



Urban Planning and Architecture Design for Sustainable Development, UPADSD 14- 16 October 2015

## Inheritance and Innovation----The Design of Central Library of Ningbo University

Miao Hong<sup>a\*</sup>, Xiaoqiang Yan<sup>b</sup>

<sup>a</sup> Zhejiang A&F University, Hangzhou, China, 311300

<sup>b</sup> The Architectural Design and Research Institute of Zhejiang University Co. Ltd, Hangzhou, China, 310028

---

### Abstract

This study aims to explore design of the modern library based on the case design of Ningbo University (NBU) central library. In term of context, we tried to explore the history and conventional styles as well as the design combining context inheritance. In term of sustainable design, green and ecological elements are essential for a sustainable design. In term of open space and communicative function, the building created various spaces to facilitate communications.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of IEREK, International experts for Research Enrichment and Knowledge Exchange

*Keywords:* Campus Architecture; Contextualism; Innovation; Genius Loci; Behavior Path

---

### 1. Introduction

Ningbo University (NBU) central library locates between the educational facilities and residential sections at the main campus, with a total land area of 33,000 m<sup>2</sup>. It is a modern university library, providing educational and scientific research services, which consists of a central library, a network center, and a convention center. NBU library provides the students and scholars a place for brainstorming, academics communications, artistic and cultural fusions (see Figure.1.). As one of the core buildings of the campus, the design of the library not only harmonized the future new-built central library with the existing campus environment, but also emphasized its vital position to be a

---

\* Corresponding author. Tel.: +86-15068781693; fax: +86-571-63732751.

E-mail address: [seaear1981@126.com](mailto:seaear1981@126.com)

creative base for nurturing and cultivating students. After considering the campus environments, the context inheritances and the characteristics of this project, the architects finally decided to follow the three principles:

Firstly, respecting the context and combining the existing conditions into the future. The principle of the coexistence requires the designers to understand the planning principles, which is essential for the construction of the newly established campus core by integrating of the new central library with the existing buildings of the campus and the surrounding environments. Secondly, the designers focus on the multi-functions and open space. The function of a library is to provide a multi-function open space as much as possible, where students and scholars will enjoy their studies and readings. The third design principle is to foster the atmosphere with grave, elegance, environmental consideration and pleasing. With a classic architectural style, the library would create a comfortable and ecological space for people. The following paragraphs will present the specific design methods of the library design by following those three design guidelines above.



Fig. 1. Aerial view rendering.

## 2. Research on the integration of the building and the surrounding environment

### 2.1. *The integration of the campus environment*

There are three aspects to consider in terms of integration with the campus environment. According to the planning, the central library lies on the east-west axis of Bao Yushu Building of Educational Facilities and the end of the main axis of the south gate, which is still in planning. The two axes are considered as important and decisive factors. The designers used the axes and realized the integration of the library with the campus buildings. What's more, with an area of more than 37,000 m<sup>2</sup>, the library can be seen as a gigantic one when comparing with its surroundings. So the building bulk was cut down to relieve its pressing toward the post-graduates teaching building in the west and the student dormitory in the east. Finally, architects designed a style with long-lasting charm by embodying the graveness and elegance of the knowledge hall when considering the size and shape of the library, given the library is image building of the university.

Based on these considerations, the designer used neat and pure glass cubes as the main body of the library, made it perfectly fit in the campus environment and highlighted the core status of the library. The design is featured in the shape of the library. With two giant cubes nestling with each other which respectively lies on two decisive axes, connecting spatial structure that be embodied in the design. Meanwhile, the cubes are designed by classic scale, which could become a guideline for designer to estimate the bulk of the building. Meanwhile, the designer managed to reduce the building bulk of the library and realized good lighting and ventilation as well by overlapping some parts of the two cubes and leaving space for two daylight-flooded atriums,. At the same time, the spacious inner

Download English Version:

<https://daneshyari.com/en/article/1108793>

Download Persian Version:

<https://daneshyari.com/article/1108793>

[Daneshyari.com](https://daneshyari.com)