

Public Building Design 2

Public buildings for the community of TÖRÖKBÁLINT

2019/20/spring semester

Course leaders: András Márk BARTHA, Zoltán SCHRAMMEL DLA

design course

credit: 6

classes: Mondays 15:15-21:00

Purpose of the course:

During the semester, students can learn the basic skills of public building design. The design task relies on the theoretical knowledge gained during the Public Building Design 1 and Design Methodology lectures, and a large part on the discussions and consultations with the teachers.

The students clarify the functional needs by self-processing the relevant journals and manuals, by analyzing good examples, in order to get deeper into the chosen topic. During the process, they become acquainted with different spatial structures, their relations to the whole building, and the possible ways of their configuration. In addition to the function, the building's embeddedness plays an important role in the design work: getting to know the topology, the terrain, the climate and the expected users, the environment in general; and then comes the systematization of that knowledge with the elaboration of the knowledge based design strategies.

In addition to analytical methods, there is a similar emphasis on the release of intuitive, creative energies: small and large tasks stimulate and structure the creative process all along the course.

The main goal is to explore and understand the relationships between age, the given place, the function to be designed and the emerging form, to synthesize a vision of a new place, a new building, a new spatial structure, and to make the plans and drawings of the building understandable.

Semester's schedule:

In 2020, the Public Building Design subject will begin with a renewed theme and methodology. During the semester, the students, together with the consultants, design small public buildings for real communities of the city of Törökbálint, a settlement near Budapest. The five communities introduced at the beginning of the semester will play a crucial role during the semester. Their current operation defined the functions (Music House, Creative Camp, Martial Arts Center, Cultural Salon, Youth Community House), the locations available for them will be the sites for the design tasks, the students will choose from these function-space pairs at the beginning of the semester. During the semester, special emphasis will be placed on the functioning of the student-teacher community: lectures, presentations, and extensive discussions will

articulate the personal consultations. These events are intended to make working together more enjoyable and provide feedback to students.

During the semester, we are looking for solutions to these functional needs in two steps: a quick, warm-up, competition-like pavilion design at the beginning of the semester, followed by a detailed, larger scale, permanent building design.

Step One – WARM-UP – pavilion

We kick off the semester with a quick, intuitive piece of work, where teams will be able to match their abilities to create, in a good atmosphere, a competition-like concept early in the semester. From the first impressions of the site, a lightweight, temporary installation should be planned, which already refers in its function to the building to be designed later (Music House – Music Pavilion, Creative House – Pop-up Exhibition, Martial Arts Center – Meditation Center, Cultural Salon – Outdoor Stage, Youth Community House – Party-Kitchen) The site models documenting the understanding of the sites and the models of the installations are presented to a joint jury, they are rewarded, and the class can get to know them through a joint presentation.

Planning for a temporary intervention and preparing the mock-up is a prerequisite for understanding the site and the community, both physically and mentally. During the assignment students work in teams. During the work, sharing collected information and broader discussion of emerging issues with each other and with the teachers are crucial.

Parts to be submitted:

2 sheets of A3 posters, portrait format, with explanatory drawings

min. contents:

Site map and section (scale 1: 500 or 1: 1000)

The site plan includes: north sign, adjacent sites, plots, with buildings (roof top view), all buildings on the site, walkways, pavements, existing or planned vegetation, slopes, wells, etc. and other essential buildings, signage of entrances. The drawing represents the new, designed site plan, so any intervention, new element, modified or possibly demolished part must be readable from the drawing.

Explanatory drawings

outline the main design principles of the building with schemes, sketches and related texts

Site model (scale 1: 500)

It includes a simplified model of the planned pavilion, as well as the entire design area and its wider environment (neighbouring buildings, terrain conditions, with vegetation if needed). The model can be used during the second design task of the semester.

Pavilion model (scale 1: 100 or 1:50)

a mock-up of maximum to 2 types of materials, detailing the architectural design and tectonic system of the concept, in which human figures should be placed to illustrate the scale and the use.

Step Two Semester Project - New Building

The second part of the semester is about deepening, developing self-design and architectural decision making abilities. The students are designing different public buildings, usually between 500-1000m², from conception phase to roughly licensing plan phase.

Students will individually think through and consult the chosen functions, and discuss them in groups of 6-8 people. They clarify the strengths and weaknesses of their ideas and look for solutions to emerging problems.

During the work, students use different tools of design: they learn concept, mass and space modeling, different architectural drawings (site plan, floor plan, section, elevation), concept drawings, writing, and basic aspects of detailed design.

The main decisions of the concept are summarized in the preliminary design documentation to be submitted, in which all drawings of the building are drawn on a scale of 1:200, the building's position and the site shown on a model. Once the concept accepted and approved, drawings for consultations and joint evaluations should become more detailed, reaching 1:100 scale by the end of the semester.

In the last 2-3 weeks, the documentation and its planning becomes the most important task for the students. During this period, students continue to make their plans individually, looking for the most powerful presentation that can show the main character of their project. They make drawings that can show not only the necessary technical content but also the imagined atmosphere and mood of the building.

Parts to be submitted:

Preliminary plans:

Concept plan

Conceptual drawings explaining clearly the planned situation with short text. Illustrations can be sketches, montage, aquarel that show your vision of the design.

Lay out site plan 1:500

Site plan must show the North direction, the terrain, top view (roof shape) of neighbour buildings, entrances, fences, roads, slopes, stairs, ramps, important trees and greens. Underground facilities should be indicated by dashed lines.

Floor plans 1:200

Plans of all different floors showing the cut constructions, the main furniture, doors, windows, stairs, ramps, characteristic greens, altitude levels.

Elevations 1:200

At least 2 elevations showing the surroundings of the new building, contour of neighbours and characteristic elements too.

Sections 1:200

At least 2 sections showing the connected terrain and morphology with background view.

Maquet

Mass model of the building shall be inserted into the site maquet prepared earlier. Optionally a larger scale model can be presented in addition. (1:200, 1:100)

Final plans:

Concept sheets

Description with illustrations explaining the design concept. It also should make it clear that is not visible in the drawings.

Perspective drawings or renderings.

Section and elevation of a charectereistic part of the building in 1:50 (part section).

Site plan showing the surrounding environment in 1:500

Site plan must show the North direction, the terrain, top view (roof shape) of neighbour buildings, entrances, fences, roads, slopes, stairs, ramps, important trees and greens. Underground facilities should be indicated by dashed lines.

Floor plans

Plans of all different floors in 1:200, at least one in 1:100 showing the cut constructions, the mainn furniture, doors, windows, stairs, ramps, chracteristic greens, altitude levels and everything in view below the level of cut.

Elevations

All elevations (4) in 1:200 showing the surroundings of the new building, contour of neighbours and characteristic elements too. At least one of them has to be made in 1:100.

Articulation of the facades should be illustrated by shadows.

Sections

At least 2 sections showing the connected terrain and morphology with background view in 1:200. At least one has to be made in 1:100.

Maquet

Developed mass model in scale 1:200. It should consist of the building mass, the surrounding environment (buildings), the morphology of the terrain, important green elements.

Design log

A free hand made diary with sketches of phases of design from the start. It's role is to document the steps of development in design. The apperance of the log should represent the highbrow attitude of you.

All parts in the list have to be submitted in order to pass the course!

Drawings can be prepared by hand or by coputer too, in latter case final graphics has to be composed and finished by hand anyway.

Törökbálint

The settlement in the agglomeration of Budapest has been inhabited since the Celtic era. During its long history, the composition of its inhabitants, the use of the areas of the settlement and its architectural character have constantly changed. Its topography is basically determined by the Anna Mountain and the Hosszúréti stream that runs through the settlement. The center of the city is characterised with dense, one-storey constructions - mostly as a Swabian village - and divided by 1-2-storey institutions or residential buildings. Törökbálint has been transformed at a great pace since becoming a city in 2007, gradually losing its rural character.

When choosing the sites, we targeted the areas most affected by the change. This metamorphosis provides an opportunity to reconsider and to expand the functions of the communities of the city.

One such area is the emerging new city center (locations 4, 5), the empty plot near the center on the hillside (location 3), and the gradually built green area of the former flood plain of Hosszúréti stream (locations 1, 2).

History of the city:

<https://www.torokbalint.hu/app/cms/TorokbalintApp/index?id=15>

Historic maps:

[https://mapire.eu/hu/map/europe-19century-secondsurvey/?](https://mapire.eu/hu/map/europe-19century-secondsurvey/?bbox=2104443.1486843266%2C6011856.970214691%2C2107973.583928248%2C6013529.030208429&layers=158%2C164)

[bbox=2104443.1486843266%2C6011856.970214691%2C2107973.583928248%2C6013529.030208429
&layers=158%2C164](https://mapire.eu/hu/map/europe-19century-secondsurvey/?bbox=2104443.1486843266%2C6011856.970214691%2C2107973.583928248%2C6013529.030208429&layers=158%2C164)



1. Martial Arts Center

WARM UP TASK: MEDITATION PAVILION

The spiritual starting point in Eastern martial arts is Zen meditation, a state of spiritual peace found in contemplation of nature. The design space, as it stands, is well suited to accommodate a retreating, meditating pavilion.

During concept process, fitting into the site can be conceived either by transforming the existing vegetation freely (garden) or by positioning the existing landscape elements. It is possible to design a small structure suitable for individual or group (up to 5 persons) meditation. For seasonal use, there is no need to create enclosed, heated spaces, but they must be protected from rain. The outlook and insight view and creating intimacy with rest is very important.

During the exercise, the pavilion can be located anywhere on the green area. Find the ideal location of the pavilion (s) and design its major architectural details.

SEMESTER PROJECT SPACE PROGRAM:

The Törökbálint Sport Association provides opportunities for the younger age group to exercise in various sports. Kungfu department has nice sport result but the circumstances are beneath the results. Törökbálint Kungfu has been in the focus of attention since a member of their association, Panna Kósa won gold medal on the worldchampion ship in 2019, Sichuan. First of all, the new sports facility should be designed for them, which, besides the special space requirements, can satisfy the general sports needs as well, its use is basically no different from other sports facilities.

There are two varieties of traditional Chinese martial art, Wushu: a taolu, a part of which is acrobatic, and a real fight, the sanda. A key element of the design program is the courts for the two varieties and a sponge pit needed to practice acrobatic elements. The form exercises take up more space (10x15m), the height requirement is 8-10m due to the throwing exercises. Minimum space required for kungfu combat 10x10m surrounded by a 2-2 m safety strip. The association's request is to provide space (mobile or fixed stand, gallery) for about 100 people as an option for spectators.

For younger age activities or renting, there is a need for a small hall of about 40 m², which also functions as a fitness room.

There are 2 bigger or 2x2 smaller changing rooms and showers to serve the rooms, cca. for 40 people. A store for sports equipment to be planned, a store-related store, and a cleaning product store for operating the building.

3 office workstations required for the administration of the institution, as well as a small room for theoretical education and club events with a kitchenette.

SEMESTER PROJECT SPACE PROGRAM:

foyer	50m ²
front desk, windscreen, lounge and meeting space with seating	
toilet block	25m ²
separated by sex, calculated for a total of 60-80 persons	
changing rooms	40m ²
separated by gender for 15 - 15 people, with shower, toilet, lockers	
Gym	400m ²
10x10m "sanda" court, round 2-2m with protection zone 10x15m "taolu" court, around 2-2 m with protection zone, min 8m internal height 5x10m functional training part (wall bars, box bags) approx. 15m ² foam pit, 3m depth, 8m run	
office	20m ²
for 2-3 people working together	
coach room	15m ²
connected to the gym, for 2 persons	
storage	20m ²
connected to the gym	
small room	40m ²
connection to the foyer, min 4m ceiling height	
classroom / club room	40m ²
room for education and community programs with a kitchenette	
mechanical plant room	20m ²
cleaning supplies warehouse	5m ²

2. Youth Community Center

WARM UP TASK: PARTY KITCHEN

The most popular venue for any house party is the kitchen. Design an outdoor kitchen pavilion in marked area that can provide space for eating and drinking along with cooking, and even other community activities (birthday, game watching, board games, etc.)!

It is a small building for 15-20 people, where you can prepare and consume food and freeze your choice in any way you like (eg open fire, grill, kettle).

There is no need to create enclosed, heated spaces, but it must be protected from rain and intended for seasonal use. A special consideration is the design for cooking and consuming (ergonomics, cleanability, etc.). a system of fixed and movable elements.

Interpret, define, with built and garden elements, the zones and boundaries of the area, which provide adequate protection for the adjacent living area and give the created space a unique character!

SEMESTER PROJECT:

The Törökbálint Youth Council continuously organizes programs for local youth, entertainment and self-education. In addition to club nights, literary talks, concerts, joint coaching, free time, watching games, playing soccer, ping-pong are also part of the community.

Currently, they do not have their own place. The main goal of the development is to prevent local youth from being forced into the capital or a pub if they want to be with their friends, to have a GOOD PLACE where they can have fun without any restrictions and have all the conditions for a meaningful freetime.

The planned building should be suitable for an average afternoon of 10-15 people, but it can accommodate 100-120 people during concerts and major events.

previews:

<https://www.atelierkempethill.com/0041-osdorp-youth-centre/#16>

<https://www.designboom.com/architecture/kengo-kuma-community-center-towada-city-plaza-aomori-04-23-2015/>

<http://hazai.kozep.bme.hu/en/szent-csalad-romai-katolikus-kozossegi-haz-hernad/#jp-carousel-8860>

SEMESTER PROJECT SPACE PROGRAM:

permanent communal space ("living room")	100m ²
watching matches, concerts, celebrations, max. 80-100 people	
shared kitchen (counter)	30m ²
small training rooms (2pcs) music education, small group activities (2x 15 m ²)	
Bicycle changing room	15 m ²
shower, drying facilities toilet	
Toilet block for 80 persons	25 m ²
2 halls (can be opened together)	100 m ²
various layouts, acoustically fine, min 4m ceiling height, 2x50 pers	
storage facilities	20m ²
office	15m ²
Lockable design for 2 people, also for storing documents	
indoor-outdoor open communal space	40 m ²
with dining area, fireplace, kitchen counter, ping pong	

3. Gallery and artist colony

WARM UP TASK: POP-UP EXHIBITION

The assignment is to design a pop-up exhibition pavilion located in the design area and the public area adjacent to it or in the adjacent public area. First assignment is to design an exhibition pavilion, a visitor experience, thinking of protecting the exhibited art-works against effects caused by natural forces, thinking of closing the area or the installation at night and playing attention. The map may reflect the memory of a protected local building once stood here, or the mood of the woody intense uphill area of the site, but may also give a home for a specific exhibition or be linked to a neighboring hospitality function.

SEMESTER PROJECT:

Exhibition Space

There is currently no contemporary art exhibition space in Törökbálint, although it has an enthusiastic and active audience of the International Colony of Artists every year, and its location, the Village Museum has been outgrown.

In addition to the works being or were made at the colony of artists, there is a constant need to get to know the works of other local and guest artists, as well as the works of former artists (Gyula Hadik and István Balogh Munkácsy Prize-winning artists, Simon Endre).

Creative Spaces

A creative space next to an exhibition space can be very inspirational, it is suitable for building communities, holding club nights, and holding handicraft- and fine art-trainings for school age groups. A workshop might be established here, which can work with permanent equipment. Currently there is no way to use a workshop in the community centre. The International Artists' Colony in Törökbálint does not have a home, and the artistic colonies could accept more participants in summers, if there was a suitable place for it.

Guest Spaces

The guests who are invited to international art events, are currently accommodated in guesthouses, but there is not enough space next to the venue for events to accept them.

During the year, the guests who are invited to other city events could also be accommodated in two or three rooms here. The audience of the artist colony could also be expanded if we could provide in this area camp-type summer accommodations.

SEMESTER PROJECT SPACE PROGRAM:

workshops, studios	150 m2
3-4 pcs high ceilings areas with naturally light, workshops with permanent equipment, or studios that can be flexibly varied. They can be optionally used together and separately. Smaller individual or larger community workshops can be created.	
lounge-community-exhibition space with	50 m2
seating area suitable for waiting, meeting, arrival, departure and relaxation. It includes the possibility of the reception and the clothing storage!	
toilets	25 m2
(for males, females and disabled people) for 80 persons	
warehouse	20 m2
for equipment and material storage (optional in any studio)	
kitchenette	15 m2
preparation/heating of simpler meals, suitable for a few people for relaxation, tea, meals, coffee.	
cleaning product storage	4 m2
Near the water block, storage of cleaning tools, machines, agents.	
mechanical room	30 m2
seasonal mass accommodation 150 m2, for 20-30 persons camping bed, either jointly or in units	
guest rooms 45 m2	
2-3 double rooms with bath, 3m2 maid space	
covered and opened community and creative spaces	100-200 m2
depending on building installation	

4. Music house

WARM UP TASK: MUSIC PAVILON

a temporary, covered open-air stage to be designed on the design area or in the park linked with it for 15-20-persons band and 40-60-persons audience

SEMESTER PROJECT:

The “music house” operates in the Erzsébet Szőnyi Elementary School of Art in the settlement without own building, in the rooms, which are just borrowed from primary schools. There are 12 grades of education in the piano, guitar, bass guitar- doublebass, violin, cello, flute, clarinet, flute - pife, trumpet, solo singing, chamber music, music pre-school, solfege, music literature, music education departments. The students can play on 3-4 concerts each year, for which parents and friends are usually expected. This family atmosphere is primary where the teacher can become an educator and where there is known that most children will not become performers, but the most important goal is for them to love what they are doing and understand the world around them through music. The purpose of the building is to provide a decent place in the new centre of the town. Even other jazz and light music concerts can be held in acoustically appropriate conditions this place.

SEMESTER PROJECT SPACE PROGRAM:

lounge-community space	80m2
windbreak, locker, seating, reception	
classrooms for groups	(total) 75m2
for theoretical workshops, 3pcs, for 5-16 persons per unit	
auditorium room	80m2
for 50-60 persons, min. ceiling height is 4m,	
8-10 x practice rooms	(total) 100m2
for individual instrumental students (2-3 persons/room)	
foyer/ communal space	60m2
place for the time between the occupations	
toilets	25m2
water block (for males and females+ disabled people) for 80 persons	
office management offices (3 persons)	35m2
creating as one-room or separating to cells	
temporary workplace for 8-10 professional teachers	50m2
for 1-2 hours laptop work, music library, small meeting room, kitchenette	
mechanical room	20m2
storage 20m2 chair storage, lockable musical instrument and sheet storage	

5. Cultural Saloon

WARM UP TASK: OUTDOOR STAGE

There is a lack of a place in the center of the town where cultural events can be held during the summer. This could be a temporary, open-air stage for the summer, in the designing area or in the adjacent park area for a company of 15-20 people and 80-100 spectators. The separated approach of the auditorium and the stage as a problem has to be solved. The changing rooms and server functions are placed in the community center, they do not have to be designed in this assignment. The primary consideration is to find the correct scale, position, relationship to the environment, architectural character of the designed building, and to fully and accurately serving of the function.

SEMESTER PROJECT:

The enormous size of the existing community centre building in its present form is not capable of serving all the cultural programs of the settlement. Differentiating the wide range of programs and creating possible new cultural venues in the city means also the task of designating the city center. The building to design will serve as a venue for lectures, concerts and exhibitions, which are not fit into the community centre and which wish for a more intimate atmosphere. The special features of the site (eg the proximity of the Calvary Hill) appreciate the open-air functions that can be located in the area and should also be an integral part of the building installation. The bistro function is to serve the events and to get more involved in the city life.

SEMESTER PROJECT SPACE PROGRAM:

lounge	cca.	50m2
space suitable for waiting, meeting, arriving and resting with seating. Includes reception, cloakroom		
auditorium		100m2
Room for 80-100 persons, who are sitting at the same time, with min. 4,5m headroom,		
small hall		50m2
Room for 40-50 persons, who are sitting, with min. 3m headroom,		
multifunctional/exhibition space		100m2,
variable, and which can also be used for seminars, workshops, exhibitions, a space which can be used as auditorium or exhibition space, which can be linked with the small hall or with the large auditorium, min. 4.5m headroom		

cafe / bistro guest area	50m2
can be combined with the lounge but can also be approached independently for 20-25 guests, with a waiter service	
cafe service area	40m2
drink bar and warming kitchen, storage, preparation and changing	
toilets	25 m2
(for males and females+ disabled people) for 80 persons	
storage	20m2
furniture, technical and installation equipment, separate cleaning storage.	
mechanical room	20m2
for electrical and mechanical equipment	

Way of completion:

- active participation in consultations with - partly - home-prepared plans and models (according to Code of Studies max absence is 30%)
- successful presentations of Warm-up Task, Concept and Preliminary Design phases, (judged by consultants)
- submission of complete project plan before deadline according to the brief and conditions

Classrooms:

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| 1. | Fejérdy Péter DLA , Major György DLA, Pásztor Ádám, Ostoróczy Nóra | K211 |
| 2. | Karácsony Tamás DLA , Zsuffa Zsolt DLA, Kovács Károly Lehel | K212 |
| 3. | Fazekas Katalin DLA , Berecz Tamás DLA, Biri Balázs | K213 |
| 4. | Kronavetter Péter DLA , Pelle Zita, Deichler Tímea | K342 |
| 5. | Klobusovszki Péter DLA , Tarnóczy Tamás Attila, Soltész László Gábor | K363 |
| 6. | Vannay Miklós Ágoston DLA , Dombóvári János, Major Zoltán | K344 |
| 7. | Bartha András Márk , Alkér katalin DLA, Váncza Márk, Szilágyi Norbert | K345 |
| 8. | Kemes Balázs DLA , Batári Attila, Balázs Marcell | K352 |
| en1. | Schrammel Zoltán DLA , Kóhalmy Nóra, Rasoul Daryanavard | K391 |
| en2. | Schrammel Zoltán DLA , Gyökér András, Ritter Dániel | K393 |
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