
Research on Platform Design of University Bus

Cheng Li ^a

School of energy power and mechanical engineering, North China Electric Power University, Baoding 071000, China.

^a820837132@qq.com

Abstract

The campus bus station has the diversity, the universality, the flexibility, is the campus public facility part, has formed the campus unique environment together. Campus bus station can be a good carrier of campus culture, so as to better display the unique culture of colleges and universities.

Keywords

University, The bus stop, Design principles.

1. Introduction

A city has a unique image of a city. As a university that creates civilization and trains high-quality talents of the country, it also has its own unique cultural and cultural image. In addition to the construction of teachers, colleges and universities now pay more attention to the construction of public facilities on campus, so that public facilities on campus contain the unique culture of colleges and universities. Landscape facilities in colleges and universities, colleges and universities is decorated in the landscape facilities, such as street lamps, sculptures, signs and campus bus station and so on, these landscape constitute the unique campus culture in colleges and universities. The landscape of colleges and universities serves teachers and students in colleges and universities in order to meet the needs of teachers and students for leisure, entertainment and other activities. When planning the campus environment, colleges and universities should take into account the rationality of the layout of facilities on the one hand, and the characteristics of the school on the other hand, so that the facilities in the campus become the carrier of campus culture.

2. Design Principles

2.1 Humanized Design Principles

The establishment of campus landscape facilities is to provide better services and beautify campus functions for teachers and students. It should not only exist in theory, but also be applied in practical design. Public social facilities in campus planning, some problems when the proportion is wrong, wrong place, and some improper design, some purely aesthetic and ignores the function, make it become the ornament. This kind of situation did not take into account the principle of humanized design, ignored the basic needs of the campus community, ignored the humanized requirements.

2.2 Green Ecological Design Principles

Part of the landscape in the design process in order to more beautiful large area destroyed the original ecological environment, the formation of individual and beautiful, not only will cause the loss of financial and human resources in the construction process, but also the loss of a campus landscape facilities has a unique culture of colleges and universities characteristic, let the campus landscape as an independent individual, no fusion and other facilities in colleges and universities as a whole.

Landscape facilities in the design process, should insist on saving energy, land, water saving, material saving, environmental protection green ecology design concept, advocated the 4 r principle, namely, Reduce the use of (Reduce), Reuse (Reuse), recycling (Recover) and recycling (Recycle) to realize the sustainable development of campus environment.

2.3 Regional and Humanistic Design Principles

Landscape facilities infiltrator campus culture connotation, is one of the important spirit of colleges and universities, the construction in universities in different landscape facilities should be combined with local characteristics and design environment and campus, rather than machine-made copy hard copy other university or local attractions. Lack of school characteristics, not only so, difficult to let the teachers and students to produce identity and sense of belonging, and blindly copying to landscape facilities may be due to the difference of geographical and environmental needs of the scale, structure, material demand is different also, such as wasteful also ignored the people the very essence of campus environment needs.

3. Campus Bus Station Design

As an important public facility in campus, bus station can be an effective carrier of university culture. Bus station is an important part of public facilities in colleges and universities, is closely related to people's life, as the important public facilities, bus station in the form of a unique showing in the colleges and universities. They are like the Windows of a university, which not only meet the needs of teachers and students, but also show the unique temperament and charm of a university. Nowadays, many universities have incorporated the bus station as the overall design into the construction planning of colleges and universities. The design is more diversified and highlights the appearance and cultural image of colleges and universities.

Bus stop is easy to design, can be said to be the deep show window and platform of university image, bus stop in meet the demands of the people's functional requirements and aesthetic design elements at the same time, also want to reflect the process of civilization. Although the bus space is small, it contains many responsible functions. The design of a bus station should include a passenger's waiting platform, ceiling, stop sign, area map, waiting seat, commercial or public service advertising, lighting system and a dedicated bus road in front of the platform. Passengers use the entire bus system, including platforms, signs, trash cans, advertisements, roads and so on. Therefore, while designing the bus platform, we should consider as many aspects as possible to meet the needs of more people. In fact, the bus station is a complex that contains multiple service functions. Therefore, the bus station can display the college culture at more levels by designing a better foil and shaping the environment atmosphere. Compared with campus seats and street lamps, bus stations are more likely to attract others' attention because of their large size. And campus bus stops the use of frequency is big, therefore, bus station because of the unique culture of colleges and universities can be in the process of frequent use, more efficient and intuitive to use, so as to achieve the role of culture in colleges and universities.

When designing the structure of the bus station, we need to make sure look people can understand that this is a bus station, bus station at the same time the modelling of need combined with culture of colleges and universities, with the surrounding buildings and public facilities, also has a unique style. In order to ensure the proper structure of the bus station, the most important thing is to ensure safety. We should also consider the local geographical environment, climate (whether it is rainy or hot), cultural factors, economic conditions, traffic conditions and so on. User types (office workers, students, the elderly, disabled, etc.), user use time (commuting, shopping in the morning, evening leisure, etc.). Necessary facilities (waiting room, stop sign, ceiling, lighting seat, etc.) of bus station.

1. In view of the target population health: standing waiting for the waiting crowd physical have larger consumption, some people can stand long, others are standing time is not long will be very upset. Investigate the physical condition of the user in response to this situation and consider whether the user needs to be provided with light breathing facilities.

2. Whether people carry baggage: now some city of business people, students will carry baggage, bus stop should consider these luggage placement and support the luggage when you board the convenience.

3. Driving habits of passengers: whether to queue consciously, considering safety, whether the design of guardrail is necessary;

Whether some passengers throw litter carelessly, whether a garbage collection device is needed.

. Platform information display: information display is very important to passengers, and information display is clear, clear, etc.

To train people on the platform of familiarity with design route query equipment, some passengers are often in the platform of passengers, some of the platform is a stranger to take more, such as railway station, airport, bus station, etc.

Considering that there are special people on the bus, such as the blind, the sound prompt is especially important. The style of the platform must be consistent with the style of the school.

We find that people don't have too many functional requirements for bus stops. Too much function instead cause people not convenient operation, and the function of too much will occupy a large space, yes the station has become crowded, also can cause some unnecessary function greatly waste of resources. So try to simplify the function of the bus station, human nature, and not many functions together, so the station function in addition to the basic function of waiting, the bus stop, there should be proper rest place, the station space to provide shelter and shade for people. Station should have enough bright at night, can guarantee that people can find the information they want at night, but the color of lamplight had better choose plain white fluorescent lamp, mandarin is bright color can cause vision instead affected.

In terms of aesthetic function, the structure of the station is relatively simple, and the empty space makes people's career not too limited and limited.

The design of campus landscape facilities related to not only its own quality, more influences the whole campus environment culture connotation and taste, at the same time, as a carrier of culture, campus landscape facilities also reflects the campus geographical and time difference. So during the planning and design of campus landscape facilities, landscape facilities and the overall environment be in harmony are an organic whole, to make it become a part of the campus elements, create the beautiful and rich campus landscape environment.

4. Conclusion

Bus station in modern universities is designed for life in the colleges and universities teachers and students, people demand for such facilities in colleges and universities in constantly improve, in addition to beautiful, pay more attention to considerate and comfortable facilities, more emphasis on people-centered, meet the basic requirements of the people and the pursuit of high grade life emotional appeal. Therefore, more and more attention has been paid to the humanized design of university bus stations. Bus station for colleges and universities, at least have two big functions: 1 aspect for people to provide identification, stay, the use function such as trust, on the other hand has the function of ornament, foil, active environment atmosphere. The design of a reasonable and clever bus station can not only facilitate the use of people, but also create a leisure atmosphere for colleges and universities, so that people in universities are happy. So the design of bus stop should follow the principle of "people-oriented", from the technological, ecosystem function, culture, the four aspects of humanized design principle, is as follows: first, accord with human body engineering and behavior science. The detailed design should meet different human dimensions to meet different needs. In addition, the location, manner and quantity of the layout should take into account people's behavioral psychological needs and other characteristics. Second, functional integration. The design of bus station no longer only reflects single function, but increasingly pursues its comprehensive benefit. Many facilities should be used and viewed as a whole to make people, environment and nature more harmonious. Third, highlight the image of the university and coordinate with the surrounding

environment. To highlight the image of colleges and universities, we should respect the historical context and harmonize with the surrounding environment in shape, material and color, so as to create a strong regional feature. Fourth, pay attention to ecology and economy. Nowadays, people pay more attention to the beauty and maintenance of ecological environment. In essence, the design of the bus station seeks the harmony between man and nature.

Humanized design in the point of focus more on human factors, focus more on the broad masses of the user's physical, psychological, emotional needs, make the form and style of the modern university bus station tends to life at the same time has more affinity.

References

- [1] Leilei Zhang. Visual Image Design and Research of Urban Bus Station. Journal of Changchun of Science and Technology (Social Sciences Edition) Vol. 23 (Mar.2010) No. 2, p. 89-90.
- [2] Ting Zhang. Brief analysis on the humanized design of bus station [J]. Drama house (the first half of the month), 2013(05): p.150-151.
- [3] Xuewei Kang. Research on landscape facilities design of colleges and universities -- taking the design of campus bus station as an example [J]. Popular literature and art, 2013(16): p.73-74.