

Final Reflection

Master of Science Architecture, Urbanism & Building Sciences

Personal information		
Name	Daria Ivanova	
Student number	5686717	
Studio		
Name / Theme	Public Building	
Main mentor	Ir. Henk Bultstra	Architecture
Second mentor	Ir. Ger Warries	Building Technology
Third mentor	Ir. Sien van Dam	Theory and Delineation mentor
Graduation project		
Title of the graduation project	Homo Ludens: The playground as a metaphor for learning	

1. Did you manage to fulfill your initial design ambitions? How would you evaluate your design process? What is your project? In what way does it answer your research question?

Through research and design, I have explored the role of play and physical activity in the future educational environment. Play has the potential to become a crucial component of education, promoting both mental and physical development. The graduation project examined how these factors would influence the spatial characteristics of campuses.

According to Johan Huizinga's "Homo ludens" (1938), play is "free action" in a special "play space" that implies a strict internal order. Access to play is often unrestricted and easy due to its non-formal nature and minimal risk. It is not typically motivated by material interests or profit. When entering the game, all participants become equal and follow the same rules. The uncertainty of the outcome and the tension keep people engaged. All these characteristics of play can be applied in education and help students from different social and age groups acquire knowledge and skills while remaining engaged in the learning process. For this purpose, educational spaces should have playful qualities such as interactivity, dynamism, and rigid frameworks ("rules of the game") for flexible development and future use. In addition, the spaces should be suitable for use by a diverse range of public groups and should include a significant number of outdoor spaces.

These rules were tested during the design of the Vertical Campus in The Hague. The tower serves as the entrance to a pedestrian greenway that leads from the city center to Central Station. Along the way, there is a transformable stage for urban events and festivals, as well as temporary pavilions for shopping and leisure activities, and outdoor work and learning areas. The Vertical Campus extends Leiden University by providing new hybrid spaces, renovated entrance areas, and rooftops that complement the existing building's program.

Johan Huizinga's definition of play also applies to sports games, in which, in addition to democracy and excitement, physical training and body development are significant. Sports games teach teamwork and leadership skills. They develop self-control, responsibility, and quick thinking. That is why, in addition to classrooms for group and individual work, concentrated study, and lively discussions, the vertical campus includes a multi-purpose sports field and a swimming pool on the top floor. The building provides opportunities for both mental and physical development for citizens and visitors to the city.

The design of the campus is based on playful principles at different scales. The garden, study, and sports areas are framed by rigid metal structures. Wooden columns and beams can be modified inside them over time. In the atrium of the study area, there is a multimedia hall that can be transformed with more than six use scenarios and can be adapted for innovative activities that may arise. Research has been conducted on designing a dynamic facade with minimal environmental impact and energy consumption. Different technological solutions available today have been compared, and an optimal one has been selected. Translucent facade panels with letter patterns that change their meaning under different lighting conditions are used. The campus aims to meet today's demands and be resilient to future challenges.

The campus of the future is a special, free, and safe zone. It is a playground where mental and physical development can coexist. It's a space that's different from "real life" but it's where innovative ideas can be tested. These ideas will have practical applications in the future and will serve progress.

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The Public Building studio investigates the future of public buildings and their role in the built environment, by developing new spatial formulas, programmatic articulations, and building components. The work of the Public Building studio involves reinventing past structures and questioning existing typologies through research and design as well as research by design. The Graduation Studio aims to produce future-proof designs that are sustainable and investigates the possibilities of design thinking in a world where the definition of what an architect is and does, ceaselessly shifts. Public architecture should respond to and accommodate today's needs while anticipating the future. The concept of a public campus offers a useful approach to the venues of higher education in the future.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework?

Nowadays, a high-quality educational infrastructure is not only an integral component for the development of universities but also a critical center of urban public life. Today urban campuses can form entire neighborhoods and be integrated into the city by including cafes, coworking spaces, cultural centers, parks, and sports complexes, considering the needs of residents and guests of the city. University and city are living organisms and symbionts. Like any living organism, they are characterized by the complexity of the organization, by the specialization and close interrelationship of their parts, and by the opportunity for evolutionary development.

Games and physical activity can be one of the key elements for campus-city symbiosis. Even in Ancient Greece, there was a cult of physical culture as an integral part of the complex education. The Greek gymnasium was a building used for athletic activities, study, and philosophical discussion (Cartwright, 2023). Gymnasiums were large architectural complexes that included areas for training and discussion (stoas), athletic wrestling (palaistra), running tracks (paradromis), pools, and fountains. Many centuries later, as cities began to grow upward, physical activity also made its way into high-rise buildings and mixed with other functions. One of the first standard bearers of hybrid high-rise buildings is the Downtown Athletic Club. Metropolitan hybrid culture is engendered there, disseminating buildings that are seemingly serene and sculptural on the exterior yet on the interior are bustling in a constant state of flux of programmes.

Contemporary researchers are convinced that spaces for physical activity and play on a university campus can not only be presented as separate sports centers but can also be directly integrated into academic buildings (Gavrilik, 2022). Changing activities, movement, and play techniques help to acquire information at any age.