Nanjing Golou Campus as Interface of Public Space and Learning Environment

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1 ABSTRACT
Traditionally a campus comprises the buildings of a college or university and the surrounding area: its usage and interpretation mainly focused on its purposes and utilisation by students and faculty. Often perceived and interpreted as scholastic island the article illustrates the role of a campus as important item of the public realm and its importance for the surrounding neighbourhoods and everyday practices of its inhabitants. The article discusses the Golou Campus in Nanjing (China) as a best practice example to show how the facilities of a university campus can be intensively used by the inhabitants of the surrounding suburbs and the academic staff and students.

Keywords: University, Resilience, Public Space, China, Campus

2 INTRODUCTION
Planners, architects and designers believe that design matters and good design is supportive to achieve certain aims and aspirations. Many campus design strategies and master plans include a set of design strategies and implementation actions to achieve the universities goals regarding educational and research purposes and in parallel serve as flagship architecture facilitated for university branding (Acker & Miller, 2005; Hoeger & Christiaanse, 2007). Reviewing the campus debate shows that the discourse either focuses on the design from a practice perspective (Coulson, Roberts, & Taylor, 2010, 2014; Kenney, Dumont, & Kenney, 2005) sometimes tending to fall short regarding the evaluation of the actual functioning and service delivery of the design, or on campus as learning environments for learning purposes in a wider sense (Ellis & Goodyear, 2016; Hajrasouliha & Ewing, 2016; Scholl & Gulwadi, 2015). Increasing student numbers and changing educational and research practices, such as internationalisation, urges universities to broaden their educational approaches but also to diversify and take more care of the campus spaces (e.g. Ellis & Goodyear, 2016; Trujillo & Waxman, 2016)

Campuses are deeply associated with the notions of learning and scholarly education. Scholars are illustrating different perspectives of learning, such as (a) learning as acquisition, (b) learning as knowledge creation and (c) learning as participation (Paavola, Lipponen, & Hakkarainen, 2004; Sfard, 1997). While the first perspective is focusing on learning as a more static personal acquisition of i.e. knowledge and skills, the latter two are more dynamic readings of learning: learning as knowledge acquisition focuses on the co-creation of knowledge, skills, practices. It stresses that learning involves the cognitive and practical understanding how new knowledge, skills and practices come into being. Thus, participating in activities and developing knowledge by experiencing is becoming more important; where the students become members of a community when social relations and social interaction are conditioning the learning processes. Hence, the lens one is using to look at learning also conditions the spatial appropriation of such learning environments.

The perspective of learning as participation and social practice can be linked to the urban discourse of place, negotiating how social practices and everyday practices are turning a place into becoming (Hayden, 1995; Ingold, 2009; Shove, Pantzar, & Watson, 2012). The campus places are shaping the daily environment and are affecting how students, faculty, administrative personnel and visitors are moving through the space and how they meet and interact in space. Various scholars have illustrated the link between physical space and learning: for example, Pascarella and Terenzini (Pascarella & Terenzini, 1980) are illustrating the impact of the learning environment on social and academic engagement. Hajrasouliha and Ewing (Hajrasouliha & Ewing, 2016) analyse the relation between the campus physical environment and student retention rates. Strange and Banning (Strange & Banning, 2001) investigate the impact of design, arrangements and orientation of space and illustrate that those spaces are informal messengers to people that are using them. Different scholars are stressing the importance of the physical environment of the campus as canvas for social practices, social activities (Kenney et al., 2005) and their importance for community building, building networks of learning (Alexander, Ishikava, & Silverstein, 1977) and developing a joint institutional identity.
To do so, they illustrate the importance of spaces to meet, to linger after class and to enjoy the presence of other peers, colleagues and visitors. They show similarities between campus and urban planning and that certain positive (i.e. compactness, proximity) and negative (i.e. sprawl) characteristics account for both domains. Aslo Hajrasouliha and Ewing (Hajrasouliha & Ewing, 2016) are examining campuses from an urban planning perspective, using a morphological approach by analysing seven different morphological dimensions, such as land use organisation, compactness, connectivity, configuration, campus living, greenness and context, proving that greenness and urbanism are positively associated with students’ satisfaction and their studying experience. They argue for mixed campus developments with the three major components of student housing, greenness and urbanity. They proof the higher livability and community embeddedness of students who are living on the campus. The greenness of the campus is supporting community building, as outdoor socialising and study environment, while the urban component is crucial for social connectedness with the surrounding areas and the city. Already in 1977 Alexander stresses the importance of the physical campus environment and suggests a mixed environment consisting of different patterns such as building complexes, pedestrian streets, arcades and open stairs. Thus, we see that campuses are hardly self-standing monoliths but rather networked integral parts of the urban tissue and embedded in the public: ‘Certainly, (…) could never have the form of an isolated campus. Rather it would tend to be open and public, woven through the city (…) Establish a university as a marketplace of higher education. As a social conception this means that the university is open to people of all ages” (Alexander et al., 1977).

In this chapter, we are exploring the qualities of the Gulou campus of Nanjing University following the morphological dimensions of Hajrasouliha and Ewing (2016). The work is following a research by design approach, based on the conceptual thought that designing and design approaches can develop new knowledge, skills and insights into complex spatial problems (REF). Invited to the ISOCARP-NJU International Design Week we worked with a mixed group of Dutch and Chinese students (40 students) and international lecturers in a rapid design studio. Based on that rapid design studio outcome the authors further contextualised and discussed the material of the case study conducted in this week.

3 THE MORPHOLOGY OF NANJING CAMPUS

Nanjing University (NJU) is one of the oldest and most prestigious research and educational facilities in China. While established as a ‘modern’ university in the early 20th century its history can be dated back to CE 258. Nowadays Nanjing University is a top-rank university, member of the C9 League and regularly scores top positions in international university rankings and as a national university directly funded by the Ministry of Education of China. The university has two main campuses: Xialin Campus, is the new campus which opened in 2009 and is located in the northeast of Nanjing, hosting undergraduate and parts of graduate students. Gulou campus, the historic campus is located in the inner city of Nanjing. This location is rooted in the 5th century.

3.1 Urban context and connectivity

The ‘historic’ campus is located in the Gulou district, which is a cultural and educational hub of Nanjing. Gulou (Chinese for drum tower), an old drum tower, originally built in the Ming Dynasty is located in the North of the area. The campus is embedded in a bustling area of very dense mixed, commercial and residential areas with a very low service delivery of green spaces on neighbourhood and micro scale.

Fig. 1: Central Axis of the Golou Campus
However, the dense network of narrow streets and lanes in the surrounding of the campus is becoming a hive of commercial activities: buying and selling, eating; serving a huge group of scholars and students and citizens from that neighbourhoods. A large number of businesses are related to catering students and are linked to academic activities and services such as copy and print shops, laundry services, restaurants and food delivery services serving the campus, which is very popular and intensively used by students and employees.

Changing patterns in the surrounding urban fabric occurs: while the western part shows initial signs of gentrification processes, such as the establishment of more hip and fancy restaurants, cafés and services targeting young urban professionals and international students with higher spending capacity the northern parts of the neighbourhood is illustrating the spectrum of services for local communities with low purchasing power to neighbourhoods of arrival with a higher degree of informality. The campus is in close proximity to different Metro Stations and is linked to the city’s mobility system, which most recently experiences a shift in the modal split due to the introduction and skyrocketing popularity of a city-wide bike sharing system, that is flooding the city and campus with bikes and parked bikes everywhere, which is increasingly becoming a problem because parked bikes are cluttering sidewalks and access points to the campus. However, since the entire campus is walled and the access points are fenced, the appropriation and the design of the gates is important for the connectivity and transition areas between the campus and the surrounding neighbourhoods: currently the gates are organised as strong borders between the campus and are controlling the restricted car access, but they are also hubs where temporary food stalls are serving food or other services (i.e. bike repair) are located.

3.2 Configuration, land use organization and compactness

The campus is a mixed campus marrying a considerable number of different university-related and public functions on the site. On the campus but also in the surrounding area a broad variety and number of functions and services are offered. The campus is intersected by Hankou Road outlining two core areas of the campus: Nan Yuan, the South Garden, where many residential services and housing facilities for students and academic stuff are located; and Bei Yuan, the North Garden.

The North Garden is a mosaic of university related and public functions. This area hosts the institutes and departments, buildings for teaching and university administration, which are located in the historic buildings (north, west and east buildings) centred around the main lawn in the north-eastern area of the campus. Different recreational functions are provided and implemented in different parts of the Northern Garden, such as areas for different kinds of sports, small park-like areas, enclosed gardens or sitting areas.

While the core areas of the campus are dominated by public and academic usages, housing and housing related services are more at the fringe of the area. The north Gardens inner development is organised along two major north-south and east-west axes linking to traditional campus designs originating in the US and their relations to the 19th and 20th city beautiful movement. The axes are functionally and spatially linking the different areas of the Bei Yuan. The central axis is linking the North and South garden, but runs into the South Park Teaching Building and terminates there. Then the Southern Part is due to the appropriation for the dormitories in ribbon developments much less connected and communicating with each other. Thus, also the internal development and connection to the Guanghzou Road is flawed. The limited car access to the
campus also contains surface parking to an extent as not to exacerbate recreational usages as well as slow mobility, such as walking or cycling.

### 3.3 Greenness and social usages

Entering the campus from the dense surroundings is like stepping into a green oasis. The major axes that are organising the campus are designed as broad boulevards with double tree lines providing shade along the daily routes and crossing the campus in north south and east west direction. The open spaces and spatio-functional units are also beautifully landscaped and endowed with lush greenery and trees to provide a green roof and shade, important for a campus in a hot and humid subtropical climate. The temporal distribution of social usages is owed to the daily practices, daily weather and climatic conditions: in the cooler morning the campus is crowded with elderly people doing gymnastics, practicing thai chi in the landscaped garden areas, and walking on the sports fields. Between 7.30 and 9.00 many elderly people bring their grandchildren to the campus for playing and covering the time before nursery school or kindergarten starts.

While during the day and the hot hours the density of the social usages is declining, in the evening and night hours the social and recreational usages are quickly increasing, including various sports activities, picnicking in the landscaped park areas, meeting friends and families, playful activities with children, practicing ballroom dancing and later in the evening students are meeting for romantic walks in darker areas of the campus. However, interestingly the green lawns around the historic buildings in the US-European university campus design show less tracing of patina and usage than the landscaped areas more designed in a Chinese fashion around the Southwest Building and between the Teaching building and the boulevard along the central axis of the Northern Garden. Covered areas and open entrances of the buildings play an important role during the rainy season and during rain showers at day and evening times, when outdoor functions are shifted to those places, such as students practicing street dance and music, Thai chi or child care activities. The diversity of different green and recreational spaces on the campus, its public functions and temporal distribution creates a vivid spatio-temporal mesh of activities and social usages that are crucial for its importance within the urban fabric. The case study illustrates clearly that the campus services the surrounding dense neighbourhoods with its green, recreational services. Due to its greenness and size (1.65 km²) it offers a green and somewhat cooler environment in a city that is suffering severe urban heat island effects (Xu & Chen, 2017; Zeng, Qiu, Gu, He, & Wang, 2009).

### 4 CONCLUSION

The Golou Campus of Nanjing is an example which show how a campus can become part of the urban pattern if accessibility is ensured. Even if the access is only possible at a few points and is also restricted during night hours the extensive usage of the campus is not limited to the students and the university staff but is open to the surrounding neighbours. The quality of this arrangement is that the campus is forming a
part of the neighbourhood and is contributing to the variety of the urban spaces. Due to the separated
organisation of the usages in the campus (study in the northern and living in the southern part) and the almost
car free access there are no obvious conflicts between the different suers, due to the variety of the functional
uses. A central spot in the campus is formed by the athletic field where the different age groups and types of
usage ae coming together, without causing interferences.

Fig.4: The central athletics field as a connector of ages and activities

Even if the campus becomes a part of the urban pattern the impression on being enclosed remains, due to the
still existing clear borderline of walls and gates. On the one hand, this feels like a limitation, but on the other
hand it preserves a transition between the different existing urban spaces.

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