

The Exploration of Promoting Campus Culture Construction with Campus Sign Design

Taking Nanjing University of Aeronautics and Astronautics as an Example*

Xiaoge Huang

College of Art

Nanjing University of Aeronautics and Astronautics
Nanjing, China 210000

Xiao Hu

College of Art

Nanjing University of Aeronautics and Astronautics
Nanjing, China 210000

Abstract—Sign Design plays an important role in the public environment, so the campus Sign Design still cannot be ignored. Taking Nanjing University of Aeronautics and Astronautics as an example, this paper mainly makes the relevant study from the perspective of culture and service functions, and analyzes the problem existed through the field research on the current situation of the campus Sign Design, in addition, it makes the exploration of promoting the construction of campus culture, strengthening the campus spiritual culture connotation, improving the image of the campus while combining campus characteristics in a better way.

Keywords—sign; design; campus culture

I. INTRODUCTION

Being the soul of the development of school, campus culture is the important embodiment of uniting people's mind, displaying school image and improving school civilization. Along with the development of the times, and the progress of science and technology, campus Sign Design is the reflection of the campus culture that is materialized, so campus should combine with its background, and keep pace with the times, while combining art and technology, to provide the Sign that is more complete, clear and easy to understand, and is novel and convenient, which can help to set up campus brand image, beautify the campus environment, and promote the construction and development of campus culture.

II. CAMPUS SIGN DESIGN

The Sign (means “dao shi xi tong” in Chinese) originates from the word “Sign” in English, and “Sign” mainly has the meaning of signal, sign, illustration, indication and foreboding in English. “Sign Design” is what we call “guidance system design” today. As a kind of recognition symbol, Sign focuses on people's psychological and physiological feelings, and creates the integrity of the design objective, in addition, it makes people feel kind, and then forms the overall identifiable intention of the design target.

*Fund project: Postgraduate Research & Practice Innovation Program of Jiangsu Province in 2017 of “Campus Culture Map Design of Nanjing University of Aeronautics and Astronautics (Ming Imperial Palace Campus)”, project number: kfj20171102.

The Sign Design has already been widely used in cities. According to the elements of the Sign Design, it mainly includes guidance graphic symbol design, guidance system color design, guidance system layout design and font design. As an effective way to promote the construction of campus culture, campus Sign Design needs to focus on its functions and master its design principles, so as to design a more perfect and humanized campus guidance system design, which can promote the inheritance and development of campus culture and improve the campus image.

A. Functions of Campus Sign Design

1) *Service Functions*: Campus Sign has the functions of visibility, guiding direction, visualization and so on. The integrity of the campus guidance system can lay a foundation for improving the campus image. The most basic function of campus guidance system design is to convey information, to guide, to instruct, to explain and remind the environment, besides, it could serve teachers, students and visitors on campus by providing an easy-to-read, timely, convenient and novel guidance system. For example, the division of each function, the features of each department, the accuracy of the position indicator of each building, etc., all of which need to be considered in the design of campus guidance system.

2) *Campus Culture Spiritual Construction*: The school education is essentially the transmission of culture, while campus culture has a strong education function, which is mainly manifested in its imperceptibility, osmosis, implication and permeability. [2] The integrity and systematicness of the design of campus guidance system can be conducive to the construction of campus culture, and motivate students to be influenced imperceptibly by culture, at the same time, it could cultivate students' correct world outlook, outlook on life and values, and absorb cultural values, so as to play the role of cultivating sentiment and regulating behavior. Besides, as the core of campus culture, campus spirit as well as campus value system is closely related to the survival and development of a school. Under the circumstances, the construction of campus culture is conducive to gathering the strength of all members of the

campus into a force, and making the collective feel the warmth of the campus and strengthening the cohesion.

B. Design Principles of Campus Guidance System

The design of campus guidance system is based on the combination of historical culture and innovative environmental space, as a result, it should follow its design principles as follows:

- Consistent with the overall image of the campus as well as the image of college students;
- The design of campus guidance system should be people-oriented;
- Make reasonable layout and material selection of guidance sign;
- The symbols, graphics, text and layout of the guidance system should be integrated and meet the needs of the development of modern education.

III. THE CURRENT DESIGN STATUS OF THE GUIDANCE SYSTEM OF MING IMPERIAL PALACE CAMPUS OF NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS AND THE ANALYSIS OF ITS PROBLEMS

The Ming Imperial Palace Campus of Nanjing University of Aeronautics and Astronautics was built in October 1952, which was chosen to be located in Ming Dynasty's Imperial Palace's Donghua Gate (then known as the Dong'an Gate) outside Wu Gate on the east side of the imperial road, and the school dormitory was constructed in the Sheji Altar site of Imperial Palace in the Ming Dynasty that is in the west of the Wu Gate's external imperial road. It is a famous university in China with profound engineering background and strong humanistic atmosphere. At the same time, the surrounding Nanjing Museum and Ming Dynasty's Imperial Palace site park near the university also have a deep historical imprint. Therefore, the design and application of campus guidance system have the necessity to combine with the profound history as well as culture of the university and the historical and cultural classics of the site that the school is located. However, with field investigation and research, the current campus guidance system still exists some problems. "Fig. 1"

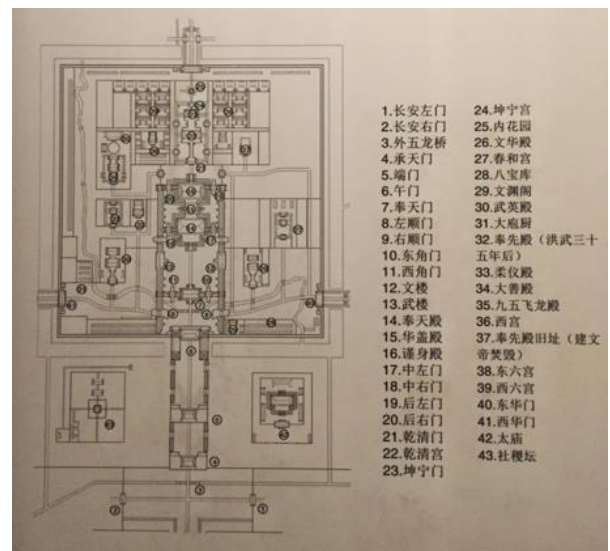


Fig. 1. The plane figure of the Imperial Palace in Ming Dynasty (taken at Nanjing Museum).

A. The Design Information of the Guidance System Is Vague, Lack of Functionality

A complete set of guidance system is often integrated with guiding function, aesthetic appearance and information transmission, and a reasonable Sign Design can help people plan their routes and improve their travel efficiency. The situation of fuzzy direction still exists in the existing guidance system on the campus, in addition, the failure to the replacement of the guidance sign in a timely way not only occupies resources, but also confuses the fact, and even some road junctions do not have the guidance sign, which brings inconvenience to people and ignores the humanized design in the guidance system.

B. Lack of Campus Cultural Connotation in Campus Guidance System

Chinese culture is extensive and profound, and every nation has its own history and culture, while every city has its distinctive culture. Therefore, it is also necessary to focus on campus characteristics in the design of campus guidance system. Ming Imperial Palace Campus of Nanjing University of Aeronautics and Astronautics is located in the Ming Dynasty's Imperial Palace site, with its unique background of aeronautics and astronautics, the school can reflect its unique campus culture and historical culture everywhere, as a result, the campus Sign Design should integrate culture concerning the history of the university and the historical and cultural heritage of Nanjing. At present, the only guidance system design fails to make the form of the sign and the selection of text color and the layout integrated with the campus characteristics in a better way.

C. The Design of Campus Guidance System Has Few Categories with Single Form

Campus guidance system is limited in two-dimensional, static as well as traditional design level, which stays in pure

form of manifestation. With the development of science and technology and the school's comprehensive and open trend, it lacks international vision, while being short of a wide range of Sign Design for the campus' teaching building, canteen, dormitory, comprehensive office building, parking lot, rest area and so on. In addition, the form of manifesting the guidance system and the use of the relevant materials need to be improved.

The following suggestions are made for the above several problems:

- The design should pay attention to functional zoning and form the overall campus guidance system design. The campus guidance system can be classified into different categories or kinds according to the overall planning of each campus function division, which can achieve the clear, concise and continuous effect, at the same time, human-oriented art design effect can be added. The design scheme can be divided into the following three major parts: architectural guidance design, public area guidance design and indoor guidance design. Among them, the architectural guidance design mainly includes the architectural name design, the architectural position sign design and the architectural entrance guidance design and so on; the guidance design of public area mainly includes the guidance design of parking lot, stadium, activity centre, business place and other positions; indoor guidance design mainly contains the guidance design of office and teaching places including functional departments, classrooms, departments, etc.
- The design should create the campus guidance system design with the characteristics of Nanjing University of Aeronautics and Astronautics. From the perspective of design science, the design should combine the knowledge of design psychology, design aesthetics and so on to carry out targeted analysis and research on the patterns and colors in campus cultural maps, and form materialized presentation on this basis. On the basis of taking aerospace culture as the background, while combining with the existing campus culture elements, such as "paper airplane", the symbol of Nanjing University of Aeronautics and Astronautics and blue elements, the design could be conducted by refining the unique element of the university, which makes it become a meaningful guidance as well as culture symbol with the identification of the university's history and culture, in addition, by refining the artistic value and cultural value contained in our university's campus culture, it could design guidance system with the characteristic of Nanjing University of Aeronautics and Astronautics that integrates the culture concerning the history of the university's development as well as Nanjing's historical and cultural heritage, which could make the teachers and students and visitors know Nanjing University of Aeronautics and Astronautics and have a good understanding about it while waking on the campus.

- The design should combine art and science and technology to create innovative guidance system design. With the development of science and technology and the progress of information network technology, the guidance system design can make use of the information platform to design a new type of guidance system that integrates the guidance, cultural introduction and history summary: set up campus' map in the west gate and the north gate of the university, in addition, change the previous traditional campus plan to the operational and interactive electronic screen, whose content is set to contain the campus culture, guidance system and the introduction of the university's history and the history and culture around the campus, which skillfully transforms the former plane and static forms gradually into the dynamic and comprehensive direction, which has the positive significance for further enhancement of the reputation of Nanjing University of Aeronautics and Astronautics and the spread of campus culture and history.

IV. THE DESIGN OF CAMPUS GUIDANCE SYSTEM AND CAMPUS CULTURE CONSTRUCTION

The campus is the base to disseminate knowledge and spiritual civilization to the teenagers, and its unique cultural atmosphere has become the main feature of campus life. People will be influenced when they live in a certain environment, similarly, the teachers and students in school are also influenced by campus culture, which could encourage them to pursue ideal and create a beautiful environment together. As a result, the construction of campus culture cannot be neglected, and it plays an important role in the behavior consciousness of the members of school. Based on the current situation and existing problems of the campus guidance system design above, it should consider the following aspects for the rational use of the guidance system design to promote campus culture construction.

A. *The Promotion of Campus Culture Construction with People-oriented Way*

The design of campus guidance system makes use of various elements, such as graphics, characters, symbols and colors, while combining with the campus natural environment and humanistic environment to embody the people-oriented concept and campus cultural spirit in a simple and understandable way. The design of campus guidance system will be integrated into the study, work and life of the school's teachers as well as students, which is conducive to the harmonious coexistence of public space, campus environment and teachers and students. At the same time, it has also influenced the artistic sentiment of teachers and students, enhanced the cohesion and the sense of pride of teachers and students, and created a modern and harmonious campus cultural atmosphere.

Excellent guidance design can have reasonable layout with the appropriate position according to the arrangement of space, which is in accordance with ergonomics, in addition,

with detailed and appropriate text and the reasonable scale coordination, its color can be adapted to the surrounding environment, so as to meet the basic function while conforming to the aesthetic and humanistic requirement.

B. Pay Attention to the Unity of Image

The design of campus guidance system is composed of several parts which should be related to each other and be a whole with the specific indicating function. The combination of symbols, characters, graphics, colors and other elements used in the campus guidance system should be consistent with the campus' construction background, planning style and image construction. The design should make full use of the standard color, symbol, graphics and the standard font elements in the campus image system design to combine with the campus guidance system design, in addition, it should inherit the campus' long cultural and historical connotation to form campus guidance system design with unification, standardization and normalization that can embody the image of the school, and reflect the integrity, unity of the campus image. At the same time, different features of space can be found in the whole for personalized design. For example, despite that the design of the guidance system at the University of California, San Diego (UCSD) adopts several different forms, it has a strong sense of unity and integrity. Among them, wall-mounted guidance design adopts the following elements from many modern elements: digit symbols use the woodiness material, which is very conspicuous, and the glass in the middle and below chooses the frosted and translucent glass material when designing, which shows the intense contrast about it, besides, the transparent glass with black font has illustrated the surrounding classroom as well as the direction, the shape of the classroom and the geographical location represented by using graphics is just below, which fully embodies the humanized design of the school's guidance system. "Fig. 2", "Fig. 3", and "Fig. 4".



Fig. 2. University of California, San Diego, Guide System 1.



Fig. 3. University of California, San Diego Guide System 2.



Fig. 4. University of California San Diego Guide System 3.

C. The Adaptability of the Environment Is Conducive to the Construction of Campus Culture

The design of campus guidance system combines science and art, and technology endows the design with good function and reasonable structure, while the artistic beauty makes the design full of aesthetic taste. On the premise of satisfying the campus guiding function, the campus guidance system design could take advantage of the adaptability of the environment to fully demonstrate the particularity of the university's space environment, at the same time, it could highlight the campus artistic atmosphere of the space, and create an artistic university space environment, so as to promote the campus cultural construction. The unique intrinsic cultural temperament of campus comes from the historical and cultural accumulation of the university itself, and from the infectious and cohesive cultural tradition inherited by university till now. Therefore, the design of campus guidance system should fully inherit, shape and innovate the spiritual quality of the university to present them externally and improve the external competitiveness and influence of the campus, and promote the construction of campus culture.

V. CONCLUSION

Campus culture is both material and spiritual; it not only includes scientific knowledge, but also the aesthetic, entertainment and other cultural knowledge; in addition, it contains both classroom learning and extracurricular activities. [3] As a part of campus culture, the design of campus guidance system not only needs to pay attention to the practical function of its information transmission, but also needs to focus on its spiritual function, such as aesthetic taste, so as to deeply explore the school's historical accumulation and cultural context, and understand the cultural connotation of campus spirit and culture, which is conducive to the establishment of campus cultural characteristics. Similarly, in present digital context, the design of campus guidance system also has the necessity to combine art and technology, and change traditional concepts and keep pace with the times, which plays a positive role in promoting the construction of campus culture, making it a unique and indispensable brand image in campus culture.

REFERENCES

- [1] Liu Zonghong. Design of campus guidance system based on service and culture - take Nanjing Communications Institute of Technology as an example [J]. Zhuangshi, 2011 (08).
- [2] Shi Huanan. Campus culturology [M]. Beijing: Beijing Medical University, China Union Medical University Press, 1993.12.
- [3] Wang Ziwei. Cultivation of campus culture and creativity [M]. Wuhan: Hubei Education Press, 2002.