Abstract. In this research, based on the analysis of the current experience of the architectural organization of spiritual-retreat centers, the main tendencies and requirements for interior design of these structures were discovered. The principles and recommendations for making internal arrangements of space of the spiritual-retreat centers are suggested.

Key words: spiritual-retreat centers, principles, internal arrangements

1. Introduction

The key to the successful functioning of any building is the harmoniously combined complex of all structure elements of the architectural space – building massing, landscaping and outfitting of the interior space of the building.

The factor that determines the popularity and attendance of any building is the visual comprehension. The world's sacred architecture exposes the unique and original solutions that turn out to be original visiting cards of its localities. Unlike with the temple architecture, that still is the subject of the certain canon, the architecture of the spiritual-retreat centers gives the architects much more opportunities for imagination and experiments, that definitely should be used. The task of an architect is to create a coherent piece with the harmonious combination of internal functional arrangement and external envelope.

The building of the spiritual-retreat centre, accumulating a wide range of social functions, is intended to ensure comfortable stay of visitors and unhindered implementation of all functional processes. The internal arrangement of space plays an important part in this aspect.

2. Analysis of recent research and publications

Such scientists as: Cherniavskyi [1], Linda S. [2], Novykova E. [3], Timokhin V. [4], Starmar A. [5], Ustyn V. [6] and others dedicated to the general research on the interior design of public buildings. Slieptsov O. [7], Stotsko R. [8], Bulychova T. [9], and others investigated the architectural arrangement of sacred centers, spiritual educational institutions and spiritual and educational centers as well.

However, the principles and tendencies of the internal arrangement of spiritual-retreat centers space are not sufficiently highlighted, and it determines the urgent character of this research.

3. Research findings

The analysis of the Ukrainian functioning experience of spiritual-retreated centers indicates the significant disadvantages and problems in this area, which are, primarily, caused by the insufficient funding of the religious and spiritual sphere in Ukraine. The majority of the Church's social processes are concentrated in unforeseen constructions: basements of temples, separate buildings of monasteries or redesigned buildings, the internal environment of which is unattractive for the target audience – space first of all for the young generation.
and is not intended for educational or recreational activities of the Church. Instead, the foreign practice of designing of the spiritual-retreat centers demonstrates the unique design solutions, modern textures, well-designed ways of lighting solutions, furnishing and interior decoration of the facilities.

Therefore, in order to create the profound recommendations for the finishing and arrangement of the internal space of the spiritual-retreat centers it is reasonable to analyze the main world trends of this sphere.

In the course of this research it was discovered that the interior of the modern spiritual-retreat centre should meet a number of requirements: economic, functional-technological, environmental, aesthetic, socio-demographic, ergonomic.[1]

**Economic** requirements allow applying the rational architectural solutions, constructive technologies, materials that will guarantee the cost reduction of construction and operation of the building.

The consideration of **functional and technological** requirements involves creating the appropriate functional and planning conditions that take into account the progress of new technological processes in building, as well as the possibility of re-planning, transformation and adaptation to new functions.

The essence of **ergonomic** requirements is the creation of comfortable psychophysiological and proper sanitary and hygienic conditions for visitors, based on the regulatory requirements of orientation, insolation, noise protection, etc. [1].

**Environmental** requirements are based on the use of techniques of ecological architecture, namely the use of environmental building materials, the introduction of renewable energy sources, the use of gardening in the interior, which in total provide a favorable and comfortable microclimate of the facilities.

The modern industry of building materials and technologies provides architects and designers with a wide range of opportunities to implement the most original ideas of interior arrangement of space and creating a unified stylistic and compositional harmony to meet the **aesthetic** demands of the society. In recent years, there is a tendency to use the stylized ethnic and cultural peculiarities of the territory for decorative interior design. It is a good practice to use elements and works of Ukrainian arts and crafts for internal arrangement of space of spiritual-retreated centre. Such elements of decor and interior objects will be absolutely attractive and interesting for visitors.

The facilities of the spiritual-retreat centers are focused on a number of important processes – recreation, communication, training, leisure, liturgical service, food, lodging, household and technological processes, which determine the formation of appropriate functional groups of facilities, each functional group requires separately selected techniques for design of the internal space.

While analyzing the world experience of modern spiritual-retreat centers organization, a number of main trends in the design of the internal space of these institutions have been identified (Fig. 1).

The interconnection of the functional organization of the facility with the volume-spatial internal arrangement of space is the characteristic feature of the arrangement of the spiritual-retreat centres and other public buildings. The interior space and its interior objects (equipment, furniture, means of art and landscape) are clearly connected with the designation of the building, while creating the necessary level of aesthetic-psychological comfort. (fig. 2) One characteristic feature of the interior of the modern spiritual-retreat centre is the harmony of the internal space and the external environment that interact with each other, filling the interior with air and light using the modern engineering solutions. [3] This feature is accentuated by the creation of atriums, winter gardens, the use of fragments of landscaping and water components in the internal arrangement of the space.

In addition, it is worth noting that institutions of this type are often visited by people with disabilities. That is why it is important to ensure unhindered ways of their movement (ramps, specially equipped bathrooms, elevators, etc.).

Another characteristic of the internal arrangement of the facility of the spiritual-retreat centre is the **provision** of flexible planning capabilities.

This principle allows creating the general-purpose facilities that can be adapted to various processes with the help of appropriate structural and composite materials (relocatable partitions, screens). The main purpose of flexibility and transformation is to ensure the adaptation of the architectural and planning organization to the new needs of society. Such flexible planning and space transformation opportunities are especially popular in the world experience concerned the public facilities. And, as the practice shows, such experience is successful, as it provides architects and designers with a wide range of opportunities to implement the most original design solutions for the internal arrangement of space.
No less important feature of the internal arrangement of space of spiritual-retreat centers is the **selection of color scale**. The color is one of the most important compositional and psychological means, which has special emotional properties that influence the mood, psychology and feelings of the visitor. [5] Special attention should be paid to the identification and selection of the harmonious color scale of the facilities and the interior objects of the space.

![Fig. 1. Principles of architectural internal arrangements of spiritual-retreat center space (author's proposal)](http://www.archdaily.com/)

Each functional group of facilities requires a carefully selected special color scale. It is reasonable to solve the recreational-leisure zone in bright colors (orange, green, yellow hues) (Fig. 2). Educational facilities should be light and pastel (Fig. 2). In decoration of the sacred core (of chapel), it is necessary to refrain from tartish combinations and to give a preference to natural textures (wood, stone, concrete, glass) and bright colors (white, gray beige) that will help on peace, rest, prayer (Fig. 2). Retreat and prayer rooms should be solved in the same manner.
Fig. 2. Interior solution of different functional zones of spiritual-retreat centre (author's proposal)
Images source: http://www.archdaily.com/
Unique textures and color combinations are achieved with a wide range of construction materials and technologies offered by the construction industry. When selecting materials, it is important to give preference to easy-to-use, safe and maximal ecologic materials to ensure a healthy and comfortable atmosphere in the building and to achieve the natural surface finish.

One of the most important designer techniques in the interior arrangement of the space of facilities, in particular the sacred core, is the use of natural and artificial lighting (Fig. 2). The modern experience of internal arrangement of the space of the sacred core demonstrates the original designer techniques of using of natural and artificial lighting to achieve a variety of effects: underlining the sacred symbolism (area light in the form of cross), creating a special spiritual atmosphere (game of light-shadow, use of stained glass windows), space planning, unique decorative elements (openwork decorated inserts on skylight), etc.

When selecting the lighting systems it should be taken into account its compliance with the functional process that will take place in the building. In particular, the facilities of educational or recreational zone require a lot of natural light (Fig. 2).

Green and sustainable design takes on the significant popularity in modern solutions of public buildings interior. This technique considers the use of natural textures and materials, unprocessed surfaces, planting elements and water components. Unity with nature, inner quietness and harmony, that can be achieved due to this technique, are especially currently important for the internal space of spiritual-retreat centers. Rooms for retreats and meditations should be decorated with large window openings that command a view of natural landscapes. Such kinds of technique expand the space visually, increase the level of comfort and erode the boundaries between architecture and nature.

The design solution, based on the inclusion in the design of works of art, provides the uniqueness of the interior. The harmony of art and architecture creates a unique effect. This technique satisfies also the need of the society in the spiritual and aesthetic education.

Works of decorative art holds the unique position among the artistic means involved in the formation of the internal space of institutions of public services. Decorative art is one of the oldest branches of artistic human activity, hence, the humanity has been surrounded by the products made of ceramics, textiles, and wood for a long time. It is their artistic level that reflects the level of nation culture and was closely related to the customs as well as national and ethnic peculiarities. [1]

Modern Ukrainian decorative art in its entirety and distinctly national identity has high aesthetic qualities and keep the touch with the traditions of folk art of the past, modern decorative art acquires new content, new properties and features. [10]

The obligatory interior feature of the facilities of the spiritual-retreat centre is the orientation towards the spiritual component (Fig. 2). The general style of the spiritual-retreat centre undoubtedly has the spiritual, sacred character, formed primarily due to the presence of a sacred core in the vicinity or in the structure of the institution. The sacred core, that is the chapel or prayer hall, occupying a large area and volume in the general structure of the building, presents to the architect the most of specific requirements of constructive, functional and canonical character. That is why the process of searching for architectural and artistic solution of the building should be based on the features of the sacral component, its tectonic, structural, volume-spatial features, which will determine the ultimate appearance of the institution.

In general, the formation of the architectural space of the institution (starting from the living room, recreational and leisure zones and completing with the landscape of the territory) must be conducted in a complex way with the aim to represent the specific features of this type of recreation to visitors, paying special attention to its spiritual component. This is to determine the special content and specifics of spiritually-retreat recreation. Such kind of approach will support spiritualization of the space and creation of an appropriate spiritual atmosphere that will reflect the specifics of this recreation.

For demonstration of the above-stated principles and means of artistic expressiveness of the interior of the spiritual-retreat centers, it is suggested to consider in more detail the project proposal of the spiritual-retreat centre in Pohonia village of Ivano-Frankivsk region, Ukraine (Fig. 3).

The building of the complex has a clear and modern shape, in which the modern day is aligned with tradition. The building is well adapted to the existing environment. The harmonious and unobtrusive shape of the building that apparently is coming out from the relief becomes dependent and independent at the same time.
The intention was based on the task of creating the new open and closed spaces with unique views in the territory of the pilgrimage centre.

**Fig. 3.** Spiritual-retreat centre in Pohonia village of Ivano-Frankivsk region, Ukraine (project proposal. Author – K. T. Holubchak)
The choice of stylistics, materials and color solutions of the interior was made on the basis of creating the harmonious conversation with the existing natural and architectural environment, in particular with the newly built wooden church occupying a dominant position in the territory.

The color of the wooden decoration of the building and the use of ornamented stained glass windows apparently is sending us to the origins of traditional wooden architecture, and at the same time the modern elements of facade decoration, namely, the large number of glazing and vertical concrete inserts create the unique bridge between traditions and modernity.

The whole complex is divided into two blocks connected to each other by the glass foyer. The interior of the spiritual-retreat centre is designed in a modern style, that is accentuated by a variety of modern interior decoration materials. The desire for geometry prevails in the interior.

Vertical colored stained glass windows give sacredness and majestic to the buildings. The sunlight that comes in through the stained glass windows returns into the colorful rays and creates the unique, spectacular effect inside the facilities.

An interesting component of the complex is the glass atrium on three floors, where the chapel, the sacred core of the building, is situated. The distinctive feature of the interior space of the building is the openness of the spaces, the absence of visual boundaries and the harmonious interaction of different functional spaces.

4. Conclusions

Summing up the analysis, it should be noted that modern experiments by architects with textures, colors, light and form plastic have formed a number of innovative architectural and designer techniques of expression of sacral in the buildings of spiritual-retreat centers. The internal space of the spiritual-retreat centers must combine the most modern innovative architectural solutions that will arouse admiration and interest of visitors, and at the same time must be subject to and harmonize with the existing complex of sacred buildings and the natural ensemble, emphasizing its integrity.

References
