

ARCHITECTURE

FEATURES OF DESIGN OF RECREATIONAL INSTITUTIONS ON THE WATER IN THE STRUCTURE OF THE YACHT CLUB

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Introductions. The issue of arrangement of coastal areas as an urban planning object in the city structure is becoming increasingly important around the world. Stable, flexible alternatives in the form of new or adapted "hydro-bridges" on water in the form of floating platforms are offered; raised amphibious structures or structures for the creation and maintenance of water metropolises, hotels, villas, residential apartments, recreation centers, shopping malls, as well as golf courses and other open spaces. The river is the most important factor in shaping the urban image. Coastal and river architecture reflects the artistic and stylistic features of cities, forms the "facade of the city" and largely determines the spatial and compositional solution of embankments. In the large cities of the post-Soviet space there is an active construction of new and reorganization of existing yacht clubs, expansion of their functions and principles of organization, the creation of so-called recreational yacht clubs designed not only for yachtsmen but also for vacationers. In the general sense, a yacht club is a public or private organization that unites yachtsmen and collects contributions from them to the club's fund. Yacht clubs are aimed at protecting and servicing yachts and protecting the rights of yachtsmen. The complex of yacht club buildings must include a boathouse, workshops, berths for mooring and parking yachts, mechanisms for raising and lowering ships. The typology of recreational yachts is just being formed, so there are almost no recommendations for the design of

recreational complexes. At the same time, there is a rich foreign experience in the formation of the interior of recreational complexes on the water, including in the structure of the yacht club.

Aim. To determine the principles and methods of forming the interior space of the recreational complex in the structure of yacht clubs on the water. To generalize the experience of designing the interiors of recreational complexes, including in the structure of yacht clubs in the context of the urban environment, to identify current trends and basic conceptual approaches in creating their design.

Materials and methods. The work used methods of analysis of scientific sources and Internet resources, conceptual and implemented design solutions; generalization of domestic and foreign experience in the design and formation of recreational facilities on the water.

Results and discussion. Despite the different functions, the objects placed on the water have a common design scheme, which is represented by two components: a floating base and a superstructure. In shipbuilding, a similar type of structure was called a landing stage (from the French *Debarcadere*, *debarquer* – to unload, land). A landing stage is a floating pier, as well as a specially equipped vessel or pontoon for mooring ships to it. In shipbuilding, a landing stage is a non-self-propelled vessel on a reinforced concrete or steel base.

In modern floating structures, a pontoon base and the following volumetric solutions of superstructures are most often used: blocks, spheres, segments, streamlined shapes, prisms. The availability of components, their strength and lightness ensure the rapid construction of structures with the possibility of insulating the pontoon. Thanks to the filler and special treatment, the structure can rise along with the rise in the water level, and thanks to the fixation to the pillars placed on the sides (telescopic piles), it can remain in place. Based on the analysis of scientific sources and foreign and domestic experience in designing recreational facilities as part of modern yacht clubs, mixed near or on the water, a number of principles have been identified that can become the basis for developing the concept of their interior design: the all-season principle; the principle of multifunctionality; the principle of

climatic and functional compliance; the principle of social accessibility; the principle of cultural and environmental compliance; the principle of creating a psychologically comfortable and attractive space.

The all-season principle implies the availability of appropriate recreational infrastructure facilities that should be included in the recreational complex of the yacht club to ensure a variety of possible combinations when choosing types of recreation and leisure and to attract more vacationers regardless of the time of year.

The principle of all-season is directly related to the principle of multifunctionality, according to which recreational complexes on the territory of the yacht club are represented by public facilities, which, depending on the functional purpose, include the following premises: administrative, club, entertainment, for sports, temporary stay of people, food (restaurants, cafes), commercial premises (shops), educational premises (sailing schools), etc.

The principle of climatic and functional compliance involves the planning and distribution of functional areas of the interior, taking into account the natural aquatic environment: placing all technical areas inside, and recreational areas near the water. The location of a floating object in the situational plan is of particular importance due to its orientation to the cardinal points, which provides for the most beneficial use of climatic features, in particular sunlight and a better view of the environment. Most often, designers tend to place the building with a south-facing orientation. Also in floating buildings arranged along the coastline, there is a tendency to place an extended facade to the water landscape.

The principle of social accessibility of the environment of the recreational complex in the structure of yacht clubs involves the creation of a comfortable space for people of all ages to stay on the territory of the landing stage, that is, the creation of an inclusive space. The accessibility of the environment for all groups of citizens, including those with limited mobility, means ensuring the safe and accessible movement of these groups within the complex and on the territory of the yacht club; the presence of tactile orientation devices and the presence of railings along the fence, ramps, stairs for the visually impaired. Places for the disabled in public toilets

must be provided at the design stage.

The principle of cultural and environmental compliance (preservation of the cultural landscape) should be understood as the introduction of a floating structure into the environment without harming the environment. A good example of this approach is the reconstruction project of the «Otrada» yacht club in the Primorsky district of Odessa, where the conditions for preserving the section of the Health Route with all green spaces were taken into account. The site borders on the east with the Black Sea, construction is expected only within the territory of the existing yacht club. The water sports club is designed in 6 levels. The first level is a boathouse for storing boats or guest parking during the operation of the boats. All other floors are intended for crews and ship owners – 192 rooms. The club includes a specialized exhibition complex and a restaurant with an open summer area. To create a psychologically comfortable and attractive space for a recreational complex in the structure of a yacht club, it is possible to introduce various design tools and techniques that are widely used today for recreational facilities near the water. Typical techniques are the visual combination of internal (interior) and external (natural) environments; visual techniques based on displaying the properties of water or water objects in the interior. To maintain maximum openness, “transparency” of space when organizing the territory of the landing stage, it is possible to create terraces, open spaces with the introduction of landscape design techniques, the formation of additional recreational space, the orientation of buildings perpendicular to the coast line, and the reduction in the number of floors in buildings.



**Fig. 1. a) glass floor; b) bulk coating; c) the use of fountains
as a decorative element of the interior**

The effect of merging interior spaces with the environment (Fig. 1) can occur with a variety of planning, compositional and decorative means: 1) reducing the number of blank walls with a predominance of large areas of glazing (restaurant "Veranda on the river", underwater hotel "Poseidon" and etc.); 2) application of various decorative receptions in a composition of facades and application of perforation for walls, ceilings, partitions, decorating of pipes, technical hatches and radiators; 3) the use of materials with reflective or transparent properties (glass, mirror surfaces, stained glass); 4) the use of direct penetration of water into the building; artificial introduction or visual penetration of water through transparent surfaces (for example, the glass floor of a floating object); 5) in the interior space bulk decorative planes are actively used; fountains and waterfalls are widely used, it is a complex hydraulic structure that can be of different shapes and supplemented with various special effects (light, music, etc.).

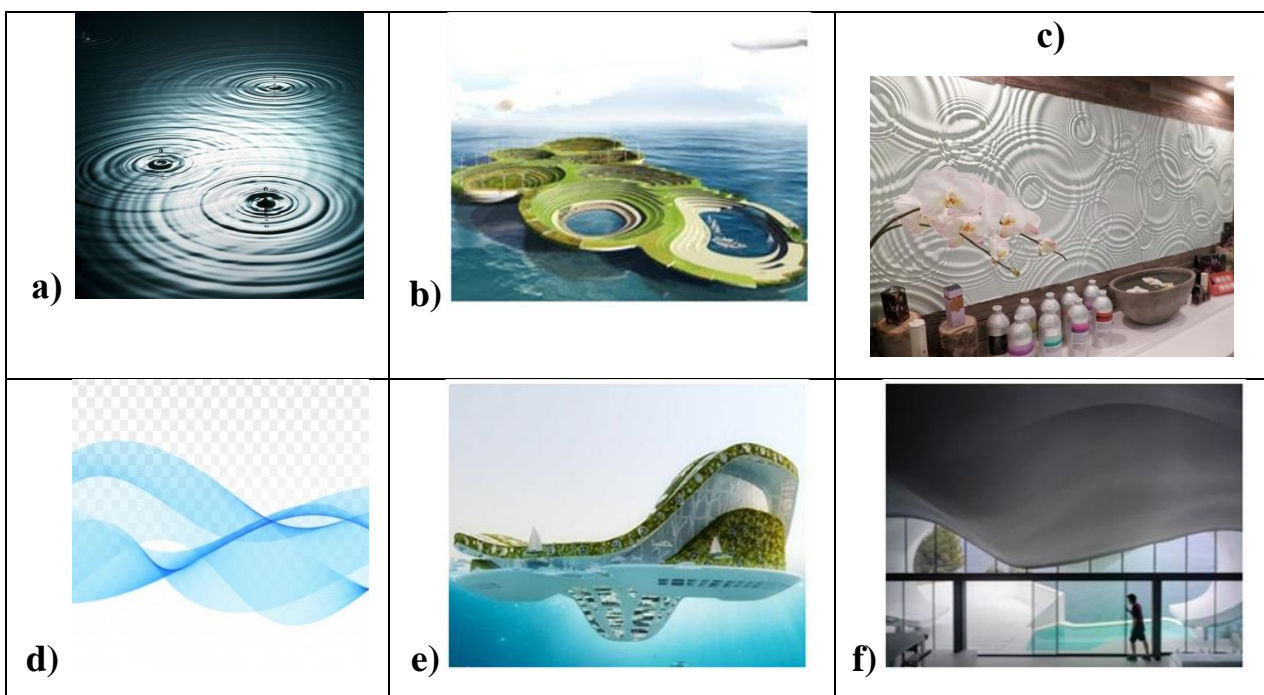


Fig. 2. a) circles on the water; b) the project of the Chinese company "CCCC and AT Design Office"; c) wall panels; d) image of the wave; e) project "Lilipad", arch. Vincent Callebdo; f) the shape of the ceiling structure in the form of a wave

Another figurative solution in the interior of a floating object is the imitation of various properties of water, such as transparency, smoothness, fluidity, specularity,

monochrome, etc. (Fig. 2) This can be reflected both in the shaping of the object and in the materials used in it. The design image can come from various physical states of water: solid, liquid and gaseous, as well as phenomena caused by its oscillation (drops, water circles, bubbles, splashes, waves, jets, etc.). Of particular interest from the point of view of design compositional solutions are forms formed on the basis of excellent aggregate states of water.

Conclusions. Based on the results of the study, the main principles of interior design of recreational complexes on the water are summarized, which can be applied in the design of recreational complexes in the structure of yacht clubs, and methods of forming their design in the context of the environment are identified. The main design approaches to the formation of the interior of a recreational complex in the structure of yacht clubs in the context of the environment are determined. These materials can be used as guidelines for the interior design of a recreational complex on the water in higher and secondary educational institutions in the field of design, as well as for practicing designers on similar projects.