

Exploration, knowledge and practice of architectural design creation Peiyu Bao

Bao Pei-yu

Department of Architecture and Civil Engineering, North China University of Science and Technology, 063009

Abstract: In the present situation of architectural design in China, the form is too impetuous for the design field. The middle process is not silent for the creative and innovative state of mind. The deep foundation is the big loss of the traditional culture soil. It will inevitably lead to the designer of the future creation of the concerns of the program, which naturally evoke the track of design of the creation. The track is the objective existence of the law of development. It is not up to the designer's will for the transfer, only to make personal creation along the track. However, the track is far from its repair, and it still need clear knowledge, practical exploration and understanding to enhance. In this paper, the development rules of architectural design creation are summarized as three levels, including small products, master works and master, which also involved inheritance, evolution and innovation. Each level has three practical projects as evidence, including style, inspiration and philosophy. Many other aspects were analyzed in-depth and designed to specify the architect track in the correct direction.

Key words: Track, Inheritance, Evolution, Innovation, Idea

This paper summarizes nearly nine years of architectural education work experience, coupled with the period of the actual work done by many programs, and the architectural design creation track. The track is categorized into three levels: small products, master works and master boutique, which also involved inheritance, evolution and innovation. Of course, whole implementation cannot be separated from the development.

1. Small product level

Most of the group has been professionally educated, such as principles, methods, performance, and architectural history. Hence, groups or individuals specific value orientation are known and timely and appropriate architectural style are chosen. This is indeed a multiplier effect, and most of the design institutes are doing similar works. This is due to the mature stereotypes of the architectural style is a cultural heritage. It is timeless, easy to use, and specifically reflected in the facade composition, color material, the details of the scale and many other aspects.

1.1 Townhouse in Tangshan City Harbor Development Zone (built stage) – Peiyu Bao

Copyright © 2017 BAO Pei-yu

doi: <http://dx.doi.org/10.18686/wc.v6i1.94>

This is an open-access article distributed under the terms of the Creative Commons Attribution Unported License

(<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 1 Human visual effect chart of townhouse



Figure 2 First floor plan



Figure 3 Second floor plan



Figure 4 Third floor plan

The high-end residential market results from neoclassical architectural style, bright colors, generous, structured, rigorous and open-space. Neoclassicism is the product of modern transformation of Western architectural art, and it is a combination of classical and modern, especially in the cornice, grille, lines and so on. On the one hand, it retains the

classical style in the material, the color of the general style, from which you can feel the traditional traces of history and rich cultural heritage. On the other hand, it abandons the complex texture and decoration, and simplifying the lines (Figure 1). It combines the feelings of nostalgia with the elegant needs of modern life. In addition, it is compatible with luxurious elegance and modern fashion, reflecting the post-industrial era of personalized aesthetic concepts and cultural tastes, which is neoclassicism still widely used in the world and continues to evolve the underlying causes of evolution. The questions are how to combine the specific requirements of specific environmental plots, the rational realization of modern functional space and the careful consideration of external scale scales, and how to integrate and optimize them (Figure 2–4). It only living in a specific environment, the use of local building materials technology to appropriately express the style of the facade composition and the details will make it full of vitality. Specifically, use of modern materials or local materials is considered to build up the elegant and delicate neoclassical elements, including the original material for the stone, metal, glass, high-grade stone, real stone paint, tile, matte, glass fence, tiles, etc. Fireplace, crystal palace lantern, and Roman column are used to be fully interpreted the elements. Only the restraint of the use of classical form or artisans, the traditional elements of a reasonable transformation, so as to be able to be completely out of the complete plagiarism, embarked on the road of development based on inheritance.

1.2 Tourist service center of original grassland resort (built stage) – Peiyu Bao



Figure 5 Aerial view of tourist service center of grassland resort



Figure 6 A little perspective of new tourist service center



Figure 7 Positive elevation of new tourist service center

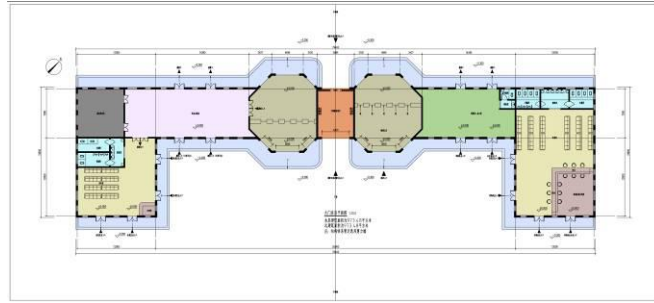


Figure 8 Plan of new tourist center

Pure and magnificent grassland is located in Zhangjiakou City, Hebei Province, Zhangbei County in China. It is the lowest latitude of the original natural grassland. The resort is like a mosaic in a shining pearl. Although it is a pure grassland in the North, the conception of the entry point is a blending of the Mongolian and Chinese culture, which is using the Ming door type with the Mongolian mausoleum phase.

Specifically, the overall layout is the door with inverted “U” type, meaning hospitality and welcome visitors from the world. The door is also equipped with a facade, hard pavement is selected as Mongolian characteristics of the parquet pattern for its color (Figure 5). In the design, three-dimensional composition and modelling language were used as primary and secondary central portal (in the fire lane and car pass road, east for the ticket entrance, and west for the export of tourists). It is formed by two Mongolian-style octagonal dome of the roof. In the color processing, the top of the slope and the head of the flower are used to impose a blue glazed tile. The dome roof uses the white glazed tiles. The main wall hangs with red granite, white paint to the transition, while the door and window frames are painted red (Figure 6–8). All these highlights the resort atmosphere with respect, festive and peaceful.

1.3 Tangshan City Bohai Ark inland port (under construction stage) – Peiyu Bao

There are many tendencies in the modernism and the emphasis on which the technology is fine. The first and the most popular modernism started in the late 1940s, the designs had the more emphasis on rational design methods, symmetry and structural logic (i.e., the rational use of the structure and the faithful performance). This coincides with the Party’s initial fashion, high-grade, landmark positioning, modern, exquisite and rational design requirements.

2. The master crafts

The design refers to the creative intention of the logical thinking activities by a designer. The inspiration thinking refers to the creative activities, where the human brain cortex is highly excited in a special psychological state and thinking form. It is in a certain abstract thinking and image thinking on the basis of the sudden emergence of new ideas. Therefore, only to get rid of the architectural style of the shackles in order to arouse the enthusiasm of innovation, to mobilize the creative thinking and burst of inspiration flashing. The difficulties of architectural design creation in the idea of the novel and the ingenious ideas of these two aspects, in addition to the intention to implement the design of the idea.

2.1 Bi City Hall Club in Qinhuangdao City (program stage) – Peiyu Bao



Figure 9 Aerial view of hall club



Figure 10 Human visual effect chart of hall club

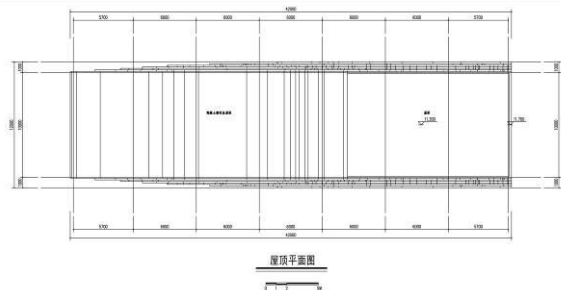


Figure 11 Roof plan of hall club

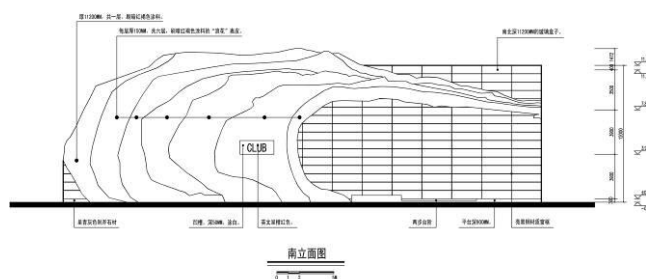


Figure 12 Elevational drawing of hall club

The geographical position of the land is superior as it is located in the east by the sea and the beach, near to the wetland protection area, the green isolation belt and the eight lane of the coastal road. The use of a strong contrast to the actual

situation and large virtual body block interspersed. It is also free and unrestrained. (Figures 9 and 10). Above the intention of the waves, it belongs to the space three-dimensional volume of plastic, forced by the current public software to express the restrictions, trying to change the way of thinking, seeking to do two-dimensional plane special treatment bold attempt. In addition, the reinterpretation also has a cave. Façade has seven layers of the waveform overlap with six layers of the waveform are given a fixed thickness, in order to use for decoration, to strengthen the surging shape, and the inside of the seventh layer of the waveform to do vertical stretching (Figures 11 and 12).

2. 2 Kindergarten in Suizhong County, Liaoning Province (built stage) – Peiyu Bao



Figure 13 Aerial view of kindergarten



Figure 14 Human visual effect chart of kindergarten

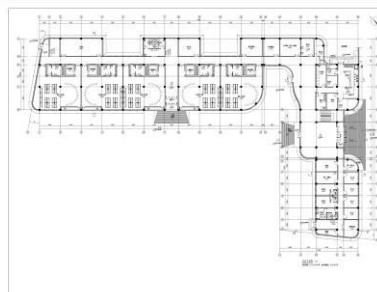


Figure 15 First floor plan of kindergarten

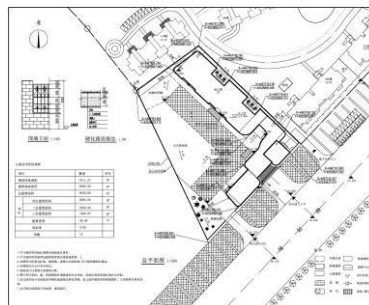


Figure 16 General layout of kindergarten

The plots are located on the west side of the Suizhong County, Liaoning Province in China, which is opposite the Sixth River Park, with a total area of 2082 square meters. In the planning layout, the building was in an anti-L shape, which naturally combined into a safe, quiet and bright outdoor space (Figure 13). The outer corner of the road form a free, mobile, lively image with 900 mm wide as the basic model to repeat and strengthen the formation of unity. In the architectural color, the walls of colorful wall panels with 900 mm wide as the basic model to meet the curiosity of children at the same time (Figure 14). In the space design, the activity area of each activity unit area is inside for certain parts and outside for certain parts. It is wonderful to take into account the dual function of the interior wall display and the outdoor window lighting ventilation, and the activities of the class activity unit. There is also a spacious balcony, which will be able to embrace the beauty of the park (Figure 15). In the courtyard planning, the layout is composed of the activities of the venue, sharing the game site, botanical garden, animal feeding circle, bunker, pool and 30 meters runway (Figures 13 and 16).

2.3 Binhe Xinyuan District in Tangshan City (reporting stage) – Peiyu Bao



Figure 17 General layout of Binhe Xinyuan



Figure 18 Aerial view of Binhe Xinyuan



Figure 19 Human visual effect chart of Binhe Xinyuan

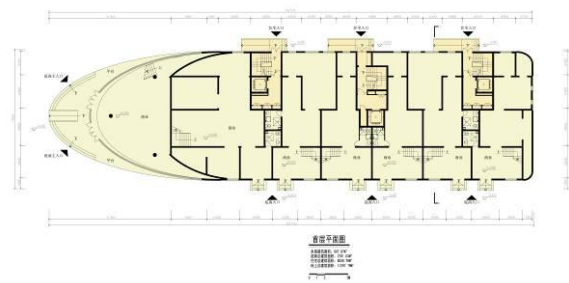


Figure 20 First floor plan of Binhe Xinyuan

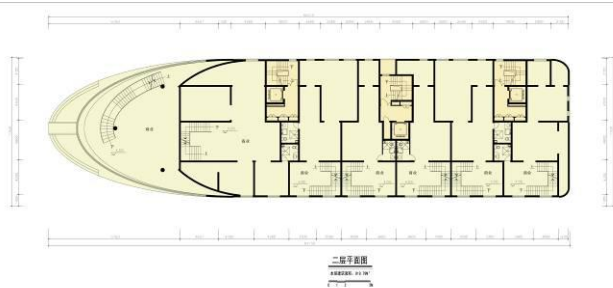


Figure 21 Second floor plan of Binhe Xinyuan



Figure 22 Third floor plan of Binhe Xinyuan

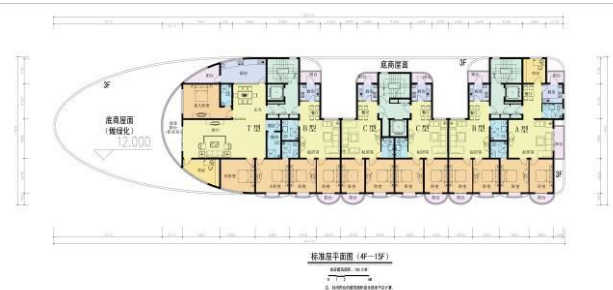


Figure 23 Standard floor plan of Binhe Xinyuan

The plots are located on the banks of the steep river in Tangshan City, where the water is meandering from the west and south of the block (Figure 17). People will unconsciously think of cheerful fish. The traditional auspicious metaphor (carp jumping gantry) and modern modeling techniques, where the residential together with the bottom of the business in oval plane, and from the bottom up as a non-linear throwing, combined with the roof layer feel the bridge structure and language. Throwing the curve of the framework, seems to outline the potential of carp flick. The building, steep

river and river landscape can be described as artistic conception. (Figures 18–23).

3. Master boutique level

Creative imagination is a necessary condition of conception. Inspiration is the conception of the birth, and architectural philosophy is conception of the high-level starting point. The idea must be closely linked with a unique, expressive architectural language to achieve a new design and imagination of the process. Even there are a lot of restrictions and constraints as architectural design creative ideas of the source, the environment, function, form, technology, economy, materials, culture and other aspects are the most in-depth comprehensive refining.

3.1 Huangshan Taiping Lake-side Apartment – Yansong Ma

Huangshan Taiping Lake is a masterpiece of nature. The proposed building must be harmonious with the symbiosis. Yansong Ma has been seeking a road of coexistence with the environment. The natural experience as a basis for the interpretation of futuristic architecture can be described as a new concept. He believes that the building itself is a response to nature and the environment. He stressed that: “Building in the landscape should be integrated with the natural world.” It is a group of holiday apartments scattered on the ridge of Taiping Lake. All rooms have a view of the lake and the distant mountains. Between the building and the building by the natural landscape and porch together, people stroll here while enjoying the facilities provided here.

3.2 Suzhou Museum – Yuming Bei

Project location is in deep urban environment and background. Mr. Bei’s design concept is “not tall and not unexpected.” The use of courtyard layout, spatial structure and the adjacent Zhongwangfu, carefully creates creative landscape garden, thus maintaining the original ancient city texture and style. It can be described as modern architecture and traditional city harmonious coexistence of the classic.

Conclusion

The actual process of architectural design creation is extremely complex. The inheritance, evolution and innovation of the three levels must not be separated from each other. Designers only follow this track firmly in the practice of a lot of benefit.

References

1. Jin XN. Architectural design method entry [M]. Xu Feipeng. Tianjin: Tianjin University Press, 2000: 9-12.
2. Sun YH. Desalination style schools to create excellent buildings [J]. Journal of Shenyang Institute of Civil Engineering and Architecture, 1998, Vol. 14 (02): 121-122.
3. Li ZT. Architectural design method [M]. Beijing: China Construction Industry Press, 2013: 90-164.
4. Zhang WZ. Public building design principles [M]. Beijing: China Construction Industry Press, 2012: 50-86.
5. Zhuang JQ. Architectural overview - into the building of the temple [M]. Deng Jing, Bin Hui, Xie Jianjun. Beijing: China Construction Industry Press, 2009: 53-58.
6. Wang JH. Form to follow what [J]. Journal of Architecture, 2004 (11): 76-77.