to trace the logic of spatial organisation and formulate generalised models applicable to different territorial contexts.

The first stage involved the selection of case studies. The objects were selected according to the following criteria:

- functional affiliation with craft, cultural or educational centres combining production, exhibition and public functions;
- availability of published architectural documentation, including plans, functional diagrams or authoritative architectural descriptions;
- compliance with contemporary practice.

As a result, a number of international and domestic examples were identified, including compact urban centres, pavilion complexes and large-scale craft clusters.

In the second stage, a comparative functional and planning analysis of selected case studies was conducted. Each object was evaluated according to a single set of parameters: type of implementation, planning scheme, availability and organisation of production workshops, educational function, exhibition or retail space. The results of this analysis were systematised in a comparative table, which made it possible to identify recurring spatial patterns, functional combinations, and planning solutions in various contexts.

The third stage involved typological generalisation. Based on a comparative analysis, the objects under study were grouped according to similarities in spatial structure, functional composition and scale. As a result of this process, three main typological models of folk craft centres were identified: a compact urban centre, a regional complex based on pavilions, and a modular rural centre. Typological classification was used as an analytical tool to identify sustainable architectural and planning characteristics, rather than to describe individual projects.

In the fourth stage, a unified functional and planning scheme was developed. This scheme was obtained by synthesising the recurring functional zones and spatial connections identified in the analysed examples. Particular attention was paid to the adaptability and versatility of the proposed scheme, as well as its applicability to various urban, regional and rural conditions in Kazakhstan. The resulting model reflects a balance between production, educational, exhibition and public functions and serves as a basis for future architectural design and standardisation.

Overall, the methodology used ensures the reproducibility of the research process and provides a consistent link between the analysis of existing architectural examples, the formulation of typological models and the development of practical architectural recommendations.

RESULTS AND DISCUSSION

Analysis of foreign architectural case-studies

The Ruthin Craft Centre is one of the most representative examples of a modern craft centre focused on combining production, exhibition and educational functions (Ruthin Craft Centre, n.d.). The complex was renovated and expanded according to a design by Sergison Bates Architects, which specialises in the design of public and cultural buildings (Ruthin Craft Centre, n.d.). The centre is located in a small historic town and serves as a regional platform for supporting professional craftspeople.

As shown in Figure 1 the architectural and planning structure of the centre is based on the principle of a perimeter composition around an inner courtyard, which serves as a public hub. Individual workshops, galleries, exhibition spaces and educational facilities are located along the perimeter. This layout ensures stable visual and functional connections between areas, as well as a clear separation of flows: visitors move through the public galleries without disrupting the production processes inside the workshops.

A key feature of the facility is the high degree of transparency of the craft process: the workshops have glass facades, allowing visitors to observe the work of the craftsmen without direct interference. This architectural solution enhances the educational and demonstration functions of the centre, generating sustained tourist interest. At the same time, each workshop retains its autonomy and is designed to meet the technological requirements of a specific craft (lighting, ventilation, sound insulation).

Delhi Haat is an example of an open-air pavilion craft complex integrated into the urban structure of a metropolis (PDSA Studio, n.d.). The project was initiated by the Government of India with the participation of the Ministry of Textiles, Government of India as a permanent venue for displaying and selling traditional handicrafts from different regions of the country, as well as for supporting artisans through direct access to the market.

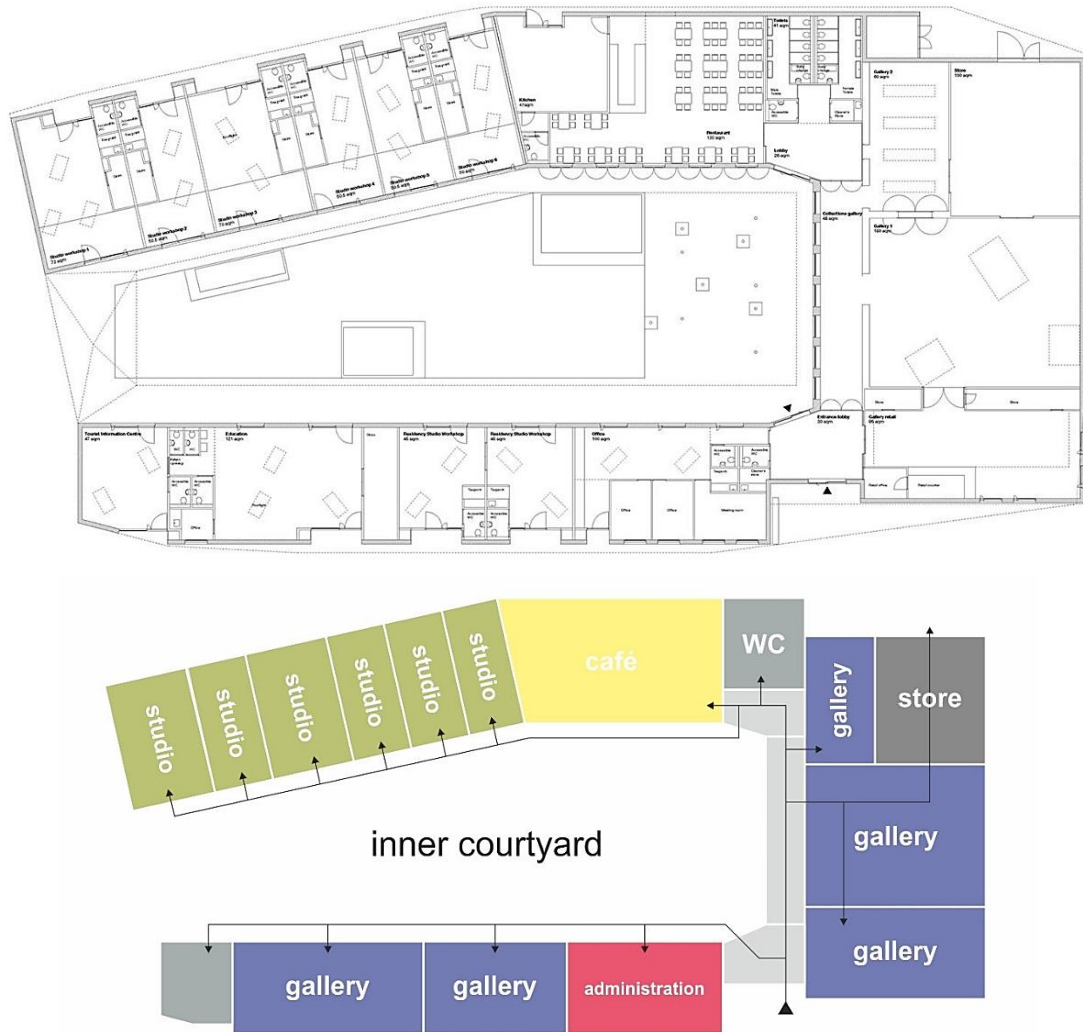


Figure 1. Functional zoning scheme of the Ruthin Craft Centre

Note – Compiled by the authors based on Sergison Bates Architects. (n.d.)

The layout (Fig. 2) of the complex is based on the principle of a craft village, where individual workshops and trading pavilions form a sequential route for visitors. The spaces are organised around open areas used for cultural events, festivals and gastronomic programmes. The architectural language of the complex is deliberately simplified and refers to regional building traditions, which enhances the effect of authenticity and visual identity.

From the point of view of functional and planning analysis, Delhi Haat demonstrates a model focused primarily on trade and demonstration functions with a limited educational component. Production processes are presented in a fragmented manner and are, as a rule, of a demonstrative nature. This allows us to consider this facility a successful example of a tourism-oriented craft space, but with limited potential for the systematic transfer of professional craft skills.

CNAD National Art, Crafts and Design Centre is an example of a compact crafts and design centre in which exhibition, educational and public functions are integrated into a single architectural and planning structure based on a reconstructed historic building and a new wing. The project was designed by Ramos Castellano Arquitectos and implemented as a public cultural facility in the central part of the city of Mindelo (CNAD National Art, Crafts and Design Center / Ramos Castellano Arquitectos, 2022, December 6).

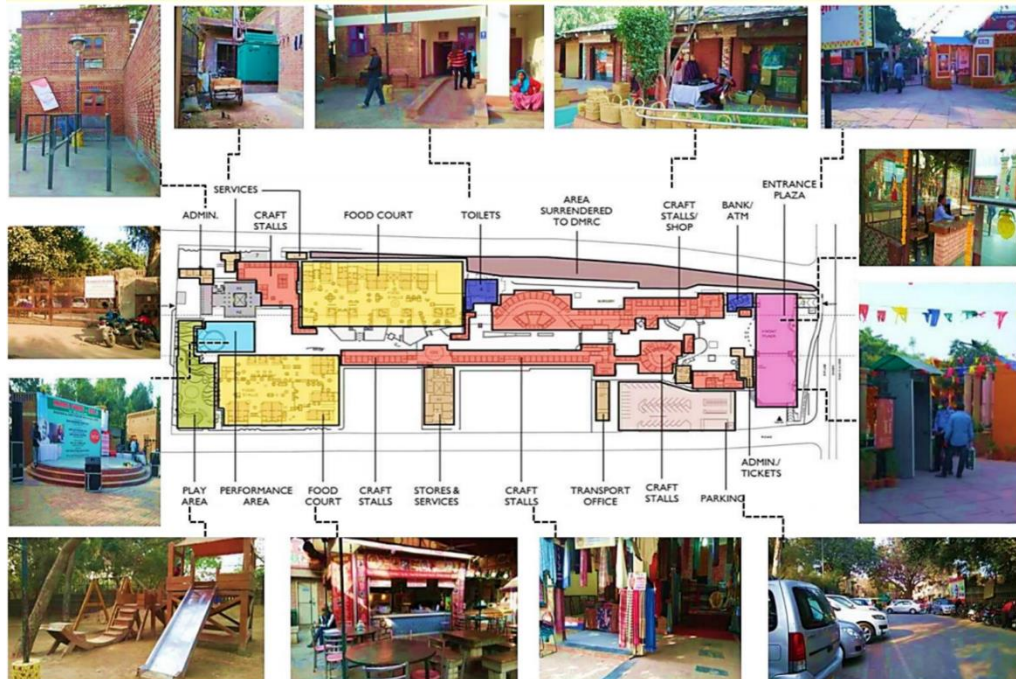


Figure 2. Functional zoning scheme of the Delhi Haat

Note – Compiled by the authors based on Gayathri, S. (2023)

As shown in Figure 3 the planning logic of the centre is built around a courtyard space (patio), which acts as a public core and provides connectivity between functions: the entrance area and public areas are oriented towards the square, while the exhibition and educational spaces form a ‘ring’ of interactions around the interior space. This composition allows for openness to visitors and the possibility of functional separation of flows, which is essential for craft and cultural-educational centres.

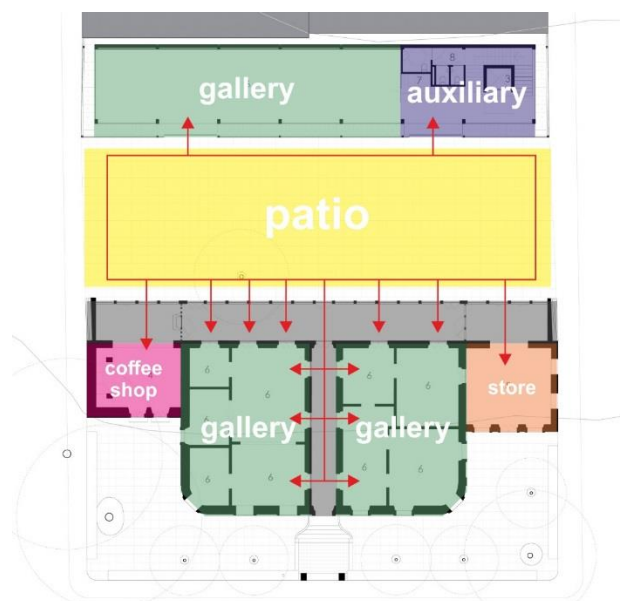


Figure 3. View of the courtyard at Ruthin Craft Centre (adapted by the authors)

Note – Compiled by the authors based on CNAD National Art, Crafts and Design Center / Ramos Castellano Arquitectos, 2022, December 6

The architectural shell of the new building is particularly significant: the façade is designed as an adjustable sun protection system that ensures light and air comfort and supports sustainable building operation principles (Ramos Castellano Arquitectos, n.d.). For the purposes of this study, the object is valuable as an example of a compact centre where functional integration is achieved through a clear spatial hierarchy (public core – exhibition and educational circuit – auxiliary functions) and a highly adaptable planning solution.

Analysis of domestic case-studies

The Schoolchildren's Palace in Astana is a completed cultural and educational complex, the architectural design of which has been published with planning diagrams and architectural solutions (Palace of Schoolchildren / Studio 44 Architects, 2019, March 8). Although the facility is not a specialised craft centre, it is typologically similar to the objects under study in terms of the principle of integrating educational, public and studio functions into a single architectural and planning structure. The functional zoning scheme (Fig. 4) of the building is based on the separation of a public core and functional blocks, including studio and training rooms, which allows it to be considered an example of a compact year-round centre.

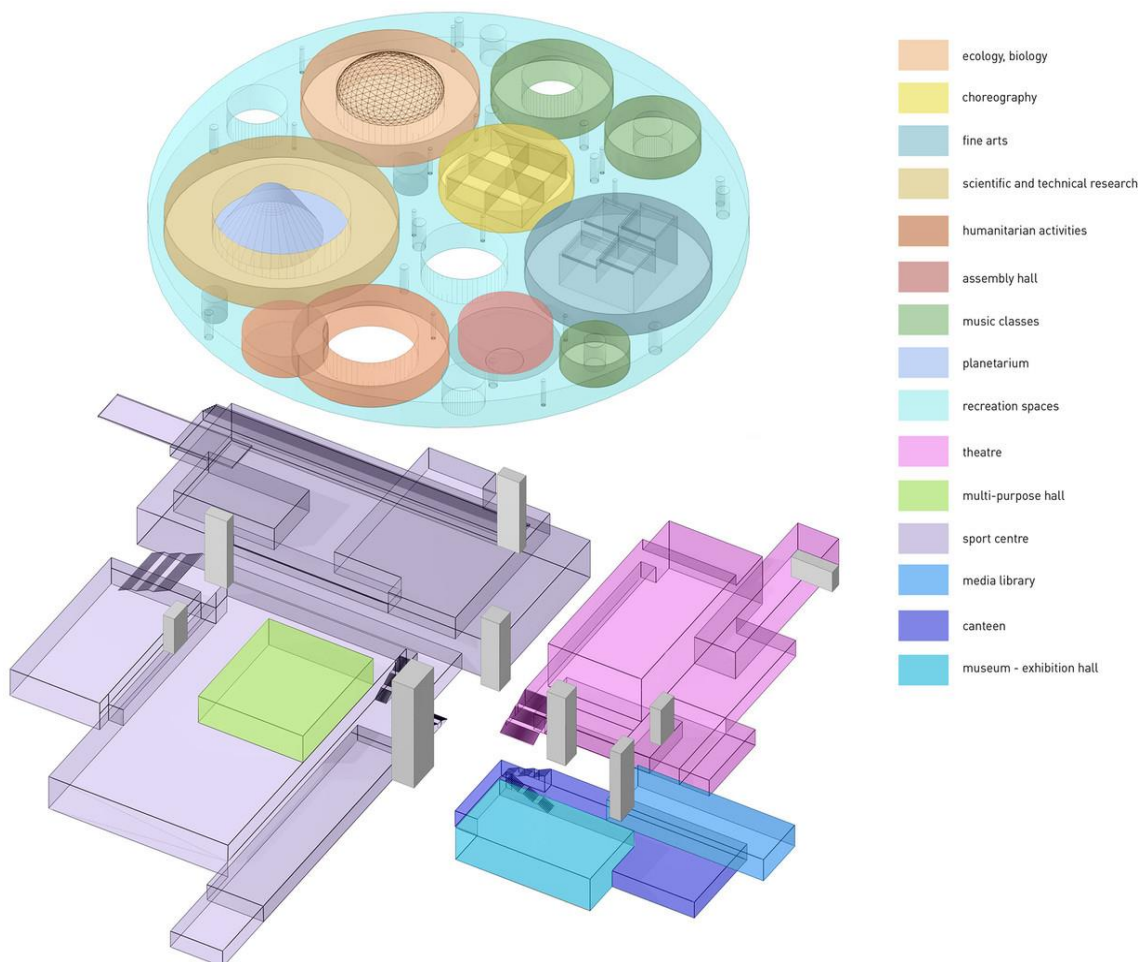


Figure 4. Functional zoning axonometry of the Palace of Schoolchildren

Note – Compiled by the authors based on Palace of Schoolchildren / Studio 44 Architects, 2019, March 8

The use of this facility in the study allows us to analyse domestic experience in organising sustainable educational and creative spaces with a clear functional hierarchy and adaptive planning structure.

A new stage was marked by the construction of capital craft complexes as part of tourist clusters. A striking example is the recently opened Craftsmen's Town in the city of Turkestan (Fig. 5). This facility, officially launched in September 2025, is declared to be the centre of craftsmen of the entire Turkic world. Its creation coincided with Turkestan receiving the status of 'City of Craftsmen' from the World Crafts Council – the first in Central Asia (STAN.KZ, 2025). As can be seen from the example of Turkestan, a modern centre for folk crafts can reach the scale of a cultural and tourist cluster. The craftsmen's town is a 2.5-hectare complex comprising a number of different areas. It is reported that the complex consists of eight main functional areas and includes 20 workshops (for various types of crafts – felting, wool processing, weaving, ceramics, woodworking, leather, carpet weaving, etc.), exhibition halls, two showrooms for displaying and selling products, a restaurant, a hotel and other tourist infrastructure. Such a rich functional content turns the centre into a self-sufficient facility where craftsmen can not only work but also live during sessions (hotel), and visitors can spend the whole day learning about crafts and relaxing. The layout of the Turkestan craft town is divided into rows of workshops (probably forming a kind of 'craftsmen's street'), covered exhibition and fair spaces (an oriental bazaar), and service facilities. An important part of the complex are the open areas for events: during the opening, 100 potters simultaneously made jugs, and there were ethnic fashion shows and concerts (STAN.KZ, 2025). The architectural appearance of the complex is consistent with the historical context of Turkestan (probably with elements of traditional Eastern architecture, which would correspond to the status of the spiritual capital of the Turkic world).



Figure 5. Bird's-eye view of the craftsmen's town in Turkestan

Note – Compiled by the authors based on STAN.KZ (2025)

Functional and planning analysis shows that the Turkestan complex is primarily oriented towards mass visitors and cultural tourism. The educational function is mainly implemented through short-term master classes, which limits the potential for in-depth professional training. This example demonstrates the strengths of the pavilion-cluster model and at the same time highlights the need to balance the tourist function with sustainable craft production.

Comparative analysis of domestic and foreign analogues. A comparative analysis of domestic and foreign folk craft centres was carried out on the basis of a single set of criteria ensuring the comparability of the architectural, planning and functional characteristics of the facilities. The following analytical parameters were used: type of facility implementation (adaptation of an existing building or new construction), planning scheme, composition of functional areas, principles of organising visitor and craftsman flows, degree of demonstration of the craft process, operational model, and focus on tourist activities. For clarity and systematisation of the data obtained, the results of the comparison are presented in Table 1, which summarises the key characteristics of the analysed domestic and foreign analogues. The table allows us to trace the relationship between the architectural organisation of the facilities and their functional priorities.

Table 1. Comparative analysis of domestic and international craft centres

Craft centre / Object	Type of implementation	Planning scheme	Production (workshops)	Educational function	Exhibition / trade
Ruthin Craft Centre	Purpose-built cultural craft centre (reconstruction and extension)	Perimeter layout around internal courtyard	Permanent professional workshops	Formal education programs, studios	Permanent galleries and shop
CNAD National Art, Crafts and Design Center	Cultural craft centre based on adaptive reuse and new construction	Courtyard-based hybrid scheme (historic building + new volume)	Permanent professional workshops	Educational programs and workshops	Exhibition spaces integrated into public circulation
Delhi Haat	Government-initiated open-air craft complex	Pavilion-based open-air layout with linear pedestrian routes	Demonstrational and seasonal workshops	Limited (short-term master classes)	Strong emphasis on trade and craft fairs
Craftsmen's Town, Turkestan	Large-scale craft and tourism cluster	Pavilion-based clustered layout forming "craft"	Permanent and demonstration workshops	Limited (mainly master classes)	Exhibition halls and market
Palace of Schoolchildren	Multifunctional cultural and educational complex	Compact block-based layout with central public core	Studio and workshop spaces adaptable for craft activities	Systematic educational programmes for children and youth	Systematic educational programmes for children and youth

Note – Compiled by the authors based on a comparative analysis of architectural descriptions, functional programmes and official information materials of domestic and international craft centres (Ruthin Craft Centre, CNAD National Art, Crafts and Design Center, Delhi Haat, Craftsmen's Town in Turkestan, and the Palace of Schoolchildren).

Comparison of layout plans and architectural solutions. An analysis of layout plans shows that the choice of spatial organisation for a folk crafts centre is directly related to its functional focus and operating mode. As can be seen from Table 1, foreign centres of an institutional type are mainly implemented in the form of compact block or perimeter schemes with an internal

courtyard, which ensures year-round operation, clear zoning and controlled interaction of visitors with the craft process. Pavilion and cluster layouts, typical of facilities focused on tourism and events, demonstrate a different logic of space organisation. In such complexes, workshops and shopping pavilions form a visitor route similar to street space, which increases the spectacle and audience engagement. However, as the comparison in Table 2 shows, such schemes require additional measures to ensure safety and climatic comfort and are less suitable for a systematic educational process. Domestic experience demonstrates the predominance of pavilion-cluster solutions in tourist areas and adapted spaces in urban conditions, which indicates the absence of a unified typological strategy and the need to develop one.

Table 2. Relationship between planning scheme and functional priorities

Planning scheme	Dominant functions	Advantages	Limitations
Compact block	Education, permanent production	Year-round operation, controlled environment	Limited expansion, complex separation of “clean” and “dirty” processes
Pavilion / cluster	Tourism, events, trade	High visibility, visitor engagement	Seasonal use, safety and climate constraints
Perimeter with courtyard	Exhibition, education, demonstrations	Clear orientation, public core, visual links	Requires larger site, higher construction cost
<i>Note – Compiled by the authors based on a comparative synthesis of planning schemes and dominant functional characteristics identified in the analysed craft centres.</i>			

Comparative analysis of the functional composition of centres. A comparison of functional content revealed a consistent set of areas present in most of the analysed facilities, but with varying degrees of development.

– A production area is mandatory in all cases, but its role varies. In foreign institutional centres (Ruthin Craft Centre, CNAD National Art, Crafts and Design Centre), workshops function as permanent workspaces for professional craftsmen. In pavilion complexes (Delhi Haat, Turkestan), workshops are often of a demonstration or mixed nature, geared towards short-term stays by craftsmen.

– The educational function is most fully represented in compact year-round centres, where there are separate classrooms and training programmes. In pavilion complexes, training is usually limited to master classes for visitors and does not form a sustainable system of knowledge transfer.

– An exhibition and trading area is present in all the facilities analysed and plays a key role in their economic sustainability. However, the analysis shows a difference in its location: in institutional centres, it is integrated into the public core of the building, while in cluster complexes it is often located in separate pavilions or open fairgrounds.

– Event and demonstration spaces (halls, stages, open areas) are critical for tourist-oriented centres. Their presence directly correlates with the scale of the facility and the intensity of visitor traffic.

Organisation of visitor flows and interaction with the craft process. One of the key analytical findings was the identification of different approaches to the organisation of visitor and craftsman flows. In foreign institutional-type centres, controlled interaction prevails: visitors have visual access to the craft process but do not disrupt the production regime. This is achieved through glazing, galleries, clearly defined routes and spatial separation. In pavilion complexes,

interaction is more direct: visitors can freely enter workshops, communicate with craftsmen and participate in the process. Analysis shows that this format enhances tourist appeal, but increases safety requirements and limits the possibility of complex or dangerous technological operations. For Kazakhstan, this conclusion is of fundamental importance: when developing standard solutions, it is necessary to determine in advance the permissible level of visitor involvement in the craft process and to design workshops and routes accordingly.

Interim analytical conclusions. A comparative analysis of domestic and foreign analogues allows us to formulate a number of key provisions:

- There is no universal planning scheme suitable for all contexts; the choice of model depends on climatic conditions, scale and functional priorities of the centre.
- Compact block and perimeter schemes demonstrate the greatest sustainability for year-round operation and educational functions.
- Pavilion-cluster complexes are most effective in tourist areas, but require additional infrastructure to ensure safety and systematic training.
- In all the cases analysed, the need for multifunctionality and transformable spaces as a condition for the economic and social sustainability of the centre is confirmed.
- A hybrid model combining a compact public core with the possibility of expansion in the form of pavilions or courtyard spaces is relevant for Kazakhstan.

Identification of typological models of folk craft centres

A comparative analysis of domestic and foreign analogues of folk craft centres has identified three stable typological models that are formed as a result of recurring combinations of planning schemes, functional composition, operating modes and the nature of visitor interaction with craft production. These models (Table 3) summarise the results of the analysis presented in Tables 1 and 2 and reflect the most common architectural and planning approaches.

Table 3. Typological models of folk craft centres

Typological model	Planning scheme	Dominant functions	Mode of operation	Visitor interaction	Typical context of implementation
Model I. Compact year-round centre	Compact or perimeter-based	Production, education, exhibition	Year-round	Controlled, visual access	Large cities, educational and cultural institutions
Model II. Pavilion-cluster complex	Pavilion or cluster-based	Tourism, trade, events	Seasonal / event-based	Direct, immersive	Tourist destinations, cultural clusters
Model III. Adaptive multifunctional space	Flexible, non-fixed	Exhibitions, fairs, workshops	Episodic / transitional	Variable	Small and medium-sized cities, initial stage of development

Note – Compiled by the authors based on the comparative analysis and typological classification of domestic and international craft centres presented in Tables 1, 2.

Typological model I — compact year-round centre (institutional model). This model is characterised by a compact or perimeter layout with a clearly defined public core and controlled access to production facilities. As a rule, it is implemented in the form of new construction or reconstruction of existing buildings and is designed for year-round operation. Production workshops in such centres are used as permanent workspaces for professional craftsmen, and educational and exhibition functions are integrated into the architectural structure of the complex. The visual accessibility of the craft process is ensured by glazing, galleries or specially organised routes, which increases the educational and demonstration value of the facility while

maintaining the production regime. This model is characterised by a high degree of sustainability and the greatest potential for the systematic transfer of craft knowledge.

Typological model II – pavilion-cluster craft complex (tourism-oriented model). The pavilion-cluster model is formed as a set of spatially separated workshops, exhibition pavilions and public areas, connected by pedestrian routes. It is mainly used in tourist areas and is focused on event-based activities. The production function within this model is mixed in nature and often combines the permanent work of craftsmen with demonstration formats. The educational component is usually limited to short-term master classes. The main advantage of this model is the high degree of visitor involvement and the spectacular nature of the craft process, but its operation is largely dependent on seasonal factors and requires increased attention to safety and climate comfort issues.

Typological model III – adaptive multifunctional space (transitional model). The third model is based on the adaptation of existing buildings and is characterised by a high degree of spatial flexibility. Such centres use one or more transformable spaces that alternately serve as exhibition halls, trading areas, workshops and educational spaces. Despite the effectiveness of this model in the initial stage of the revival of craft practices and the relatively low level of capital costs, its long-term sustainability is limited by the lack of specialised engineering and production infrastructure. As a rule, such centres play a transitional role and may eventually transform into more structured typological forms. The identification of these models confirms the possibility of systematising the diversity of existing solutions within a limited typological set, which creates the conditions for architectural unification without losing contextual specificity.

Unified functional and planning structure of folk craft centres

Despite differences in typological models, the analysis revealed a stable functional framework characteristic of most folk craft centres. This made it possible to formulate a unified functional and planning structure applicable to facilities of various sizes and purposes. This structure is based on a public core that includes exhibition, retail, and event and demonstration spaces. It serves as the main hub for distributing visitor flows and provides orientation within the centre's structure. Adjacent to the public core are production and educational areas, which can be spatially integrated or partially isolated depending on the permissible level of visitor interaction with the craft process. Administrative, utility and service premises form a supporting contour that ensures the efficient operation of the facility. The fundamental principle of the unified structure is the combination of functional differentiation and spatial unity. Individual zones are designed taking into account specific requirements (noise, safety, microclimate), while their interconnections ensure flexible use and transformation of the space. The analysis showed that such a structure can be implemented in various planning schemes – compact, pavilion or perimeter – while maintaining the overall logic of functioning. An important result is the possibility of scaling and modular development of centres. The number of workshops, the size of the public core and the degree of development of the service infrastructure may vary, but their mutual location and functional connections remain unchanged, which creates the basis for the standardisation of design solutions.

Applicability of the identified models in the conditions of the Republic of Kazakhstan

The applicability of the identified typological models in the conditions of the Republic of Kazakhstan is determined by regional, climatic and socio-economic factors. The compact year-round model seems to be the most appropriate for large cities and regions with a cold climate, where stable operation of centres and development of educational programmes are required. A controlled environment and stationary infrastructure are consistent with the objectives of professional training of craftsmen and institutional support for crafts. The pavilion-cluster model is most appropriate for southern regions and tourist centres, where favourable climatic conditions and seasonal tourist flows create the conditions for the use of open and semi-open spaces. In these

conditions, folk craft centres can function as elements of cultural and tourist clusters, strengthening regional identity and the attractiveness of the territory. The adaptive multifunctional model remains relevant for small and medium-sized cities, especially in the early stages of craft infrastructure development. It allows for the gradual development of the functional content of centres and reduces investment risks, while maintaining the possibility of further transformation.

Overall, the results of the study indicate the advisability of a hybrid approach combining elements of different typological models. The unified functional and planning structure identified in the analysis can serve as a basic framework for the design of folk craft centres in Kazakhstan, taking into account regional and cultural characteristics.

Standardisation and architectural flexibility

The results obtained indicate that architectural standardisation of folk craft centres should not be perceived as the unification of artistic image or the loss of local identity. Standardisation in this context implies the formation of a minimum functional and spatial framework that ensures the quality, safety and sustainability of the facilities. Within this framework, architectural solutions, choice of materials and artistic techniques may vary depending on local traditions and natural and climatic conditions. This approach allows folk craft centres to be viewed as elements of a broader system of cultural, educational and tourist development in the regions. For Kazakhstan, which is characterised by considerable diversity in its regions and craft traditions, the proposed model of combining standardisation and adaptability appears to be the most promising. It ensures the reproducibility of design solutions while preserving their cultural expressiveness and functional efficiency.

CONCLUSION

The study achieved its goal of identifying and systematising the architectural, planning and typological principles underlying the formation of folk craft centres in the Republic of Kazakhstan based on a comparative analysis of domestic and international experience.

It has been established that folk craft centres are a necessary element of the cultural, educational, and socio-economic infrastructure, ensuring the preservation of intangible cultural heritage, the transfer of traditional knowledge, and the involvement of society in the processes of actualising craft practices. The relevance of their development in Kazakhstan is determined by a combination of cultural, educational and economic factors, including the tasks of strengthening national identity, supporting small businesses and developing cultural tourism.

As a result of a comparative analysis of domestic and foreign architectural analogues, three basic typological models of folk craft centres were identified:

- a compact year-round centre focused on continuous production and educational activities;
- a pavilion-cluster craft complex focused primarily on tourism and events;
- an adaptive multifunctional space based on existing buildings and applicable in the early stages of craft infrastructure development.

The identification of these models made it possible to systematise the variety of existing solutions and form a typological basis for further architectural unification.

An analysis of functional and planning solutions revealed a stable set of functional areas, including production workshops, educational premises, exhibition and fair spaces, demonstration and event areas, as well as an administrative and service block. The repetitiveness of these elements and the nature of their spatial interrelationships made it possible to formulate a unified functional and planning structure for the folk crafts centre, based on a combination of a public core, a production and educational circuit, and auxiliary service areas.

During the study, principles for the architectural unification of folk craft centres were formulated, including the universality and transformability of planning solutions, functional

zoning taking into account the safety requirements and technology of craft processes, reflection of national and regional identity in the architectural image, mandatory inclusion of educational and exhibition components, as well as orientation towards the principles of sustainable development and phased formation of objects. The implementation of these principles allows for the creation of standard or reusable design solutions without losing cultural expressiveness and functional efficiency.

The applicability of the identified typological models in the conditions of the Republic of Kazakhstan has been substantiated, taking into account regional, climatic and socio-economic factors. Compact year-round centres are considered most appropriate for large cities and educational clusters, pavilion-cluster complexes for tourist areas in southern regions, and adaptive multifunctional spaces for small and medium-sized cities in the early stages of craft infrastructure development. The most promising direction is a hybrid approach that combines elements of different typological models within a single functional and planning structure.

The practical significance of the research results lies in the possibility of using them in the development of architectural concepts and project documentation for folk craft centres, as well as in the formation of methodological recommendations and regulatory requirements for these facilities. The conclusions can be applied in the activities of relevant authorities, design organisations and educational institutions, as well as serving as a basis for further research in the field of architectural typology of cultural and educational facilities.

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REFERENCES

- Arynov K., Zhaksylykova L., Chernysh N., Chekayeva R. & Khvan Y. (2022). A basis for creating educational and production centers and folk applied craft centers in the settlements of Kazakhstan. *ISVS e-journal*, 9(5), 291–302. http://isvshome.com/pdf/ISVS_9-5/ISVS_9.5.20_Aryonov.pdf
- Bullen P.A. & Love P.E.D. (2011). Adaptive reuse of heritage buildings. *International Journal of Building Pathology and Adaptation*, 29(5), 411–428. <https://doi.org/10.1108/02630801111182439>
- Carr J. & Dionisio M. R. (2017). Flexible spaces as a “third way” forward for planning urban shared spaces. *Cities*, 70, 73–82. <https://doi.org/10.1016/j.cities.2017.06.009>
- Chatzigrigoriou P., Nikolakopoulou V., Vakkas T., Vosinakis S. & Koutsabasis P. (2021). Is architecture connected with intangible cultural heritage? Reflections from architectural digital documentation and interactive application design in three Aegean islands. *Heritage*, 4(2), 664–689. <https://doi.org/10.3390/heritage4020038>
- CNAD National Art, Crafts and Design Center / Ramos Castellano Arquitectos. (2022, December 6). ArchDaily. Retrieved January 10, 2026, from <https://www.archdaily.com/993254/centro-nacional-arte-artesanato-e-design-cnad-ramos-castellano-arquitectos>
- Evans G. (2009). Creative cities, creative spaces and urban policy. *Urban Studies*, 46(5–6), 1003–1040. <https://doi.org/10.1177/0042098009103853>
- Gayathri S. (2023). Evaluating the parameter of visibility adopted for CPTED for user safety in public open space of Haat Bazar: Isovist and VGA. *Qeios*. <https://www.qeios.com/read/KHDE9I>

- Hillier B. & Hanson J. (1989). *The social logic of space*. Cambridge University Press. https://books.google.kz/books/about/The_Social_Logic_of_Space.html?id=-_0LBAAAQBAJ
- Jokilehto J. (2005). Definition of cultural heritage: References to documents in history. ICCROM Working Group “Heritage and Society”, January, 4–8. <https://www.yumpu.com/en/document/view/7749207/definition-of-cultural-heritage-references-to-cif-icomos>
- Liu C., Gan H. & He M. (2025). Evaluating the flexibility of rural public cultural spaces based on polyvalence theory: A case study of Xiangyang Village, Shanghai. *Land*, 14(6), 1177. <https://doi.org/10.3390/land14061177>
- Markusen A. (2006). Urban development and the politics of a creative class: Evidence from a study of artists. *Environment and Planning A: Economy and Space*, 38(10), 1921–1940. <https://doi.org/10.1068/a38179>
- Markusen A. & Gadwa Nicodemus A. (2014). *Creative placemaking: How to do it well* (Community Development Investment Review, Issue 02). Federal Reserve Bank of San Francisco. <https://www.frbsf.org/community-development/wp-content/uploads/sites/3/creative-placemaking-how-to-do-it-well.pdf>
- Montgomery J. (2003). Cultural quarters as mechanisms for urban regeneration. Part 1: Conceptualising cultural quarters. *Planning Practice & Research*, 18(4), 293–306. <https://doi.org/10.1080/1561426042000215614>
- Palace of Schoolchildren / Studio 44 Architects. (2019, March 8). ArchDaily. Retrieved January 10, 2026, from <https://www.archdaily.com/488674/palace-of-schoolchildren-studio-44-architects>
- PDSA Studio. (n.d.). Dilli Haat – INA. Retrieved January 10, 2026, from <https://psdastudio.com/dilli-haat-ina/>
- Ramos Castellano Arquitectos. (n.d.). Kulturzentrum auf den Kapverden / Cultural centre in Cape Verde [Project description]. DETAIL. Retrieved January 10, 2026, from https://www.detail.de/de_en/kulturzentrum-auf-den-kapverden-von-ramos-castellano-arquitectos
- Ruthin Craft Centre. (n.d.). Accessibility / Hygyrchedd. Retrieved January 10, 2026, from <https://www.ruthincraftcentre.org.uk/accessibilityhygyrchedd>
- Ruthin Craft Centre. (n.d.). Ruthin Craft Centre: The Centre for the Applied Arts. Retrieved January 10, 2026, from <https://eumiesawards.com/heritageobject/ruthin-craft-centre/>
- Schoof J. (2023, July 12). Cultural centre on Cape Verde by Ramos Castellano Arquitectos. DETAIL. Retrieved January 10, 2026, from https://www.detail.de/de_en/kulturzentrum-auf-den-kapverden-von-ramos-castellano-arquitectos
- Scott A. J. (2010). Cultural economy and the creative field of the city. *Geografiska Annaler: Series B, Human Geography*, 92(2), 115–130. <https://doi.org/10.1111/j.1468-0467.2010.00337.x>
- Sergison Bates Architects. (n.d.). Centre for the applied arts: Ruthin Craft Centre (Project). Divisare. Retrieved January 10, 2026, from <https://divisare.com/projects/261449-sergison-bates-architects-david-grandorge-ioana-marinescu-centre-for-the-applied-arts>
- Smith L. (2006). *Uses of heritage* (1st ed.). Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9780203602263>
- STAN.KZ. (2025, September 26). V Turkestane otkrylsya tsentr remeslennikov tyurkskikh... Available at: <https://stan.kz/v-turkestane-otkrilsya-centr-remeslennikov-tyurkskih-st-423937/>
- Амангелдіқызы Р., Амандықова Д.А., & Tokajuk A. (2023). Народные художественные промыслы Казахстана: концепция реновации промышленных зданий. *Вестник Казахской головной архитектурно-строительной академии, Сәулет және дизайн*, № 1 (87). https://vestnik.kazgasa.kz/frontend/web/uploads/personal-documents/1678879411_nwbllld.pdf
- // Amangel'dikyzy R., Amandykova D. A., & Tokajuk A. (2023). Narodnye khudozhestvennye promysly Kazakhstana: kontseptsiya renovatsii promyshlennykh zdaniy [Folk arts of Kazakhstan: A concept for renovation of industrial buildings]. *Vestnik*

Kazakhskoi glavnoi arkhitekturno-stroitel'noi akademii. Säulet jäne dizain, 1(87).
https://vestnik.kazgasa.kz/frontend/web/uploads/personal-documents/1678879411_nwbIld-.pdf (In Russ.).

Степанчук А.В. (2016). Особенности архитектурного формирования объектов культурного туризма с ремесленно-креативной функцией. CyberLeninka. <https://cyberleninka.ru/article/n/osobennosti-arhitekturnogo-formirovaniya-obektov-kulturnogo-turizma-s-remeslenno-kreativnoy-funktsiei>
// Stepanchuk A.V. (2016). Osobennosti arkhitekturnogo formirovaniya ob"ektov kul'turnogo turizma s remeslenno-kreativnoi funktsiei [Architectural features of cultural tourism objects with a craft-creative function]. CyberLeninka. <https://cyberleninka.ru/article/n/osobennosti-arhitekturnogo-formirovaniya-obektov-kulturnogo-turizma-s-remeslenno-kreativnoy-funktsiei> (In Russ.).

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