Some Didactic Aspects in the Theory of Interior Design

Abstract

A new round of technical progress leeds to creation of new forms of buildings, and, consequently, the formation of new, often complex forms of domestic space that requires innovative approaches to interiors design. The article deals with didactic aspects of interior design theory. It focuses on the methodological principles of such formation. Method of teaching the theory of interior design proposed by an author is analyzed. Four groups of interior elements are considered. Practical results are presented.

Keywords: interior design theory, structuring of elements

Problem definition

Formation of professional esthetic environment in modern social and economic conditions requires a new system of knowledge capable to provide this process with the specialists characterized by innovative thinking and high level of culture. This may be solved through the means of modelling of theoretical material logical structure. Modelling in didactics is viewed as a means of integrative and differential approach aimed at systemic knowledge and skills formation, which is an important condition of quality of specialists training improvement, as a "means of presentation of structural elements and their interrelations, cognition of didactic process regularities". Instruction material modelling allows reproducing the research object, may change it so as learning of this instructional material provides new information about this object.

Logic of the academic subject, through the content area, allows unifying the task of understanding the theory or topic and, in necessary sequence, organizing the general skills adoption based on this knowledge.

One of the most efficient ways of achieving the knowledge consistency is the implementation of integrative approach to the instruction information selection. The research of conditions necessary for achievement the students' knowledge consistency, requires the analysis of the following three components: Structure of academic subject and fragmentation of its elements, scientific and educational content of the subject and the process of its learning. The basis of instruction material development considering these components is the successive skills based on the previous skills. In the process of such knowledge generalization the thinking independence is formed, and the learning methods influence the creativity in the design solutions.²

The course «Interior elements design» is aimed at students with the academic degree of Bachelor of Architecture with the basic skills in interior design, where the theory and practice are integrated within the design of residential and public premises.

As the goal of the interior design is a complex project based on a functional improvement, esthetic enrichment and psychological optimization of interior space, main objective is the integral combination of the interior elements into the unity, according to certain design objectives. Though, problematic is the invariant design-projecting with the determination of optimization factors. In selection of form, size, and organization of space it is necessary to take into account such factors as functional planning demands, technological peculiarities of construction, economic demands, expressivity of appearance and style. The interior design is always based on the architecture and its systemic characteristics. Therefore, it is currently important to implement the systemic approach in the interior design.

Development of design concept, as a rule, is positioned in the sphere of design ideas, produced with consideration of all conditions and necessary requirements. Based on their consideration and possible preliminary ranging or integration and following optimization either main idea or design objective is formed. In this event, in the design variants the following criteria will be obligatory, apart from the mentioned ones, measured efficiency indexes (for instance, certain materials of certain range); ergonomics (types of balances of the individual and space and its characteristics); aesthetic qualities - form, style (artistic image and corresponding associations, which will have a certain meaning for the interior user).

From the system analysis point of view, design process as well as technological process, may be considered as a complex system. In this case, the researched objects of these systems are determined as composed of separate parts connected by temporal, spatial, functional rela-

tions and integrally functioning due to the fact that each object has certain number of elements, where the operation of ones is closely connected with the functions of the others and is aimed at general function accomplishment.³ The difference between the design and technological processes is that the design process considers two projects – artistic and technical, and necessary element of its fulfillment is a perfect (in consideration of certain problems and determination of certain criteria) combination of their content-forming elements.

Presentation of basic material

Development of new forms of interior requires new approaches to the interior design, as the interior quality should comply with the quality of modern life.

Studying the stylistic advantages, implementation of natural and ecologically-safe materials, as well as professional understanding of ergonomics facilitates the creation of unique bright image. The formula of the projects success is a special attention to the details, separate elements providing for the space functional comfort.

In the theory of interior design an essential challenge is constituted by preliminary determination of the design objects structure and its visualization, and main objective is the determination of the final number of elements with their interrelations which should determine the relation between them.

On this issue the works of A.M. Sokhor⁴ are very actual, according to whom, structuring is a way of stable combination, interrelation of integral systems elements.

The structuring theory of interior elements suggested by the author of this article is based on the formation and systematization of the content, i.e. on its regulation, related with the separation of the groups corresponding to this content, and the components and relation between them within the groups. According to tis theory the interior elements structure may be subdivided into four basic groups:

- Constructive elements:
- Installation elements;
- Functional elements;
- Decorative elements.

The group of constructive elements includes the building constructions visible in the interior, dividing walls designed for special division of one or several premises and simultaneously – for heating and sound-insulation of separate zones, vertical communications – the stairs. In modern interior – stairs is the main vertical compositional axe, which is the initial point for formation of different interior levels: galleries, mezzanine floors, podiums, etc.

Winter gardens also belong to the group of constructive elements, as they are capable to alter the space, replenish or completely modify the purpose of premises. The attached or integrated winter gardens have become the integral part of many administrative buildings, business-centers, cultural, recreational, and entertainment centers, sport buildings, cottages, etc.

The group of interior installation elements is represented by the elements, construction systems or separate areas, for the operation of which the connection to certain supply systems is needed: water supply and sewage system, heat supply, electricity supply. This group also includes sanitary and technical appliances, and, correspondingly, sanitary conveniences and bathrooms, heating appliances, conditioners, illuminators and equipment for their control within the interior.

The interior functional elements are furniture and furniture structures.

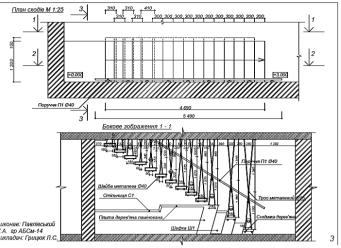
The group of decorative interior elements is formed by four subgroups: **elements of decoration and artwork**; textile; plants within the interior; water elements within the interior. The last three groups are formed by three principal decoration directions: textile design, phyto-design, and aqua-design.

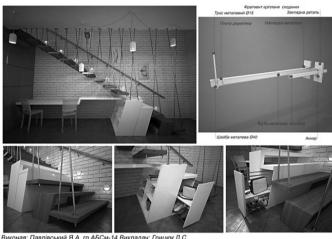
The consumer qualities of the interior depend upon the integral approach and consistence of all its elements – constructive, installation, functional, and decorative. The spatial interior composition is determined by planning and commonly recognized by the functional program. This, in its turn, influences the color solution, premises decoration, illumination, and planting. Functional zoning and visual segmentation of certain premises allows proceeding to the next stage – segmentation of primary and secondary compositional accents. The last stage of work on interior is decoration.

To understand the specific morphogenetic role of elements of each group the students are suggested providing graphical works at option: from the group of constructive interior elements – stairs or winter garden.

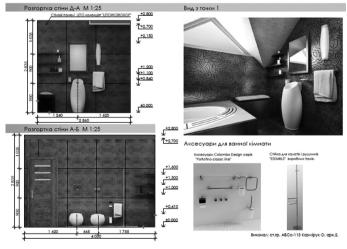
This graphical work is aimed at projecting of stairs in the residential or public building for certain purpose. Some compositional solutions presuppose using the open staircase in the interior, therefore the attention is focused on their form, proportions, decoration, selection of material for principal constructions, color solution. Enclosure type is selected depending upon the stairs type (specified in the task): straight, commode, spiral, curvilinear. According to the stair type, the constructive materials are selected (il. 1).

Other graphical work is the winter garden. The winter garden construction is a highly-technological combination of the systems of aluminum, reinforced-plastic or wooden profiles with the use of double glazing and implementation of modern technologies, such as automatic control of temperature and micro-climate, automatic glazing heating for the snow melting, electrochemical glazing. The integral components of this graphical work are as follows: winter garden special design – choice of constructive elements, form design, – membrane; space zoning; selection of materials for the decoration of floor, furniture, way of plants exposing; selection of shadowing elements.





il. 1. Sample of graphical work «Staircase design», student I. Pavlivskyi (archive of Architectural Design Department, Institute of Architecture, National University "Lviv Polytechnic")



il. 2. Sample of graphical work «Bathroom», student O. Kazmiruk (archive of Architectural Design Department, Institute of Architecture, National University "Lviv Polytechnic")

The graphical work on installation interior elements is aimed at the bathroom interior design in residential building or sanitary conveniences in the public building (hotel, office center, sport club, restaurant, etc.). This work is aimed at the interior style design (functional zoning, composition of sanitary appliances, furniture, equipment); selection of sanitary ceramics and accessories, furniture, materials for the decoration of principal elements (walls, floor, ceiling) according to the catalogues of leading manufacturers; light design of premises (il. 2).

Mixed group of construction and installation elements considers the SPA-pool or relaxation premises design – sauna. Depending upon the premises size and purpose the pool type is selected (skimmer or overflow) and its form is determined.

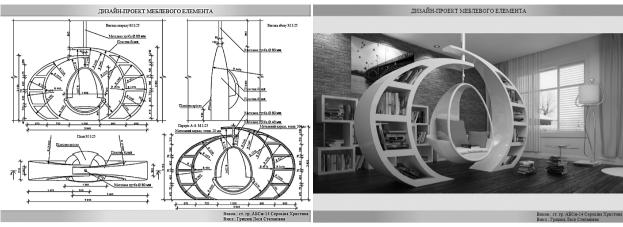
Special premises with the implementation of special construction and installation networks include saunas. Graphical work provides for the sauna design (steam sauna, sauna bath, infrared sauna – at option).

The chapter on interior functional elements considers the basis of principal furniture elements design – for sitting, lying, functional spaces and functional areas. The graphical work is aimed at the design of the functional furniture element for residential or public premises. This can be either bar counter, reception, sales counter, furniture divider, or room divider, etc. (specified in the task). According to the type of furniture element the construction and decoration materials are selected (il. 3).

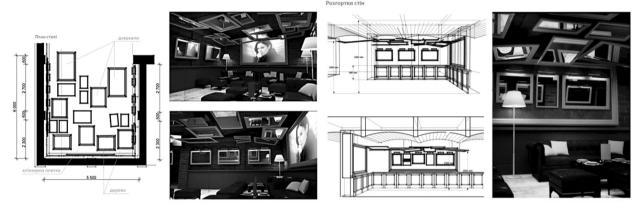
The chapter of the interior decoration elements considers the the wall and ceiling decoration design, water elements, phyto-design, thematic utilitarian and abstract installations design. Decorative elements complete the integral interior formation, give it a certain emotionally-psychological, associational and culturological meaning. The graphical work is aimed at the decoration of walls and ceiling in the public premises. Depending upon the purpose of premises the decorations style is selected as well as the types of decoration materials and coloristic. The graphical work integral elements are the style- and light-design of ceiling or walls, selection of decoration materials, decoration element design (il. 4).

Conclusions

The analysis of didactic approaches to the structuring of academic subject allows stating: complex, conscious mastering of skills and knowledge in any academic subject lies in the selection and optimization of the instruction material through its logical structuring. Support of instructions by didactic means facilitates the conscious understanding of complex professional situations, formation of the decision-making skills, application of knowledge and skills to the new situations.



il. 3. Sample of the graphical work «Furniture element», student Kh. Sorokina (archive of Architectural Design Department, Institute of Architecture, National University "Lviv Polytechnic")



il. 4. Sample of graphical work «Restaurant lounge ceiling decoration», student Kh. Badzian [3, p. 33–34]

The analysis of the design process determined the problematic issues in the interior design to solve which the systemic approach is needed accompanied by the appropriate theoretical support. Undoubtedly, all these complex solutions will sufficiently boost the motivation and design quality.

ENDNOTES:

- ¹ Chepelev V.I, Podlasy I.P. Teaching models // Computer-based teaching: Interdepartmental scientific collection. Ed.12. K.: Vyshcha shkola (High School) 1985. p. 3–10.
- Palamarchuk V.I. The role of visibility in the process of developmental teaching // The functions and structure of teaching methods. K.: Vyshcha shkola (High School), 1979. p. 109–118
 Dolnikova L.V., Tsubova O.L. Structuring the content of academic subjects as an important condition for improving the quality of specialists' training// National University "Lviv Polytechnic".
- ⁴ Sokhor A.M. Logical structure of instruction material. M.: Pedagogika (Pedagogy), 1974. 192 p.

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- [2] Dolnikova L.V., Tsubova O.L. Structuring the content of academic subjects as an important condition for improving the quality of specialists' training// National University "Lviv Polytechnic".
- [3] Hrytsyuk L., Pekartshuk O. Interior. Part II // National University "Lviv Polytechnic", 2011. 76 p.
- [4] Palamarchuk V.I. The role of visibility in the process of developmental teaching // The functions and structure of teaching methods. K.: Vyshcha shkola (High School), 1979.
- [5] Sokhor A.M. Logical structure of instruction material. M.: Pedagogika (Pedagogy), 1974. 192 p.