

INSTITUTO UNIVERSITÁRIO DE LISBOA

Exploring public design competitions as a primary platform for architectural education

Trampoline: the competition as an academic project

Yana Chepilko

Integrated Master's in Architecture

## Supervisors:

Architect Filipe André Touças Magalhães, Invited Assistant Professor Iscte – University Institute of Lisbon

Architect Elói da Silva Gonçalves, Invited Assistant Professor Iscte – University Institute of Lisbon



Department of Architecture and Urbanism

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I would like to express my heartfelt gratitude to everyone who has accompanied me throughout this work, during these two years at the university and the two and a half years since I moved to Portugal.

To my professors: Filipe Magalhães, Eloi da Silva Gonçalves, and António Mesquita, for guiding me through this academic path.

To all the professors I've had the pleasure of meeting at ISCTE, thank you.

To my classmates, for being a team this year, sharing this journey with me.

To my family, who have always been there for me, offering unwavering support at every step.

To Júlio, for his extraordinary encouragement and constant support.

This journey has been a transformative experience, and I sincerely thank you all.

acknowledgements

Este estudo explora o papel dos concursos públicos de design, centrando-se no seu valor enquanto campo de ensaio profissional e ferramenta educativa. A primeira parte do trabalho é uma reflexão sobre a participação em sete concursos em grupo durante um ano académico, destacando as experiências e os conhecimentos adquiridos com estes projectos de colaboração. A segunda parte analisa a utilização de concursos de conceção no âmbito do ensino da arquitetura, examinando o seu potencial enquanto espaço de investigação e experimentação para professores e estudantes.

São discutidas, ademais, as transformações pedagógicas no ensino da arquitetura em Portugal e na Europa, desde os dias em que se aprendia diretamente com os profissionais até à transição para o ensino moderno. Sugere-se que a integração de concursos nos ateliers académicos pode servir como uma plataforma única que não só desenvolve as competências práticas dos estudantes e aprofunda a compreensão das especificidades do projeto, mas também a forma como a prática pode responder desta forma às necessidades da localidade. É também defendido que uma abordagem interdisciplinar, tanto na orientação como na formação de equipas, poderá ser benéfica para maximizar os benefícios educativos e profissionais destes concursos.

A conclusão apoia a noção de que os concursos, quando abordados com um foco na colaboração entre disciplinas, podem enriquecer tanto a experiência académica como os resultados do próprio concurso.

#### palavras-chave

concursos públicos, desenvolvimento de competências dos estudantes, aprendizagem experimental, tutoria interdisciplinar.

This study explores the role of public design competitions, focusing on their value as a professional testing ground and educational tool. The first part of the work reflects on my participation in seven competitions with my group during an academic year, highlighting our experiences and the insights gained from these collaborative projects. The second part delves into the use of design competitions within architectural education, examining their potential as a space for both professors and students to engage in research and experimentation.

This study also discusses pedagogical transformations in portuguese and europen architectural education, from the days of learning directly from practitioners to the transition to modern education. I suggest that the integration of competitions into academic studios can serve as a unique platform that not only develops students' practical skills and deepens understanding of the specifics of design, but how practice can also respond in this way to the needs of the locality. I also argue that an interdisciplinary approach in both mentoring and team formation is beneficial for maximizing the educational and professional benefits of these competitions. The conclusion supports the notion that competitions, when approached with a focus on collaboration across disciplines, can enrich both the academic experience and the outcomes of the competition itself.

#### key-words

architectural competitions, student skills development, experiential learning, interdisciplinary mentoring.

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Historically and theoretically, the competition will be the democratic form of access to public commissioning. Faced with a defined problem, and starting from the premise of equal circumstances, any author can offer an answer that, after a process of analysis and choice, can build or at least contribute to a concrete discussion.

The competition is not a static entity. Well-established models with solid results, such as the Swiss one, as opposed to (apparently) experimental ones, such as the Belgian one, prove the vitality of the competition as a form of critical and disciplinary production, as well as a form of cultural impact that needs constant revision and reflection. The Portuguese case stands in apparent opposition to this awareness, frozen and protected by the current reality of public procurement.

The exercise proposed for the PFA class was simple in its formulation: a fictionalised simulation of a distant but at the same time close reality, proposing that the students take part in public tenders immediately. Before their time, perhaps, but with the intention of exposing the students as soon as possible to a tangible reality that they might encounter in practice, in a kind of leap of possibilities and expectations. The aim would not be for them to compete in order to win, as any prize would result in disqualification, but rather for them to see this academic exercise as a simulacrum of the reality that awaits them: in laboratory conditions that are as close as possible to real practice. A springboard.

Over the course of the academic year, proposals were submitted for seven competitions of different scales and programmes, in different cities and contexts. In each competition, teams mixed with different expectations, with an unequivocal progressive improvement in the critical and production skills of all the students evident in the proposals submitted. All the facts were studied: statements, preliminary programmes, delivery models, jury reports and evaluations, comparisons between competitors.

Secondly, after the competitions, a window of reflection was proposed on any given topic, individually. A hypothesis that could result in a thesis, moving from practice to theory, in a kind of inversion of principles. This thesis would be an excuse to allow, as a final academic exercise, as the conclusion of a journey, a dissertation.



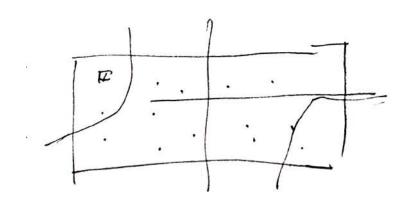


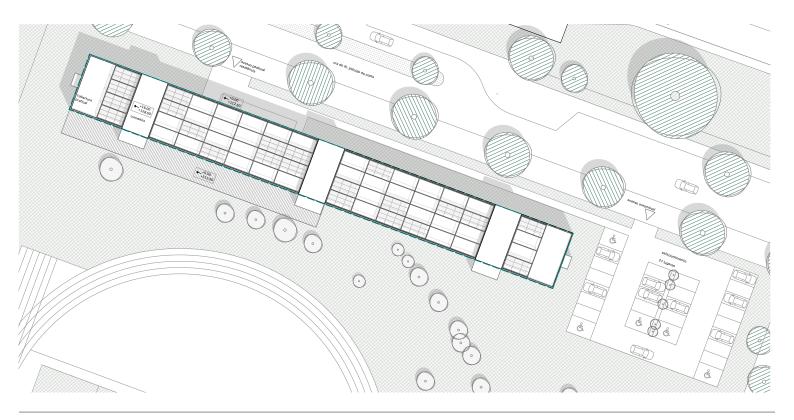
beatriz carpinteiro daniel anjos jose santos laura lopes mariana cristino yana chepilko iscte 09.23 - 09.23 exterior view of the entrance

1/89

We started our extensive course with the competition for the Asprela university residence, located in Asprela, a neighborhood in the city of Porto (Rua Dr. Plácido Costa). The exercise served as an introduction to team organization (groups of six students), the distribution of areas of responsibilities and managing time constraints. The goal of the residence project was to design a dormitory for 192 students with shared social spaces, providing everything necessary for comfortable living and self-service of basic needs.

The program was clear — we had a number of premises that we had to operate on the project and the financial threshold for the construction. Moreover, the room layouts were predetermined. The restriction of the red line dictated the shape and orientation of the building. Thus, the main limiting factor was the short deadline for submitting the final competition entry.





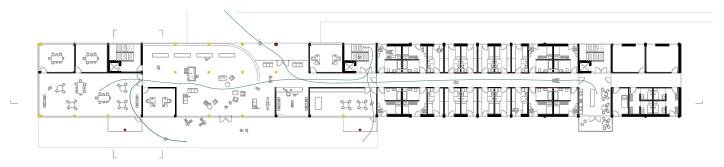
beatriz carpinteiro daniel anjos jose santos laura lopes mariana cristino yana chepilko iscte 09.23 - 09.23 conceptual drawing

implementation plan 1/750



Analysing the brief allowed us to outline a clear framework of what was expected from the proposals, so our team defined the vision and goals we wanted to achieve with this project. In the process of creating the sketch, we relied on solutions that  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ simplified the project, such as, for example, the elimination of the basement, or the unification of spatial solutions. Despite the numerous restrictions specified in the competition's programme document (which actually made the process easier), we were free to design the logic of the public spaces, mainly on the ground floor, as well as the vertical connections and the upper floor with access to the roof. We had to put it all together and imagine what the appearance of the dormitory would be like and what it would represent.







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ground floor plan 1/600

typical floor plan

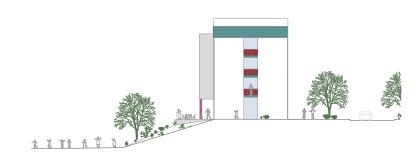
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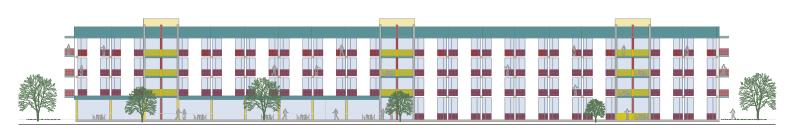
The circulation was divided into three access blocks.

On typical floor we focused on creating open common areas that would exist next to the 32 individual rooms and efficient circulation between them, taking into account fire safety standards. The common areas had to have functions that would give students self-sufficiency in using the dormitory. Three communal kitchens were placed on each of the typical floors, located opposite each of the stairwells.

The ground floor, which stands out with a curved glass brick wall and a bright red column at the entrance, was divided into two parts: a residential (private) area with 20 rooms (of which 8 are inclusive), one kitchen, and ancillary facilities; and a social, free zone, with an open space logic that flows into places for group work, communication, study and relaxation, and includes administrative offices. In increasing the number of rooms, we prioritised increasing the number of people the building can serve, accommodating a total of 204 residential units.







beatriz carpinteiro daniel anjos jose santos laura lopes mariana cristino yana chepilko iscte 09.23 - 09.23 lateral elevation

1/600

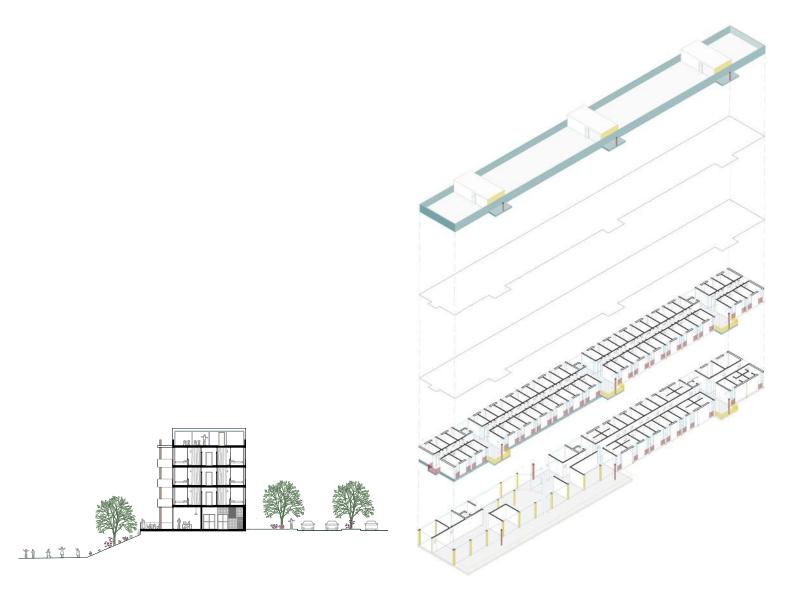
north elevation

1/600

south elevation

1/600

The colour distribution of the façade allows us to trace the logic of the space organisation. Yellow is used for social areas and common areas. It can be seen in the columns on the ground floor, in the upper roof spaces where the communal laundry and lounges are located, and in the metal balcony mesh grids in the kitchens. Red marks the entrance from the open space to the private area and is used in the doors and window mesh grids of the rooms, as well as in the round column at the entrance. The blue colour symbolises the separation between private and open space, and we can see it on the horizontals. From the side of the main street façade, the staircase is fully glazed along its entire height.



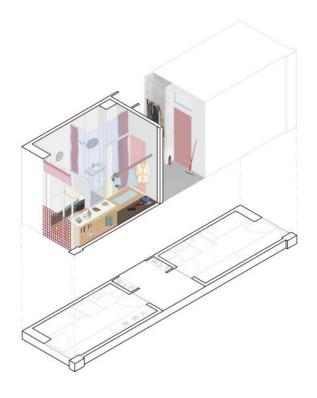


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transverse section 1/600

The structural solution is simple: no basement, monolithic frame construction, reinforced concrete stairs, walls and slabs, and in some places the use of glass block walls. Other material solutions include a metal frame designed to shade the roof of the building, that is also designed to be functional and to be an additional space for students, metal lattice grids on the windows and balconies, and finishing plaster on the facade.





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axonometry of the module

The area of the residential module was determined in the design requirements and is minimal, but includes a private bathroom, a wardrobe, a desk and a bed. The window opening occupies the entire height of the room, and the bathroom walls are also made of glass. The possibility of fully opening the window above the entrance door towards the corridor contributes to the natural ventilation of the room.

Summing up this experience, it was rather an exercise for further self-organisation of the group and setting up basic processes in the virtual infrastructure necessary for cooperation. A shortcoming of this task was the lack of preliminary analysis of the context of the location, as well as the lack of a critical approach to the creation of architecturally expressive solutions and the organization of spaces. Many decisions were made intuitively, often individually, in a group where visions differed.





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1/2000



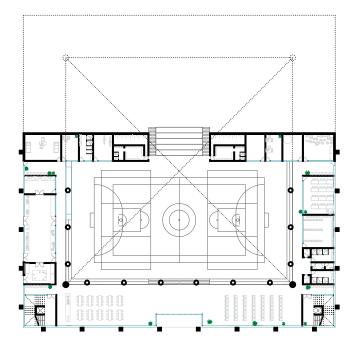
south-east elevation

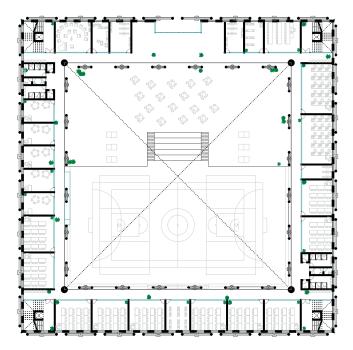
1/400

The second competition focused on refurbishing the 2nd cycle facilities at EBI in Lagoa (basic school in the Azores). Our approach was focused on directly meeting the requirements of the programme, but, as we moved forward, we slightly detached our proposal from the programme's constraints.

Though, we had more freedom to reflect on broader design strategies, concepts, or intentions compared to previous competition in Asprela.

The site for the school is clearly defined by four courtyard buildings of an old school. Among other tasks, it was therefore necessary to provide temporary containerized premises during construction, ensuring the educational process could continue uninterrupted.







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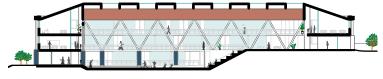
view of the school's interior

Unlike the school's old four buildings, our proposal consolidated the entire programme into a single structure, also of the 'courtyard type,' but with a key difference: instead of a central courtyard, the middle featured a sports field, roofed at the height of the entire building. This design allowed the sports field to be open to all school areas, making it the heart and center of the school. It also interacts this way with open corridors and galleries on the two upper levels, fostering connectivity.

The ground floor was designated for social functions, the first floor for classrooms, and the second floor for administrative offices and teachers' rooms, archives and a library. The building's perimeter housed the classrooms, with vertical connections at each corner, while the central space served as an interactive hub that tied all areas together. In response to the terrain, we decided to partially bury the ground floor, addressing the issue of differing external entrance heights. The sports locker rooms were placed in this recessed area, making efficient use of the available.









beatriz carpinteiro daniel anjos jose santos laura lopes mariana cristino yana chepilko iscte 10.23 - 10.23 view of the school's interior

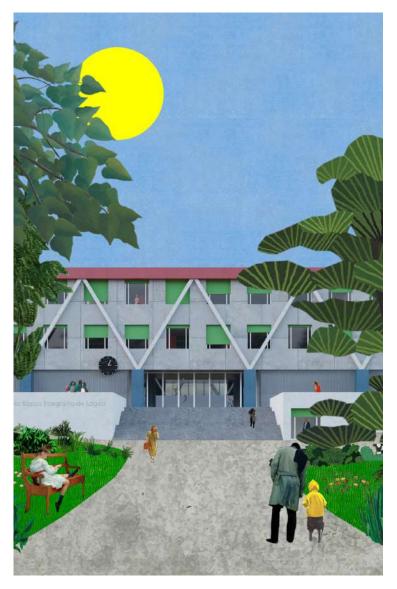
10/89

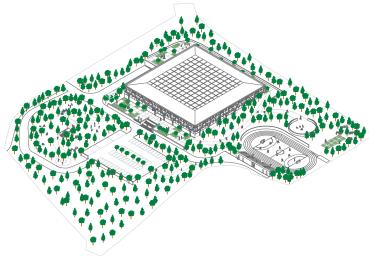
view of the classroom

section through the sports field

section through the rooms 1/800

The cross-section through the sports field highlights the generous three-story height of the open space, as well as how the natural terrain was cleverly used to benefit the project. The roof covering the sports field features alternating closed and transparent square sections, allowing natural light to flow into the building from above. Additionally, light filters through openings in the corridors where there are no classrooms. This open, airy environment, combined with the thoughtful use of color both inside and out, creates a welcoming and joyful atmosphere for the future students of the school.







beatriz carpinteiro daniel anjos iose santos laura lopes mariana cristino yana chepilko iscte 10.23 - 10.23 view of the main entrance

axonometry

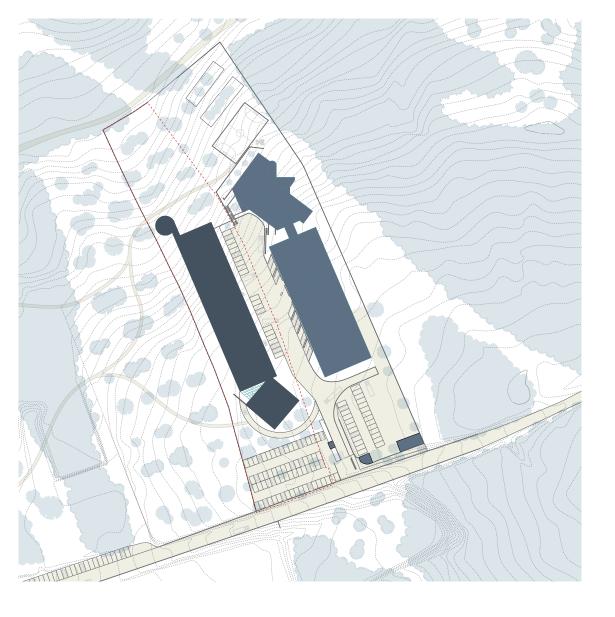
south-west elevation

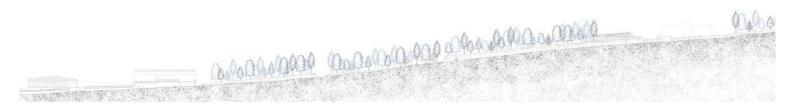
1/400 The facade prominently features V-shaped columns, located both inside and outside the building, making the structure an integral part of the architectural design. These columns distribute the building's loads to the primary thick columns, which form the backbone of the structural system. They also support the grid of beams spanning each floor, efficiently distributing the load from the roof to the foundational elements. However, there is a noticeable disconnect between the various representations of the project — plans, visualizations, and structural  $\,$ logic — which conflict with one another. This misalignment arises from a lack of cohesiveness within the team, where structural and aesthetic decisions were not well-integrated. As a result, the plans and visualizations do not accurately represent the true workings of the school's structural system. In terms of the symbolic division of the facade, the first level appears transparent and light, representing openness or the public areas of the school. The second

11/89

level, which signifies the "educational area," is characterized by a more rigid, rhythmic structure. The facade's design thus attempts to embody both the functional and symbolic aspects of the school, though the conflicting design processes undermine this ambition.







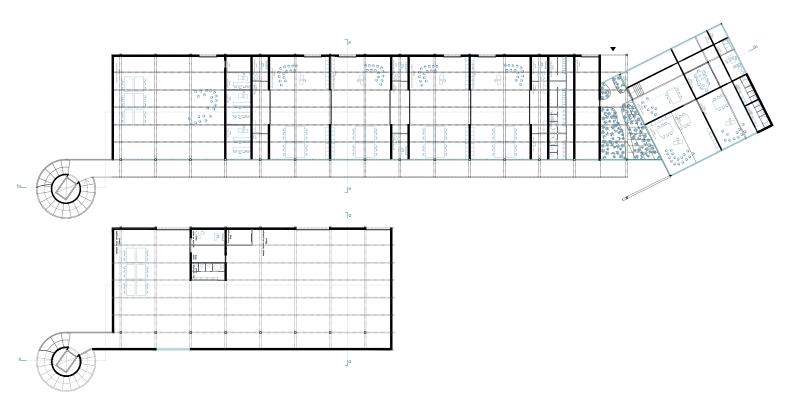
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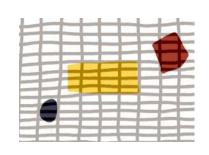
implementation plan transversal profile 1/2000



The third competition, completed within a two-weeks deadline, brought together the entire group of 12 students. The task was to design ancillary facilities for the 'Cincork' cork factory, specifically aimed at creating educational and workshop spaces. The site, located near a forested area and already home to the Professional Training Centre of 'Cincork', presented the challenge of seamlessly integrating our proposal with the existing infrastructure.

Our approach was to extend the current facilities in a thoughtful manner, ensuring cohesion with the existing building. We opted to "mirror" the layout of the neighboring structure — a long building connected to a smaller, rotated section — using this arrangement as a guide for our design.





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ground floor plan -1 floor plan

1/650



The program was designed to accommodate two distinct types of learning: theoretical and practical. This division naturally led to the creation of two separate volumes. The larger, elongated volume is dedicated to practical spaces and has two levels, while the smaller, more compact volume, rotated relative to the longitudinal axis, contains all the rooms intended for theoretical learning on a single level.

The connection between all the spaces is external, consisting of an open gallery that runs along the length of the workshops on the ground floor. At the northern end of the building, an open spiral staircase with an elevator — the third volume — provides access to the -1 level, which houses technical and more private spaces for educational experimentations, with no direct connection to the road.





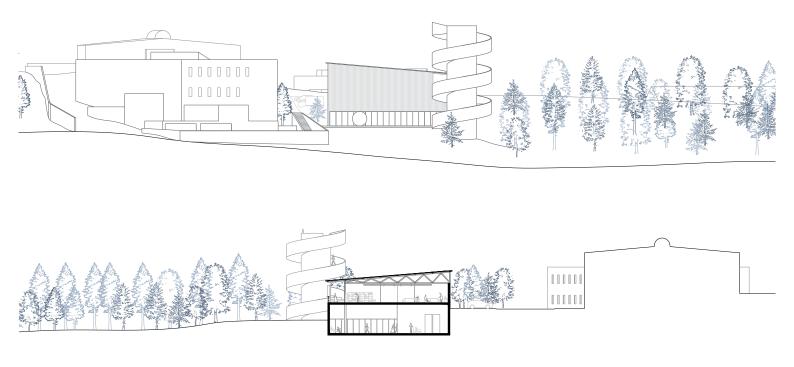
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exterior of the main entrance - winter garden

view of the external gallery

A striking bright blue tower with an open spiral staircase ascends beyond the ground floor, eventually becoming an observation platform that offers panoramic views of the surrounding landscape. It takes center stage at the end of the extarnal gallery.

The main entrance doubles as a winter garden, connecting both the theoretical and practical blocks. It is framed by two distinct columns: a metal column supporting a long concrete beam from the theoretical block, and a concrete column with a metal core, which holds up a wooden truss. The winter garden continues the natural theme of the nearby forest, seamlessly integrating the built environment with the surrounding landscape.



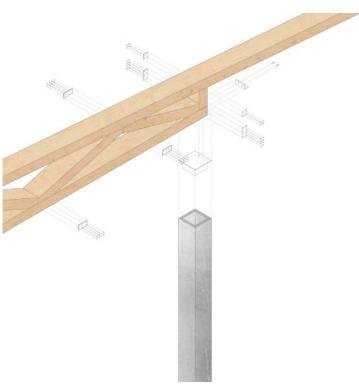
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north elevation transversal section 1/650 16/89

Public parking is in the middle of the courtyard between both CCC buildings. An exterior corridor on the east side allows truck access to workshops, while a western pedestrian corridor accommodates both people and forklifts. A hierarchical pedestrian path system ensures free, well-marked, and illuminated circulation around the building.

Taking an advantage of the site's topography and height difference, the -1 level is recessed into the ground, but still has a lot of natural light coming through the northern façade a round window on the western façade.





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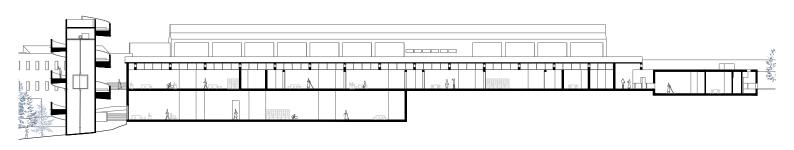
interior view of the workshops construction details of the roof

17/89

The workshop space is designed to be maximally open to natural light, promoting connectivity between the workshops, easy access to the street, and offering a generous view of the surrounding forest. Single-pitch wooden truss supports the roof. This way, the space is free of columns and the machines for work, stands and workstations are free to move around. Sliding large metal gates in each of the workshop rooms allow the length of the space to be transformed every time.

Since everyone in the group had a separate role, my primary focus was on developing the interior solution for the workshops. In general, this time it felt like the whole group was able to come up with a common, coherent story that was conveyed in the visual representation of the project.





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view of the west façade longitudinal section 1/650 18/89

Each of the volumes has a different materiality. The volume that houses the didactic programme, a square in the southern part of the site made of cork-cement composite. As one of the design intentions was to give the building an 'industrial' appearance, the outer shell of the workshops with a gallery in the rectangular volume is made of polycarbonate glass and sheet metal, although it hides the wooden trusses supporting the roof on top of the metal columns. West and east facades differ: the west facade, facing the forest, establishes a stronger connection with the natural surroundings, making it more open and transparent. In contrast, the east facade, which faces the Cincork building and the road, was designed to be more closed off, providing greater privacy for its users. The vertical tower, designed to stand out in the project, is made of blue-painted concrete, serving as a striking visual element that contrasts with the rest of the building.





inês montês josé santos yana chepilko iscte 11.23 - 01.24 three-dimensional model

20/89

The fourth competition centered on the urban redevelopment of Alcobaça's historic core, a site rich in cultural and architectural heritage. At its heart lies the Alcobaça Monastery, a UNESCO World Heritage site renowned for its Gothic architecture and historical importance. Overlooking the town from a nearby hill are the ruins of Castelo de Alcobaça, a medieval Moorish castle that offers sweeping views of the landscape.

The challenge for our group was to enhance the connection between these two landmarks, creating a cohesive perception of the city center. The project was particularly engaging for me, as it involved addressing multiple conceptual challenges, consideration of history and local materiality, while also reimagining transport and pedestrian flow to enhance the urban experience.



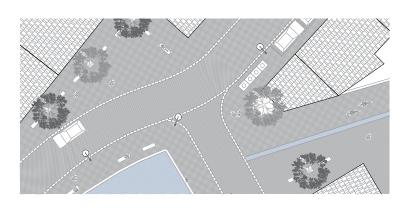


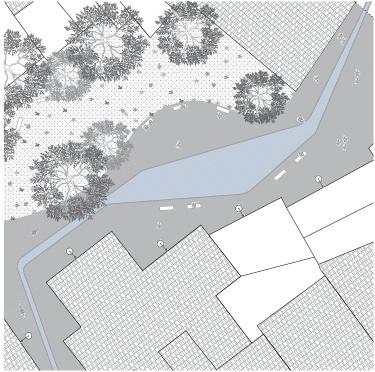
inês montês josé santos yana chepilko iscte 11.23 - 01.24  $\begin{array}{c} \text{implementation plan} \\ 1/4000 \\ \text{outline of the strategy adopted} \end{array}$ 

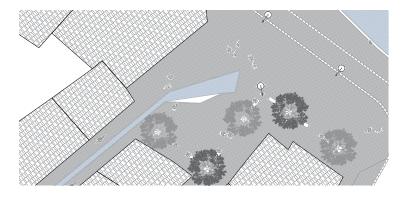


The primary focus was on enhancing accessibility and highlighting historical elements by utilizing materials and strategies that honor the region's identity. This involved rethinking transportation flow, improving street visibility, redirection of parking areas and optimizing intersections.

But, furthermore, we were unafraid to propose bold ideas, such as imprinting the footprint of the river flowing below and intervening in private areas.







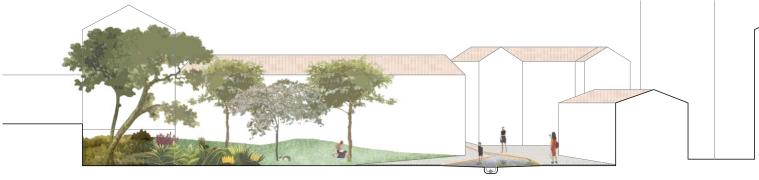
inês montês josé santos yana chepilko iscte 11.23 - 01.24 plan of the start of the water route 1/500 plan of the interior of the block 1/500 plan of the end of the water route 1/500



22/89

We studied examples where cities integrated underground waters by bringing them to the surface to enhance public spaces. In the context of Alcobaça, such a solution was appropriate for both updating the pedestrian route and creating a symbolic unification of the 'exposed' parts of the river, although we did it purely symbolically.

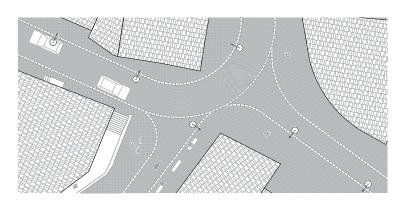


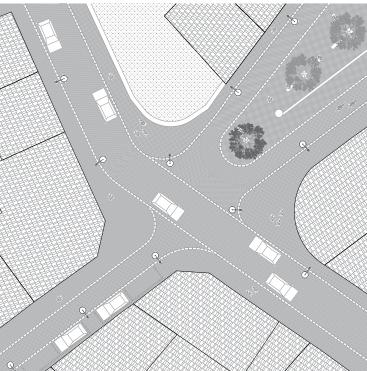


inês montês josé santos yana chepilko iscte 11.23 - 01.24 image of the start of the water route

section of the inside of the block 1/500

Another important aspect of the project was identifying opportunities to revitalize neglected private areas and transforming them into inviting public spaces. This included clearing the green zone inside one of the blocks and extending the water stream to flow through the space. As depicted in the section of the interior block, opening up the courtyard creates a new passageway with a garden and reflective water feature, encouraging people to engage with and enjoy the space.







inês montês josé santos yana chepilko iscte 11.23 - 01.24 plan of the avenue intersection 1/500 plan of the intersection next to the church 1/500

section of two secondary streets 1/500





The streets needed to become more pedestrian-friendly and visually appealing. To achieve this, the design of all intersections in the intervention area was softened, providing greater clarity to traffic flow. Additionally, we eliminated the use of curbs between pedestrian and vehicle lanes, further emphasizing a seamless and accessible environment.

Abandoned "corners" of streets were also transformed into cozy resting areas, as seen in the example of the section where two roads branch off from the intersection at different elevation angles.





inês montês josé santos yana chepilko iscte 11.23 - 01.24 image of the avenue

25/89

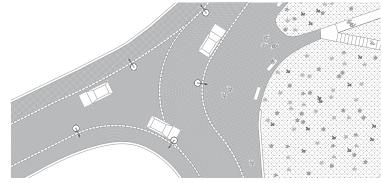
image of a side street

The streets needed to become more pedestrian-friendly and visually appealing. To achieve this, the design of all intersections in the intervention area was softened, providing greater clarity to traffic flow. Additionally, we eliminated the use of curbs between pedestrian and vehicle lanes, further emphasizing a seamless and accessible environment.

Abandoned "corners" of streets were also transformed into cozy resting areas, as seen in the example of the section where two roads branch off from the intersection at different elevation angles.

A consistent use of local materials — Lioz limestone and granite — was employed throughout the project, creating a tactile and visual connection between Alcobaça's key landmarks, enhancing the sense of cohesion within the urban landscape. We also designed street furniture elements from brass, including benches, lamps, and water drains, to introduce an additional unifying visual component to the streets, complementing the use of the same stone for the pavement.





inês montês josé santos yana chepilko iscte 11.23 - 01.24 image of the entrance to the ruins

plan of the crossroads near the ruins 1/500



In terms of traffic reorganization, vehicle accessibility, and parking solutions, we drew inspiration from successful practices in reducing vehicle presence in historical centers worldwide. Our proposal focuses on minimizing car access within the ring area around the site. Currently, Rua do Castelo, which connects the monastery to the ruins, operates as a one-way street. We proposed converting this road into a two-way street along its entire length, which involved sacrificing some parking spaces. This adjustment is intended to improve traffic flow on this crucial route.

Additionally, nearby streets—R. Miguel Bombarda, R. Cândido dos Reis, R. Eng. Duarte Pacheco, and R. Eng. Bernardo Vila Nova—would be restricted to residents only, limiting access to those needing entry to their homes or garages. This strategy creates a quieter, safer environment for residential areas while maintaining essential access for locals.



design competition "from the monastery to the castle", alcobaça.

inês montês josé santos yana chepilko iscte 11.23 - 01.24 image of the route among the ruins

27/89

The project proposes metal grating pathways around the ruins to enhance circulation and accessibility, harmoniously blending with the surrounding vegetation. The metal grating allows for visual permeability, showcasing the existing greenery and creating a unique interaction between the historical heritage and the natural environment. The lightweight structure feels unobtrusive, making access to the Alcobaça Monastery viewpoint easier. This design decision was inspired by Citânia de Santa Luzia, where a similar metal grid pathway weaves through the ruins atop a hill.





iscte 01.24 to 02.24

implementation plan

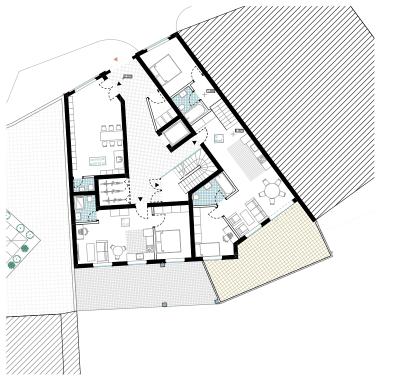
1/625



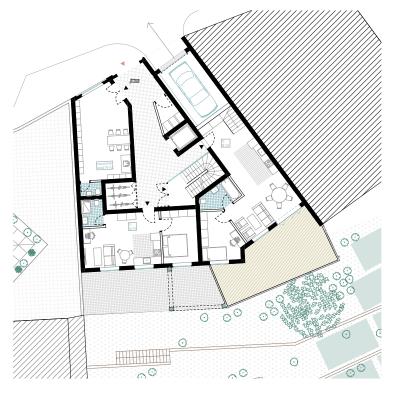
### Competition No. 5: Housing

With only a month to complete the design, each student individually developed a proposal for social housing aimed at reclaiming vacant spaces in the city. The project involved two plots located on Rua de Santa Engrácia and Rua da Bela Vista à Graça, in the parish of São Vicente. These sites, with a height difference of up to 25 meters, placed the buildings one above the other. Each plot had its own access street, distinct surroundings, and specific conditions. The intervention sites were oriented from northwest to southeast, offering views of the Tagus River. Due to the constraints of the red lines and retaining walls, Lot 1 (Ni01) and Lot 2 (Ni02) could not be connected through the courtyard space, as the retaining walls supported significant terrain differences.

For this project, I chose red brick and painted red concrete as the primary materials. While red brick is relatively unconventional in Lisbon's architectural style, it serves as a strong visual tool to unite two distinct buildings located on different streets. The boldness of the red facades allows the buildings to stand out, creating a visual link between them despite their separate positions and challenging topography.









plot ni01: ground floor, 0.000; +2.000.

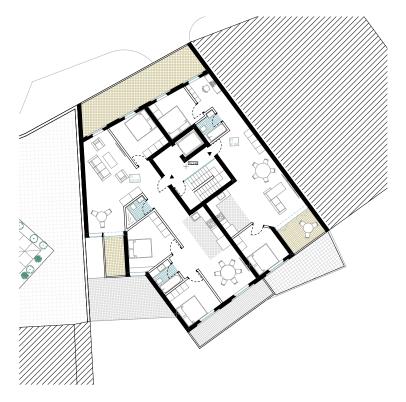
1/300

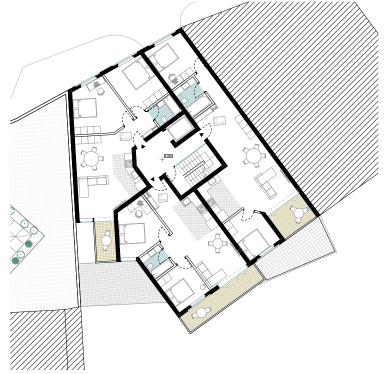


north elevation, r. da bela vista à graça 1/300

interior view of the t2 apartment

Ni01 site posed significant challenges due to its elongated and narrow limit. Additionally, strict regulations prohibited the inclusion of windows facing the adjacent buildings. These constraints required careful planning and creative solutions to maximize light and functionality within the design. Plot is also adjacent to the large observation deck of the neighboring building, so it was important to keep it free of construction to guarantee the view of the river it offers. The entrance to the building is made through wide corridor from the street, along the commercial area. The facade explores a play on square proportions, with concrete framing the window openings, creating a crisp, geometric rhythm. In Ni01, I employed a strategy that I will also use later in Ni02: positioning of the parking entrance at the lowest point of inclination along the street. This allowed to "gain" space above. Thus, T2 the apartment on the ground floor benefits from dual orientation, with access to both the courtyard and the main façade, though a few steps are needed to reach the bedroom.







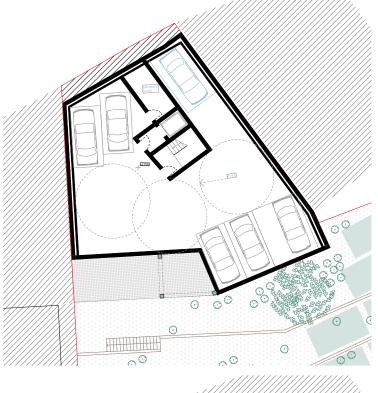
plot ni01: typical floor plan top floor plan 1/300



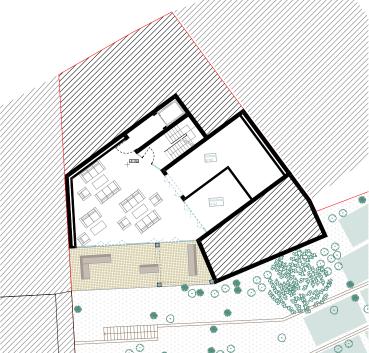
exterior view from the street

The apartments on the typical and top floors turned out quite quirky and unconventional. Typical floor (level 1 and 2) hosts 3 typologies T2 apartments. Top floor has T3 and T2 apartment.

Due to the elongated shape of the site, I placed the staircase and elevator core at the center of the plan to maximize the access to natural light for all apartments. The eastern and western facades are not available for windows due to regulatory restrictions, as well as restrictions are set on how far the apartments can be set back from the walls of neighboring buildings.









plot ni01:

-1, -2 floor plan (parking)

-3 floor plan

1/300

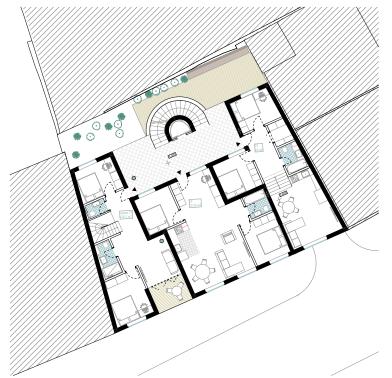
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transversal section

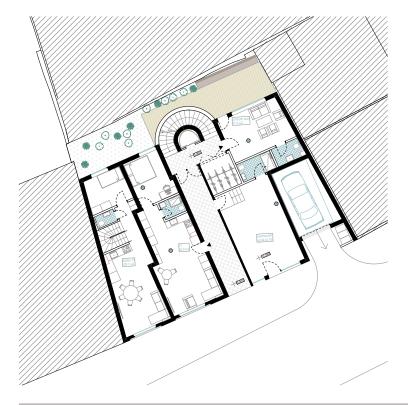
1/500

exterior view from the south

The inner courtyard slopes down three levels. I utilize the lower levels (-1) and (-2) as a parking area, while the level (-3) is designed as a communal space with direct access to the garden. This lower courtyard houses relaxation areas, a laundry room, and a large storage facility, creating a functional and social hub for the building's residents. Parts of the lowest level are reinforced with compacted soil to effectively manage the load from the parking above. This structural solution ensures the integrity of the space while allowing the parking area to function efficiently without compromising the communal areas below. It's a thoughtful integration of both engineering and design to make the most of the site's natural topography.







iscte 01.24 to 02.24

plot ni02: first floor plan ground floor plan 1/300

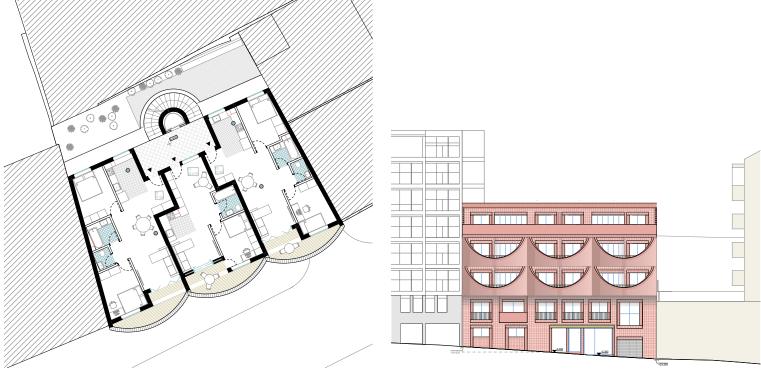


exterior view froom the street

The building proposal for plot Ni02 begins by aligning with the street line on the first two floors, matching the neighboring buildings. I experimented extensively with apartment configurations here. The upper levels feature curved, half-round balconies crafted from concrete and brick. These balconies not only introduce an unexpected sculptural element to the façade but also create unique, intimate spaces within each typical-floor apartment, making them some of the building's most distinctive features.

The parking lot entrance, similar to the NiO1 plot, is positioned at the lowest point of street access. This placement allows for higher ceilings in the living room of the T2 apartment on the first floor. Building on this exploration of the first floor, I investigated the potential of this space to avoid being limited to just one typical floor layout. As a result, the ground level houses a T1 apartment, the first floor has two T2 apartments, and both floors share a T3 duplex apartment.





iscte 01.24 to 02.24

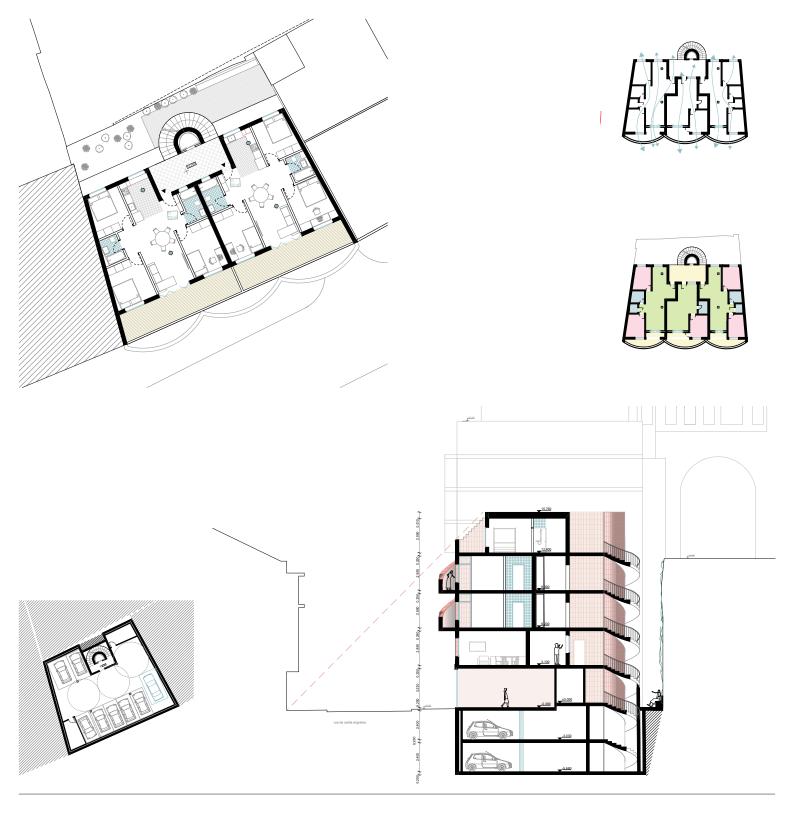
plot ni02: interior view of the T2 apartment typical floor plan 1/300



elevation, rua de santa engrácia 1/300

Apartments on the typical floor featuring curved, half-round balconies. These balconies, besides adding an unexpected sculptural element to the façade, create unique, intimate spaces within each apartment—transforming them into some of the most distinctive features of the building.

The retaining wall in the backyard rises to the height of the first four floors, which complicates the issue of natural light in the north-facing apartments. Therefore, the staircase core is placed in the backyard to create distance between the apartments and the retaining wall, allowing for open corridors on each floor that provide access to the apartments.



iscte 01.24 to 02.24

plot ni02: top floor plan

1/300 -1, -2 floor plan (parking)

1/600



schemes

transversal section

1/300

The top floor houses two T3-type apartments. The floor is recessed, providing generous direct balconies for both apartments. Generally, all the apartments in the building have dual orientation.

The parking descends two fully underground levels, accommodating 14 parking spaces and technical rooms. Structural columns are often located independently of the walls separating the apartments, which allows the structure to remain open to the viewer.

The main challenge in this competition was that the time frame was too short to complete two separate projects at once, although it gave us an impetus to delve into the specifics of building regulations under Portuguese law and regulations.





iscte 02.24 - 03.24

implementation plan 1/1000

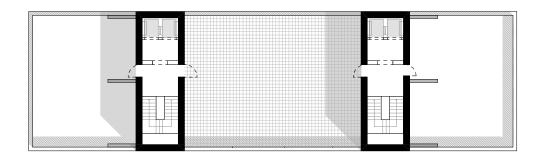


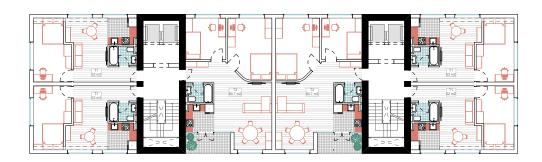
37/89

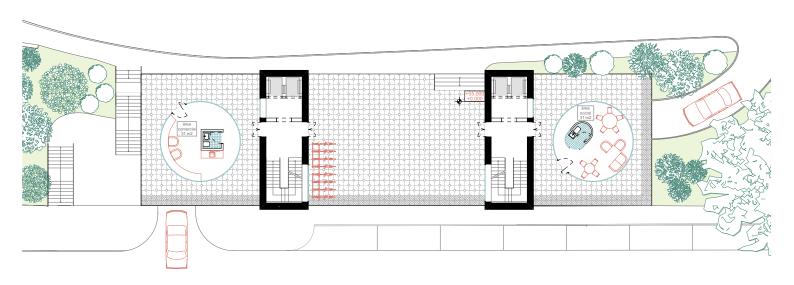
Sixth competition was again a housing project.

The location is more convenient and there is only one building this time. A free plot bordering 2 roads with a 5 meters elevation difference.

At first, I took the 'safe' route to approach this project and meet it's program requirements; I worked on fairly simple layouts for the development of the project: an equidistant grid of columns, an external gallery, apartments with the same layout logic... I developed this idea in the first weeks, but during one of my classes with the professor, we agreed to set up an experiment and completely change the approach to the project. It was risky, but I decided it was worth it: after all, in this case the competition for us was just a set for learning process and there was a space for an extra experiment.







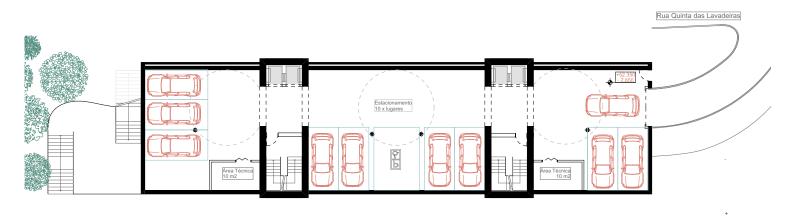
iscte 02.24 - 03.24

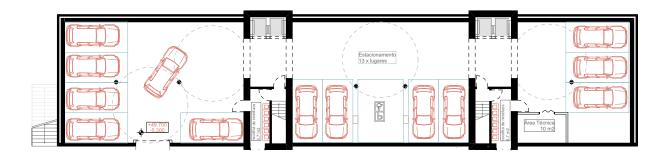
top floor plan typical floor plan ground-floor plan 1/300



The building's interior layout is centered around two vertical circulation cores, each containing a staircase and two elevators. Thanks to the cantilevered structure, the entire ground floor remains free of supporting columns, except for those around the vertical circulation areas.

The ground floor spans 40 meters in length and 11 meters in depth, with the two vertical cores dividing it centrally. The upper volume is slightly shorter at 38 meters, allowing for the arrangement of six apartments per floor: 4 T1 and 2 T2 units. In total, the building houses 24 apartments across four residential floors. The vertical cores provide efficient access to all units. Additionally, the ground floor accommodates commercial and social spaces, with the column-free design creating the impression that the building "floats" above the ground.





iscte 02.24 - 03.24

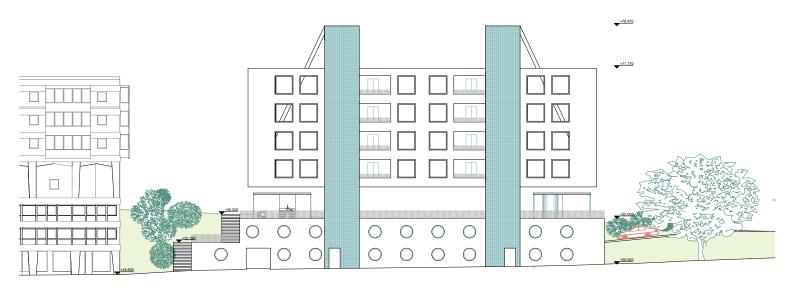
- 1 level parking lot plan
- 2 level parking lot plan 1/300

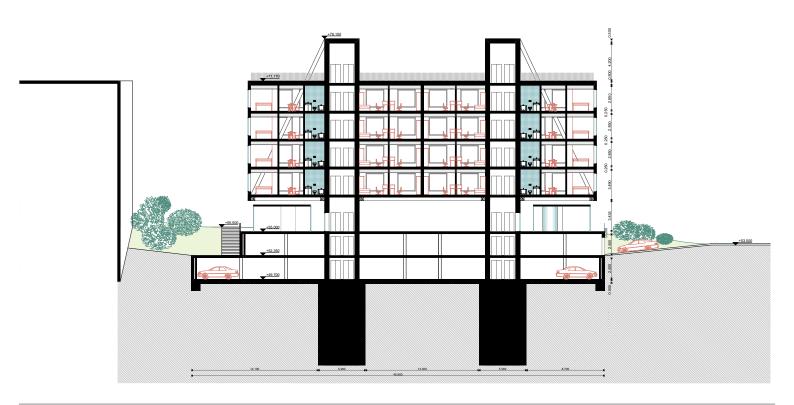




Parking entrances were organised on two levels: from Rua Quinta das Lavadeiras, on level -1, and from Rua Cidade de Tomar, on level -2. That solution made it possible to organise two-level parking without the need for a loading bay or ramp, with 23 covered spaces and parking spaces for bicycles and motorcycles. The main access to the building is from Rua da Quinta das Lavadeiras, and its main objective is to extend the street into the interior of the plot, in order to provide a better connection between the street and the commercial areas, as well as vertical circulation nodes.

The connection between the two streets has also been improved: a staircase has been built between the neighbouring building and the commercial area of the project's ground floor.





longitudinal section

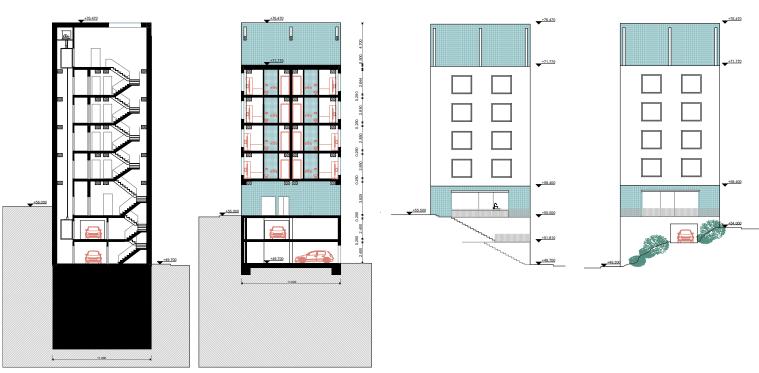
longitudinal elevation

1/400

40/89

The social and commercial zones are circular in plan and fully exposed to the viewer. However, access to the social zone is more private, achieved through the passage of the eastern tower, while the commercial zone is at ground level on the western side, adjacent to stairs that bridge a 5-meter difference in street elevation. In the facade design, it is also evident that the parking area is well-lit, featuring circular windows. The building feels split in half due to the completely open ground floor, while the visible metal trusses, combined with the round windows, give the structure a "ship-like" appearance.





iscte 02.24 - 03.24

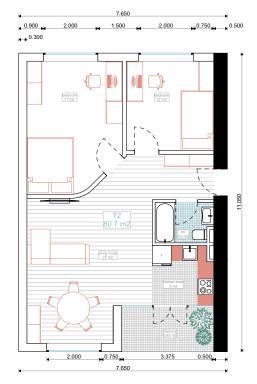
exterior view (rua quinta das lavadeiras) transverse section through structural core transverse section through T1 units east elevation west elevation 1/400

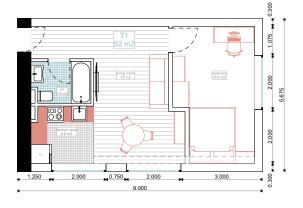
The structural system is partly inspired by the MASP project by Lina Bo Bardi and the Ministry of Transport in Tbilisi by George Chakhava. The design features two main vertical structural cores that support cantilevered beams on either side, with fixed beams spanning between them. This system is further stabilized by metal trusses running along the lateral and central longitudinal axes, which help support the cantilevered sections. There are "four lines" of beams along the entire length of the building, with slabs placed on top of them. The trusses from the cantilevered sections extend down to connect with each of cantilevered beams on the sides and thus provide an additional support. The cantilevered sections span 8 meters, requiring the structural cores to extend deep into the ground to provide the necessary stability.

This experimental structural concept lacked input from professional engineers, which could have greatly enhanced its development. An interdisciplinary collaboration would have ensured the design's feasibility and practicality.







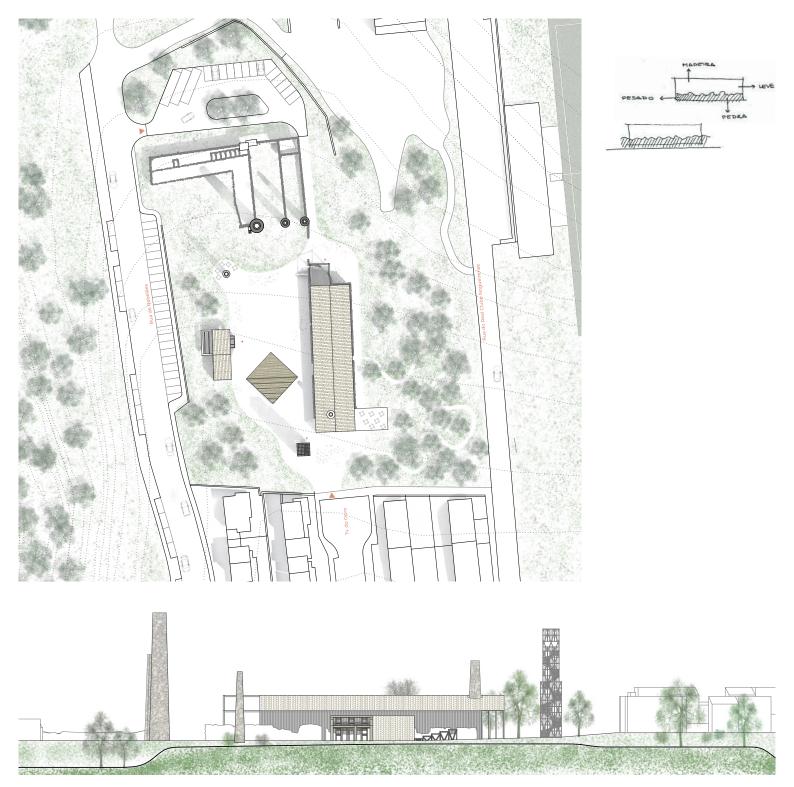


exterior view (rua cidade de tomar) interior view of the T2 typology T1 typology T2 1/140



Summing up this experience, it was a valuable chance to try to develop the idea of comfortable housing again, after the previous competition. However, I think that such an assignment could be a productive environment for collaboration/consultation with a structural engineer, serving as a great opportunity to improve the experience and add confidence in matters related to non-standard solutions or (approximately) correct calculation of loads in the building - which are important for bold ideas.





iscte 04.24 - 05.24

materiality concept diagram site plan

1/1250



profile of Rebelães street 1/750

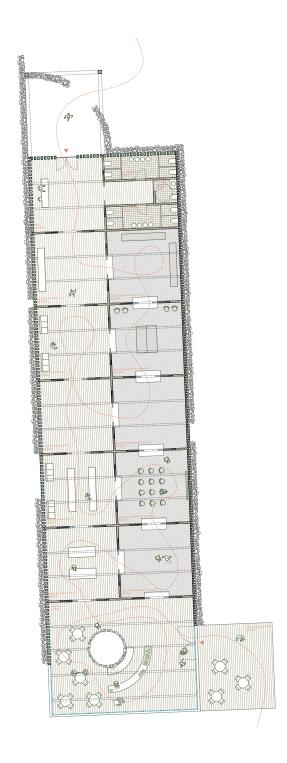
### Seventh competition: working with heritage

The competition aimed to create the Interpretative Center of Minas do Pintor, enhancing the architectural and urban quality of the area while respecting its existing morphological and typological characteristics. The intervention site, covering 10,698 m², is located on the former Minas do Pintor mining grounds in the municipality of Oliveira de Azeméis, Nogueira do Cravo.

The area still retains traces of its former mining activity, including rare industrial stone chimneys, an administrative building, ruins of an ore storage warehouse, and remnants of old processing structures. The site features Precambrian schists and limestones. Due to arsenic extraction, vegetation is sparse and uneven. The mine, which operated vertical veins through a single 204-meter deep shaft connected to 8 galleries, was expanded between 1881 and 1891.







iscte 04.24 - 05.24

interior of the museum longitudinal section of the museum 1/800

ground floor of the museum

1/300

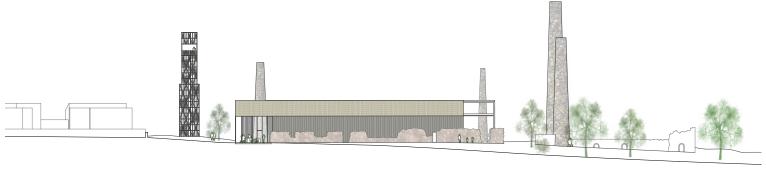


At start, we set ourselves a certain framework for the development of the project, namely: each group chose the main building material from which to build their proposal. My group chose to use wood — a contrasting and lightweight material — to complement the stone remnants. Our team chose not to replicate the industrial aspects literally but to reinterpret the area by focusing on its cultural potential. We decided to preserve the ruins and integrate the chimneys into the design. Our approach is to create narratives around the mining history and its geological features, but keeping central focus on the community's interaction with the site in a new format.

The project is divided into five segments:

the ruins, preserved in their original form, situated adjacent to the car park; an interpretation centre containing a museum area with an atrium, ten rooms and a cafeteria at the end of the building; an indoor auditorium paired with an an auxiliary building; an open-air amphitheatre, positioned between the interpretation centre and the auditorium.





iscte 04.24 - 05.24

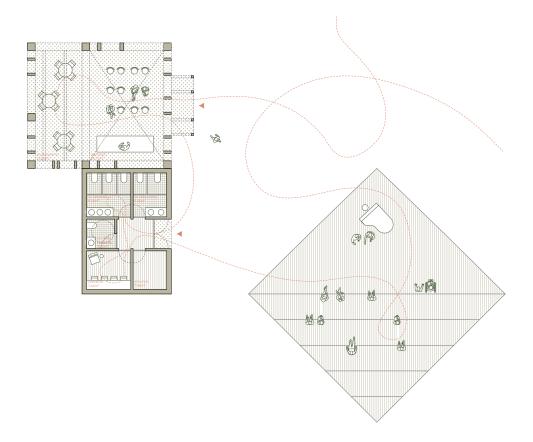
view of the museum's main entrance transverse section through cafeteria  $1/800\,$ 

46/89

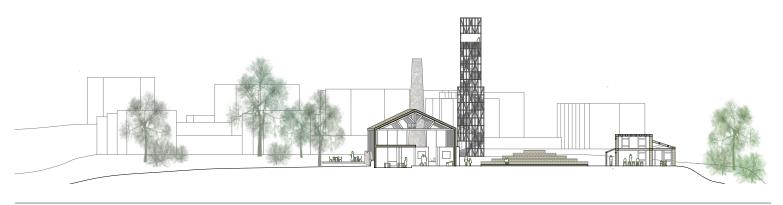
The interpretive centre is located on the eastern side of the site, where a building once stood as part of the Minas do Pintor complex. The structure is enclosed by a stone wall, with the walls built only within the ruins. The entrance to the museum features a prominent column that stands out from the building, as well as an opening formed by the ruins. Upon entering, visitors can immediately see through the entire building by looking towards the stone chimney at the end of the building.

The building consists of ten interconnected exhibition halls, allowing visitors to freely explore the space. Five of them are lit by natural light, which penetrates through wooden slats along the façade, creating dynamic patterns of light and shadow. The remaining five rooms are dim, receiving only indirect light through the doors connecting them to the other rooms. The floors in these rooms are covered with gravel, reminiscent of the dark, confined and earthy environment of the mines. The design deliberately contrasts light and shadow, as well as different materials, to enhance the sensory and visual experience of visitors.

At the southern end of the building is the cafeteria, which is the only space with large windows. This area is designed to integrate with the circular stone chimney, which serves as the focal point of the cafeteria.







iscte 04.24 - 05.24

exterior view of the auditorium and amphitheatre

plan of the auditorium and amphitheatre

1/500



longitudinal section through the auditorium and museum 1/600

The tall stone chimneys, as the central element of the site, serve as a backdrop for the outdoor amphitheatre. Placing the amphitheatre in the centre unified the entire project, making it revolve around the courtyard, between the main volumes. The shape is a perfect square (quadrangular like all the buildings on the site), turned so that the stage faces the chimneys.





iscte 04.24 - 05.24

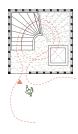
view of the amphitheatre stage with the chimneys in the background

cut through the amphitheatre 1/600

48/89

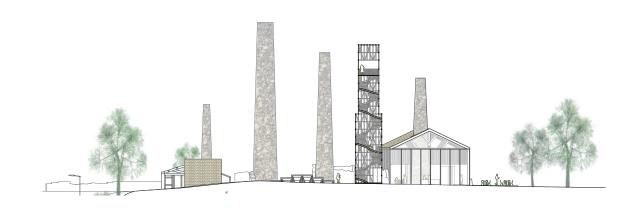
The Auditorium building is an open wooden frame and can be closed with curtains. An auxiliary building of the same length as the auditorium was designed immediately next to it, but completely enclosed, without windows, with only a glass door for entrance.











iscte 04.24 - 05.24

elevator tower plans in section elevater tower plan top view 1/500



section of the elevator tower 1/600

The site was once home to a lift tower to support the existing mines. To bring this element into the present and reinterpret this historical element within the project, a new tower with an observation deck was conceived. The tower tapers as it rises to resemble the one that existed on the site and has a transparent structure. The staircase design draws inspiration from Lina Bo Bardi's iconic Helicoidal Wooden Staircase, adding a sculptural and dynamic quality to the ascent. The height of the tower is dictated by the size of the chimneys.





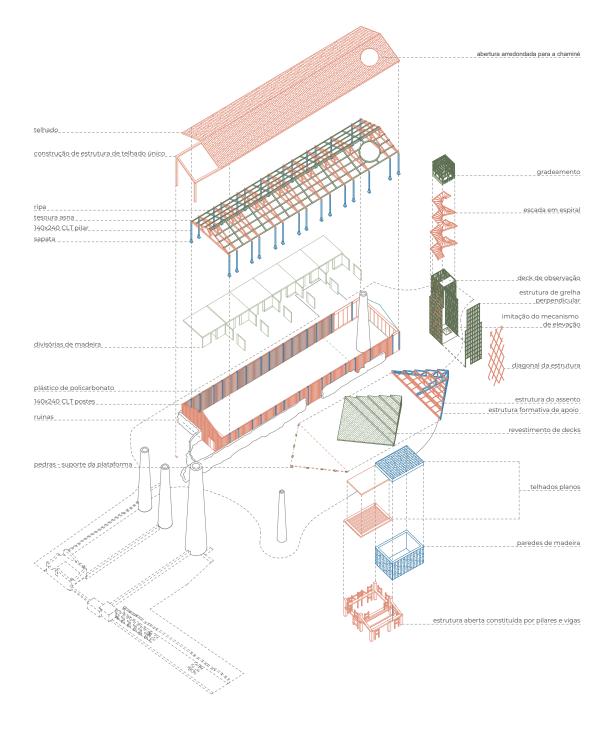
iscte 04.24 - 05.24

exterior view of the tower and museum interior view of the lift tower

50/89

The overall strategy was partly dictated by the fact that the materials provided by the organisers for the competition did not contribute to an in-depth understanding of what exactly happened at this mine before it was abandoned: how did it function? What were the logic, organisation and mechanics of the process? We had access to a photo model of an approximate historical reconstruction of the mine complex and a schematic illustration of arsenic production.

The impression I have is that for this project it would be good to have a dialogue with someone who knows not just the local context but this particular place, its history and peculiarities. A better understanding of the heritage that we are presenting in this competition could perhaps change the course of the design a little bit and look at the location from a different perspective.



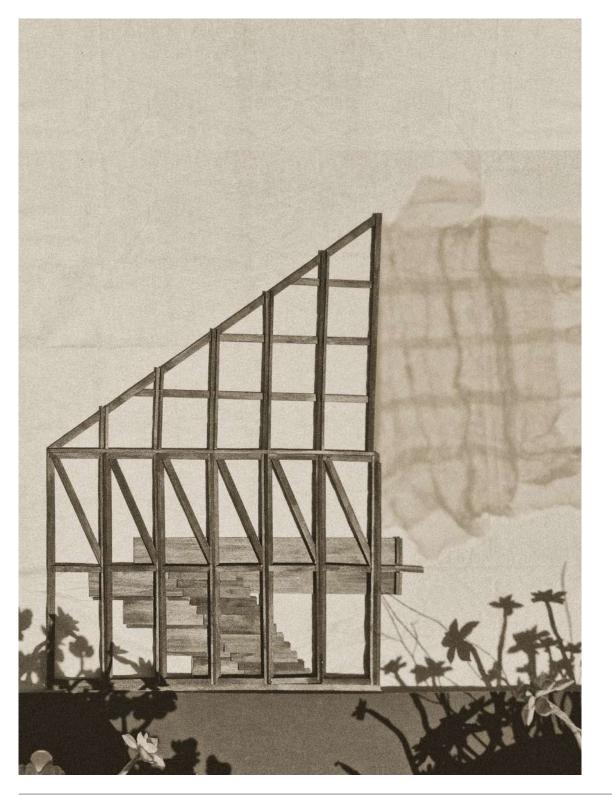


materials constructive scheme

51/89

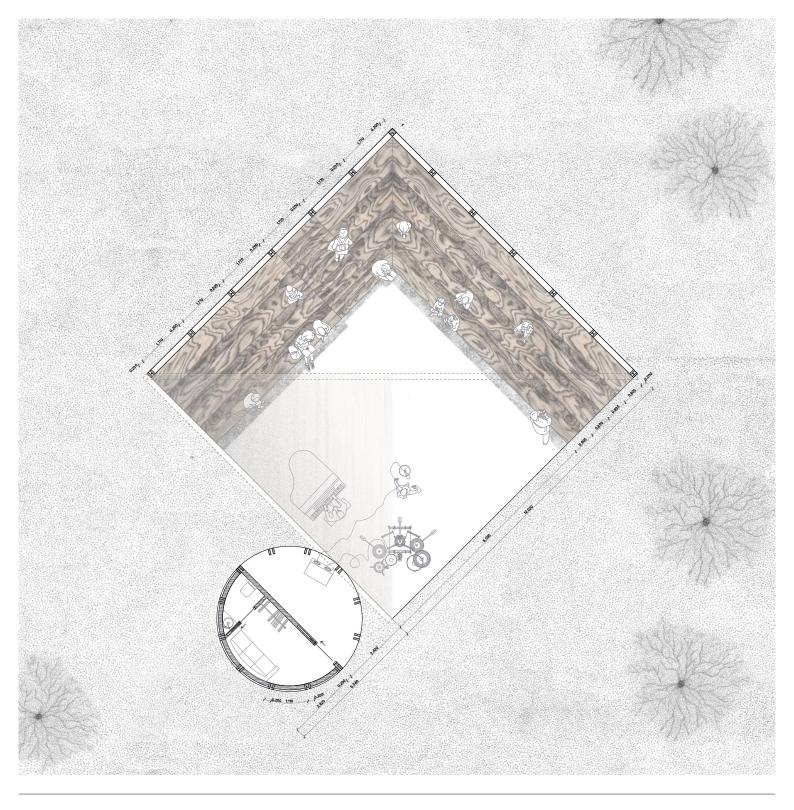
The main structural elements of the museum consist of Cross-Laminated Timber (CLT) columns and vertical posts. The roof is supported by Asna scissor trusses, which distribute the load and enable wide, open interior spaces without the need for additional supports. On the lighter side of the museum, the design incorporates both CLT pillars and polycarbonate inserts for weather protection, while on the darker side, wood covers the spaces between the pillars. These pillars are aligned with the dimensions of the support columns that hold up the trusses. For the auditorium and amphitheater, the design follows the principle of a free-standing structure, covered by a shell on top but otherwise exposed. The Helicoidal Wooden Staircase is supported by the tower structure itself.





the last jump photo of the model 53/89 iscte 05.24 - 06.24

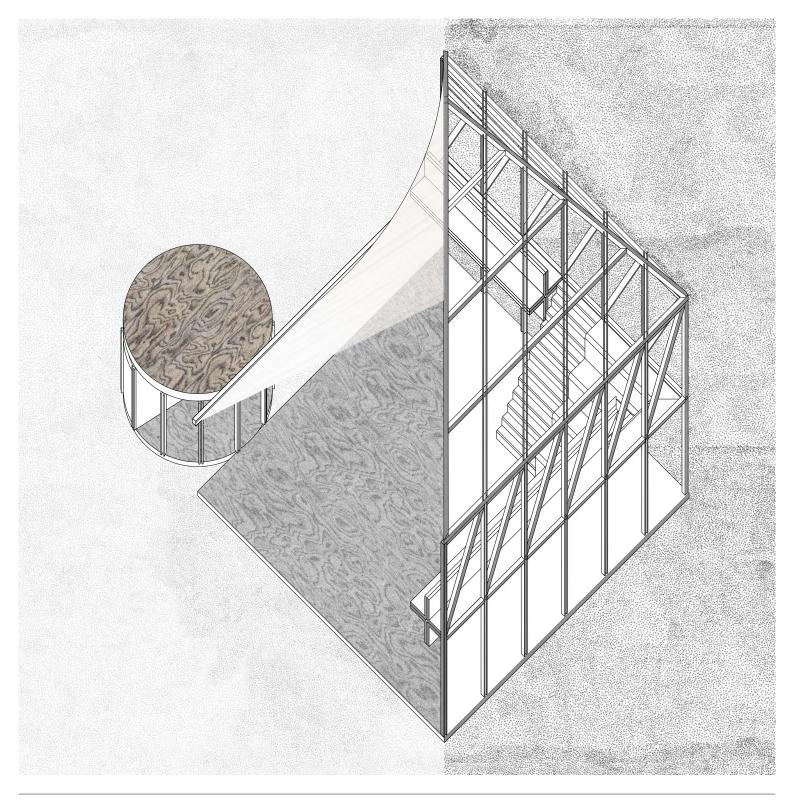
The last exercise was a kind of continuation of the previous competition - an interpretive center based on a former Minas do Pintor mining complex - but at the same time detached from it. The idea was to create something based on a graphical representation of the project from the very beginning. That is, not to leave the final images for last, but to start with them and end with them - having only 4 canvases for the development of the project all the time: a silhouette of the project model, a plan, axonometry and rendering. The programme of the previous competition included the creation of an amphitheater in an open area - and I decided to develop this element.



the last jump plan 54/89 iscte 05.24 - 06.24

Now, only large chimneys and the nearly erased ruins of the mines' architecture and infrastructure remain. The collective work and processes that once defined this place are embodied in the transformative nature of this theater and the active involvement of collective action to transform the space.

At its core, The Theater embodies the philosophy of duality, symbolizing the harmony that arises from its ability to morph from a passive architectural form into an active communal space. It challenges traditional notions of static structures, inviting users to become active participants in the life of the building. The transformative design and material duality of the theater offer a profound commentary on the nature of space.



the last jump axonometry 55/89 iscte 05.24 - 06.24

Seats of the amphitheater are designed to be unfolded by the users, initiating a collective process that breathes life into the structure. When unfolded, the space transforms into a functional amphitheater, inviting performances, gatherings, and communal activities. When folded, the seats form crosses on the edges of the structure, a visual representation of the potential for change inherent within the space. In general, I have been thinking a lot about the potential of shape shifting structures that serve as symbols in architecture. One such example is the Prada Transformer (2007) project by OMA.

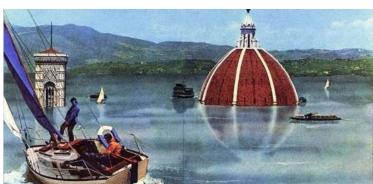


the last jump render 56/89 iscte 05.24 - 06.24

The four images of the theater tell the same story from different perspectives; removing one would make the narrative incomplete. The diagonal rafters, although inclined, grow straight from the side facades, creating a perpendicular grid that envelops the theater. This geometric manipulation represents or- der and structure, contrasting with the fluid and organic nature of the activities within. This interplay between the rigid and the dynamic emphasizes the theme of duality, demonstrating how structure and flexibility coexist to create a balanced whole. From the outside, the structure appears as burnt wood, while the interior features light, raw wood. Half of the stage is covered with a light fabric that can also serve as a screen, capable of closing off half of the space.













central courtyard of the école des beaux-arts with plaster casts and architectural models, 1937

### superstudio

"salvage of italy's historical centers (your italy)" collage 1972

alvaro siza, expo '98 - pavilhão de portugal lisbon world exposition. photo: luca nicolau, 1998

christo and jeanne-claude, reichstag wrapped in silver fabric.

idea 1971. project realised 1995. photo: wolfgang volz/

"organized population, housing conquered" saal poster, 1975

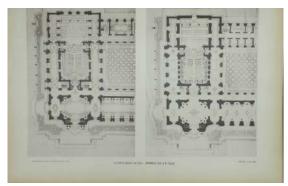
exploring public design competitions as a primary platform for architectural education

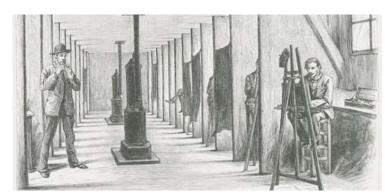
introduction

Public design competitions have long been significant part of the architectural profession, serving as both a professional proving ground and an educational tool. This research will investigate the role of competitions in shaping the pedagogical landscape of architectural education, highlighting their potential as a conduit for producing new knowledge and preparing students for the complexities of professional practice. Situated at the crossroads of academic learning and practical work, competitions offer a unique space for exploring flexible solutions to contemporary issues.

Reflecting on my own experience as a student, several questions emerged: what are the best ways to integrate competitions into academic studios to benefit both students and professors? Can local competitions be used as a space for research and subsequent proposal of solutions to address local needs while maximising the learning experience? Does focusing on a single discipline limit our ability to rethink the architect's role in addressing complex challenges? Exploring these possibilities opens a path for rethinking how competitions can serve as experimental spaces for students on various layers. Additionally, I aimed to look on how interdisciplinary approaches in mentoring and team dynamics can enrich the educational value of public design competitions and support academic goals.















boileau, louis. student of redon, g. achille leclère competition, 1901

bonnamour, student of pascal, m. drawings of section and plan of the interior of the palace's auditorium, awarded project, 1901

### 12-hours sketch competition

les loges à l'école des beaux-arts, paris, alexis lemaistre. 1889.

architecture atelier, école des beaux-arts.

prix de rome winners, 20th-century photograph amet georges alexandre pradelle, elevation of a monument to joan of arc, prix de rome competition, 1890

atelier populaire workshop, philippe vermès.

critique to competitions. je participe [...] poster, atelier populaire workshop, ecole des beaux-arts de paris. 1968.

<sup>1</sup>Mindeguía, Francisco. The PRIX DE ROME of the École des Beaux-Arts. http://www.mindeguia.com/dibex/Prix-Rome-e.htm.

<sup>2</sup>Encyclopaedia Britannica. *Prix de Rome*. www.britannica.com/art/Prix-de-Rome. <sup>3</sup>Drexler, Arthur. 1975. The Architecture of the Ecole des beaux-arts. Catalog, New York: The Museum of Modern Art, 28. www.moma.org/calendar/exhibitions/2483. <sup>4</sup>Rubin, Alissa J. 2018. Printing a Revolution: The Posters of Paris '68. The New York Times, May: 5.

architectural competitions during the formation and evolution of academic principles in the field: historical overview

on symbolic capital through networks of masters, apprentices and personal connections. The architecture section of the École des Beaux-Arts (France, 1819 – 1968) employed a system of 'emulation competitions', where students had to adhere strictly to the production process to earn credit, a practice rooted in the 18th century from the Académie Royale d'Architecture. Becoming an architect followed a hierarchical system, starting with students joining an atelier under a patron. After initiation, they entered school concours, progressing from esquisses (12-hour sketches) to projet rendus (detailed drawings)<sup>1</sup>, which had to align with the initial sketch, advancing through a pyramid-like structure. Successful students eventually reached the Grand Prix de Rome competition2, where a jury selected the most talented, awarding them a scholarship to study in Rome for several years to learn architectural theories of Rome and Greece antiquity. Government patronage ensured that former competition winners influenced the design of important buildings, shaping the architectural legacy of 19th-century France.3 The end of the Prix de Rome was part of broader educational and social reforms in France, driven by the political upheaval of May 1968, when student revolts sparked widespread calls for reform in higher education, which was criticized for being

overly conservative, hierarchical, and disconnected from contemporary practice.<sup>4</sup>

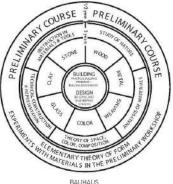
Throughout most of its history, the field of architecture sustained itself by passing













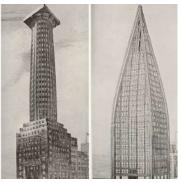










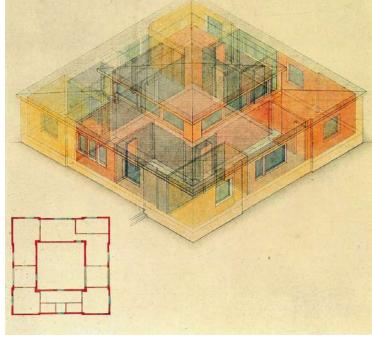












émile jacques gilbert, prix de rome winner. study of a wall painting at pompeii. 1824.

unknown (french), competition drawing for a state bedroom: elevations, ceiling and flooring plans, profiles. late 19th c.

jean béraud, competition drawings for admission to the école des beaux arts: elevations, cross-sections, plans for a pantheon. 1903.

bernard tabuteau, competition drawing for a train station. 1913

georg muche. haus am horn. a prototypal house, bauhaus, intented to serve as a template for mass-produced housing. 1923. bauhaus teaching program diagram walter gropius. 1922

bauhaus school, class with alcar rudelt with architecture students in front of the bauhaus, dessau. 1929-1931.

vkhutemas teaching program diagram. 1923. vkhutemas

students with models, 1920s.

tribune tower competition proposals

w. gropius and a. meyer; m. taut; a. loos; and b. taut, w. gunther, and k. schutz. 1922.

"late entries" tribune tower proposals h. jahn, j. maio, arquitectonica, r.stern. 1980.

<sup>5</sup>1975. Drexler, Arthur. The Architecture of the Ecole des beaux-arts. Catalog ,New York: The Museum of Modern Art, 3. www.moma.org/calendar/exhibitions/2483. <sup>6</sup>Rowland, Anna. 1988. Business Management at the Weimar Bauhaus. Journal of Design History, Volume 1, Issue 3-4 156.

<sup>7</sup>Gropius, Walter. 1956. Scope of Total Architecture. London: Allen & Unwin. 45-46.

<sup>9</sup>Park, Steve. 2022. Chicago Tribune Tower Design Competition 100 Years Later. All Things Architecture.

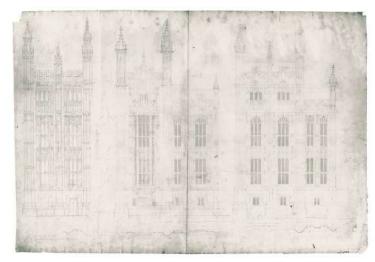
architectural competitions during the formation and evolution of academic principles in the the field: historical overview

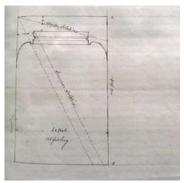
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The Ecole des Beaux-Arts appeared focused on addressing issues that were no longer seen as truly relevant, while the Bauhaus school (Germany, 1919-33) made a significant achievement by identifying and tackling what were considered the 'real' problems.<sup>5</sup> Instead of competitions, it firstly focused on a preliminary course designed to uncover each student's interests, which were then nurtured through ongoing workshops. Gropius viewed these workshops as essential to the educational process, making them central to the Bauhaus curriculum. He also believed in instilling a sense of responsibility in students by compensating them for their work. Students were paid if their projects were completed on time and met high-quality standards. Once the design was finished, the evaluation focused on several aspects: the merit of the form and idea, the level of skill displayed, and the time required for production.<sup>6</sup> The Bauhaus idea of education prioritized teaching methods of approach, rather than teaching skills.7 "Good education (...) must certainly lead [the student] beyond mere fact information and book knowledge into direct personal experience and action."8

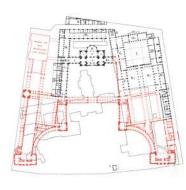
At the time, The Tribune Tower Competition (1922) sparked global interest in modern architectural ideas, although the winning design leaned toward Gothic Revival. This competition highlighted the growing tension between traditional and modernist architecture, setting the stage for future architectural innovations.9

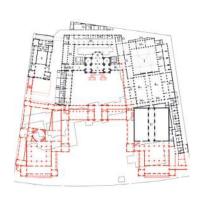


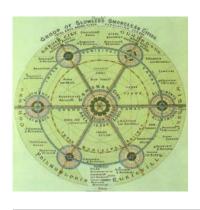




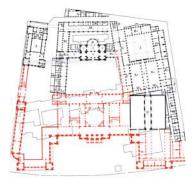














### competition entry for the royal exchange,

charles robert cockerell. view of courtyard lithograph. courtesy london metropolitan archives. 1838.

sectional study of c. r. cockerell's entry for the royal exchange competition, joseph gwilt. 1839.

diagram illustrating the garden city concept. ebenezer howard.

great exhibition building competition. first sketch for the joseph paxton. 1850.

the crystal palace in hyde park for the grand international exhibition. joseph paxton. 1851.

## public competition to design a new palace of westminster.

winning proposal, drawing for the houses of parliament, charles barry. 1836-40.

proposals for the extension of the victoria and albert museum. 1865-74.

ground floor,

francis fowke's completion plan in red. 1865; henry scott's completion plan in red. 1870; henry scott's completion plan in red. 1874.

# competition for the extension of the victoria and albert museum. winning proposal.

ground floor, aston webb's (traininee of charles barry) completion plan in red. 1891.

<sup>10</sup> Lester, Stan. 2021. Architecture in the UK: a study in professional entry-routes and entry-gates. Higher Education, Skills and Work-Based Learning. Vol. 12 No. 1. p. 4. doi:https://doi.org/10.1108/HESWBL-02-2021-0034.

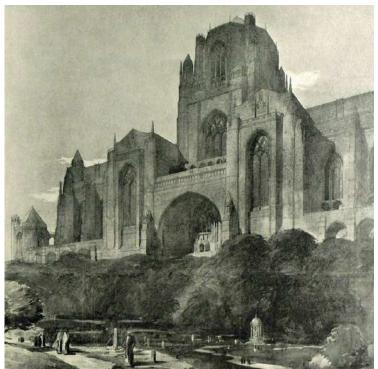
Stevens, Garry. 2014. A History of Architectural Education in the West.
 Architectural Blatherations. https://www.archsoc.com/kcas/Historyed.html
 Zamarian, Patrick. 2017. To Fend for Ourselves in Proud Isolation' – The AA School of Architecture in the Postwar Period (1945-1965). PhD, pp. 27-29. https://livrepository.liverpool.ac.uk/3008372/1/200963072\_Jul2017.pdf.
 Iplid, p.24

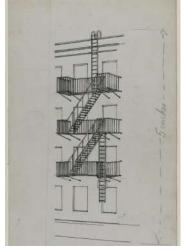
architectural competitions during the formation and evolution of academic principles in the the field: historical overview

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Architectural education in 19th-century England developed quite differently from the state-regulated systems in France and Germany. It was driven by practitioners, not universities. Before the advent of formal architectural schools, aspiring architects in England typically entered the profession through apprenticeships, working under established architects. There was no formal state certification for architects in Britain until 1880s, when the Royal Institute of British Architects (RIBA) established membership exams<sup>10</sup>; competence was assessed informally, often through design competitions. Winning a competition marked an architect's readiness to practice independently.<sup>11</sup> The Architectural Association (AA), founded in 1847, while remaining independent from the universities, opened its first formal programme in 1889 in an attempt to reorganise education. At the beginning of this process, the AA, which had always maintained a rigidly neutral stance during the mid-19th-century 'battle of styles,' briefly entered an Arts and Crafts phase, moved on to neoclassical and eventually Beaux-Arts approach. By the 1920s, however, had fully aligned its curriculum with the RIBA examination program and discontinued evening classes, the last remnants of the apprenticeship system.<sup>12</sup> AA maintained a collegial and informal relationship between tutors and students.<sup>13</sup> This egalitarianism has shaped the AA's innovative 'juries,' which, unlike the closed Beaux-Arts juries, encouraged participation from critics, students, and observers.















### giles gilbert scott,

liverpool cathedral, winning proposal, 1903,

### giles gilbert scott,

liverpool cathedral, redesign, 1910,

### giles gilbert scott,

liverpool cathedral, interior and the vault of the central space built in 1942. front cover of affred arthur cox's report on his travels to the u.s. (riba collections). 1890.

page from charles daubney report on fire safety standards in the u.s. (riba collections). 1901.

university of liverpool, school of architecture. (riba collections). 1920.

<sup>14</sup>Toplis, Ian. Liverpool Cathedral. GilbertScott.org The Scott Dynasty. https://gilbertscott.org/buildings/liverpool-anglican-cathedral.

<sup>15</sup>Whittick, Arnold L. 1974. European Architecture in the Twentieth Century. Abelard-Schuman.

<sup>16</sup>Collins, Peter, Kenneth Frampton, and Réjean Legault. 2004. "Concrete." In Concrete: *The Vision of a New Architecture*, 36–55. McGill-Queen's University Press

<sup>17</sup>Wells, Matthew. The history of the RIBA President's Medals: Travel scholarships in North America. RIBA. https://www.architecture.com/explore-architecture/inside-the-riba-collections/

<sup>18</sup>RIBA. The President's Medals History. https://www.presidentsmedals.com/ history.aspx.

<sup>19</sup>Stevens, Garry. 2014. A History of Architectural Education in the West. Architectural Blatherations. https://www.archsoc.com/kcas/Historyed.html architectural competitions during the formation and evolution of academic principles in the the field: historical overview

The design competition of Liverpool Cathedral began in 1901, with a 22-year-

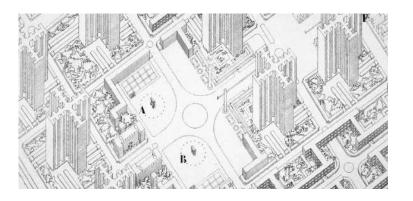
old Giles Gilbert Scott, still an apprentice to Temple Moore, another cometitor,

emerging as the unexpected winner. His Gothic Revival design impressed judges, including N. Shaw and G. F. Bodley. Due to concerns about Scott's inexperience, Bodley was appointed as his mentor. After Bodley's death in 1907, Scott took full control and, by 1910, convinced the committee to accept his revised design, replacing the twin towers with a central one. This change blended traditional Gothic with modern monumental elements, transforming the design. In 1836, George Godwin received the first-ever RIBA Gold Medal for his essay on the properties of concrete, a scholarly work that reflected the period's reliance on classical sources for scientific validation. In 1881, Godwin himself established a scholarship to help young talents study modern construction techniques abroad. Chosen applicants were awarded the *Godwin Bursary*, funding at least 5 weeks of overseas research, with a report to be submitted to the RIBA. The current form of the awards dates to 1986, when RIBA introduced the Bronze and Silver Medals to reward students' design work, with the Dissertation Medal added in 2001.

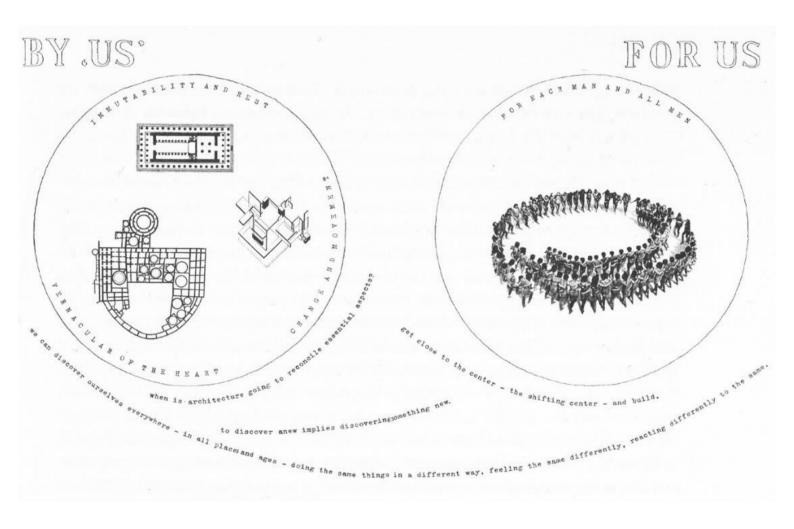
France introduced formal, organised architectural education, while Germany

emphasized the integration of teaching and research in universities. The U.S.

combined both of approaches, layering them onto british apprenticeship system.<sup>19</sup>







le corbusier, radiant city 1933

aldo van eyck. otterlo circles diagram

ciam last meeting otterlo, 1959 pedagogical transformations in architectural education

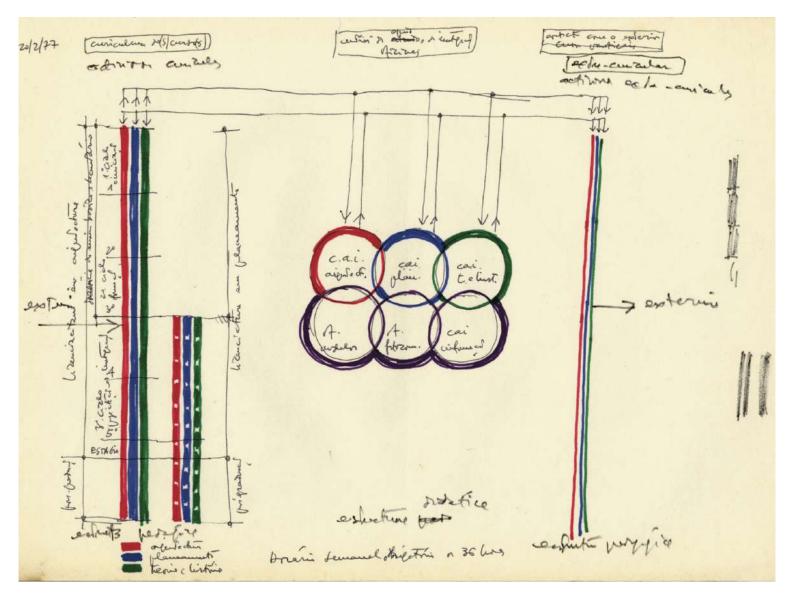
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The transformation of architectural education in Portugal through the 1931 and 1957 reforms marked a slow but significant shift from the classical Beaux-Arts tradition to more modern and technical approaches in the field. These reforms, conducted into the Escolas de Belas-Artes of Porto and Lisbon, sought to modernize curriculum by incorporating technical training and more practical, functionalist design principles. However, this process was constrained by the lingering Beaux-Arts traditions, making it a hybrid model rather than a full transition to modernist pedagogy.

Before the 1931 reform, architectural education in Portugal had been grounded in the 19th-century Beaux-Arts system, which emphasized classical design, historical styles, and artistic composition. The educational model closely followed that of the École des Beaux-Arts in Paris, where students were trained as artists, focusing on aesthetics and the mastery of historical architectural principles. The learning was highly structured around atelier-based methods, where students worked under the guidance of a master architect and engaged in competitive project-based learning. It was kept up to date with successive trips to Paris by scholarship holders to reproduce the teaching practised in France.<sup>21</sup> This approach, while fostering creativity within a rigid framework, placed little emphasis on technical or practical construction skills, which were becoming increasingly critical as modernist architecture and industrialization reshaped the profession.

<sup>&</sup>lt;sup>20</sup> Moniz, Gonçalo Canto. 2011. O Ensino Moderno Da Arquitectura: A Reforma De 57 E As Escolas De Belas-Artes Em Portugal (1931-69).

<sup>&</sup>lt;sup>21</sup> Silva, Marco Alexandre Jesus. 2017. Escola De Arquitetura Em Debate: Entre Os (Des)Encontros, Entre Porto E Coimbra.





### study plan, general bases

porto high school of fine arts, 1977 archive fernando távora

carlos ramos in atelier

late 1940's

<sup>22</sup> Moniz, Gonçalo Canto. 2012. A Reforma De 57: Em Direção A Um Ensino Universitário Da Arquitetura. IX Congresso Luso-Brasileiro da História da Educação. Rituais, Espaços & Patrimónios Escolares. Lisboa.

<sup>23</sup>Tostões, Ana. 1997.

Os Verdes Anos na Arquitectura Portuguesa dos Anos 50

<sup>24</sup>Gil Bruno, Susana Lobo, e José Esteves. 2020. *Portuguese Architecture in Transit(ion): The 1967 International Competition for Amsterdam Town Hall.* Footprint. DELF Atchitecture Theory Journal, 07 16: 15-33..

pedagogical transformations in architectural education

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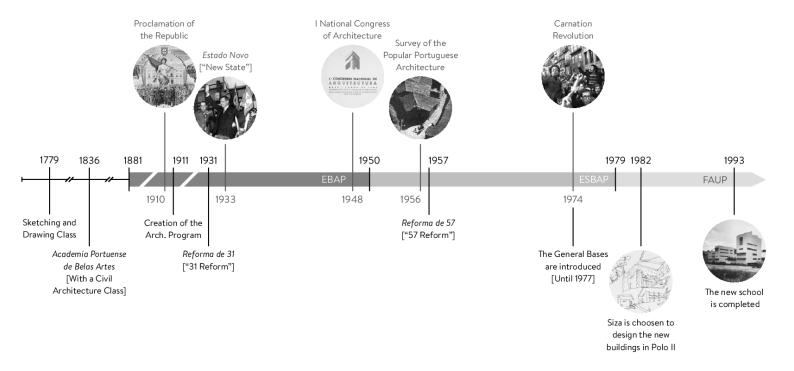
At the turn of the 20th century, calls emerged in Portugal for educational reform to meet the evolving technical needs of the profession. However, these calls were slow to gain momentum, and the 1931 reform ultimately reinforced the dominance of the Beaux-Arts system. While it aimed to streamline the educational framework, it failed to introduce the technical and functionalist aspects gaining traction in Central Europe, where architectural schools were embracing modernist principles. Portugal remained rooted in classical Beaux-Arts traditions, focusing on artistic training rather than addressing modern architectural demands.<sup>22</sup> Several factors contributed to this delay in adopting modern approaches, including academic conservatism and later, the Estado Novo regime's promotion of traditional architectural styles. At the time of the 1931 reform, however, the regime's influence on education was not yet fully established. The regime's "Estilo Português," later ironically dubbed "Português Suave," emphasized a more understated nationalistic style in the 1940s, shifting away from earlier monumental modernism.  $^{\rm 23}$  While the government initially embraced monumental styles, by the mid-20th century, the educational system remained slow to adopt functionalist ideas, contributing to the delayed modernization of architecture in Portugal. At the 1948 National Congress of Architecture, professionals united to challenge the Estado Novo regime's official aesthetic in public works and called for modern architectural and urban planning principles.<sup>24</sup>











#### academia das belas artes, porto, 1905

#### faup building, 1993

the faculty founded in 1979, from the transformation of the architecture course within the school of fine arts of porto (esbap)

# timeline of the evolution of the porto school

mesquita, f; calix, teresa; xavier, joão. (2020).

#### academia das belas artes

lisbon 1918

#### faul building, 1996

the faculty of architecture was established in 1979 at the technical university of lisbon, from the transformation of the architecture section of the school of fine arts of lisbon.

#### <sup>25</sup>Coutinho, Bárbara. 2001.

Carlos Ramos (1897–1969): obra, pensamento e ação. A procura do compromisso entre o Modernismo e a Tradição.

<sup>26</sup> Moniz, Gonçalo Canto. 2011. O Ensino Moderno Da Arquitectura: A Reforma De 57 E As Escolas De Belas-Artes Em Portugal (1931-69).

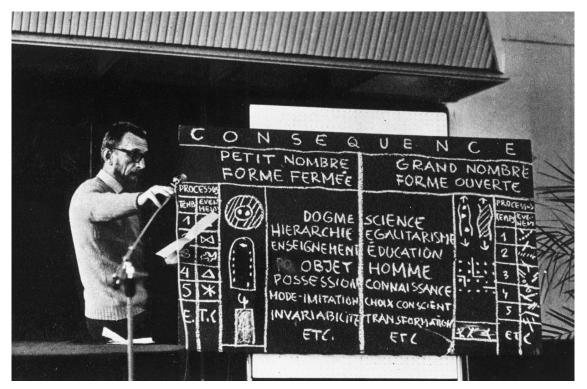
#### <sup>27</sup>Laurence, Peter. 2014.

Modern (or contemporary) architecture circa 1959.

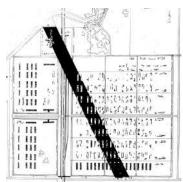
pedagogical transformations in architectural education

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The 1957 reform, often referred to as Carlos Ramos' Reform, took significant steps were taken to modernize the educational framework.<sup>25</sup> By then, the influence of Bauhaus and other modernist movements, which had already established themselves in Europe and America decades earlier, finally started to penetrate Portuguese architectural education. This reform introduced a more technical and functional approach, reflecting the evolving role of the architect as not just an artist but also a technician capable of addressing the challenges of an industrialized and modernizing society. Inspired by modernist pedagogies, including those of Walter Gropius, the reform attempted to align the curriculum with international trends by incorporating technical subjects, scientific methodologies, and rationalist design principles. Yet, it remained a hybrid model, merging modernist ideas with lingering Beaux-Arts traditions, reflecting the political and cultural tensions of the time.  $^{26}$  The delay in these reforms — more than 30 years after similar changes were happening in Central Europe — was largely due to Portugal's slow industrialization, the conservatism of the Estado Novo regime, and the resistance of established educational institutions. Nevertheless, the 1957 reform laid the groundwork for further advancements in architectural education, even though it emerged at a time when modernism itself was being challenged internationally and faced criticism for being overly focused on functionality and neglecting the social, cultural, and human needs.<sup>27</sup>













oskar hansen at the aica congress in wroclaw.

photograph by s. stepniewski, 1975.

oskar hansen and team 10

model of masovia belt, 1968.

bergen school of architecture (bas) photo: bergen assembly

oskar hansen, zofia hansen

competition proposal for the auschwitzbirkenau museum, 1957 pedagogical transformations in architectural education

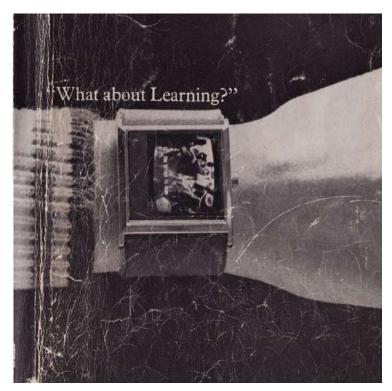
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<sup>28</sup>Strauven, Francis; Ligtelijn, Vincent. 2008. *Aldo Van Eyck. Writings*. Rotterdam. as cited in Miranda, Bernardo. 2015. *The spirit of the Catholic aggiornamento: architecture, dialog and active participation.* 

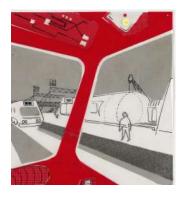
<sup>29</sup>Kedziorek, A. 2015. *Creativity Exercises — Spaces of Emancipatory Pedagogies*. Guide to the Exhibition, Budapest: Tranzit.hu.

<sup>30</sup>Kedziorek, A. 2020. Oskar Hansen's Open Form: Architecture, Art and Pedagogy
<sup>31</sup>Bergen School of Architecture. Foundation/Open Form. https://bas.org/en/grunnlag-og-strategi/.

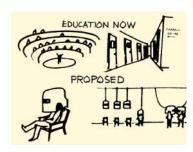
A more human-centered perspective finally came into focus during the 1959 Otterlo Conference, the final meeting of CIAM. Team 10, representing a new generation of architects, pushed back against the rigid, functionalist ideals of modernism that had dominated CIAM in the post-war era, arguing for a more socially conscious approach to architecture.1 "Otterlo Circles" displayed how classical, modern, and vernacular traditions should be reconciled to create an architecture capable of addressing the complexities of contemporary life.<sup>28</sup> Team 10 advocated for architecture that was more responsive to human and social needs, stressing context, community, and human interaction. This shift laid the foundation for new directions in architecture, focusing on social engagement and personal experience - principles that would inspire reforms and educational practices in the field. One of contributing to the Team 10 discourse was Oskar Hansen's theory of an Open Form.<sup>29</sup> It emphasized art driven by ordinary people, with architects and \ playing a supportive role. It called for rejecting the "almighty power and individualism of the designer", 30 focusing instead on individual capabilities and human relationships. The theory found further development within Bergen School of Architecture, founded in 1986 by Hansen's student Svein Hatloy. The school's curriculum, grounded in Open Form pedagogy, centers on democratic principles of place-making and spatial agency. Drawing from its Nordic west coast surroundings, it stresses learning from tradition, particularly in material knowledge and landscape context.31

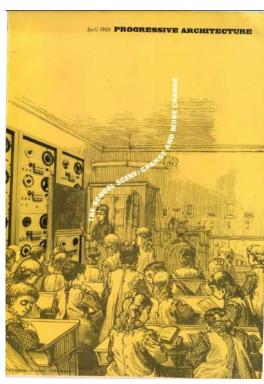














cedric price, cover of architectural design magazine no.5 issue, may 1968 cover of the progressive architecture magazine no.4 issue, april 1968 'université val-benoît' abandoned university, liège cedric price, potteries thinkbelt project,

proposal to use billboards for education by the group led by robert venturi

new schools for new towns. 1967.

individualized education diagram proposal by the group led by charles colbert new schools for new towns. 1967.

zoom meeting

<sup>32</sup>Saunt, D; Newton, T; Wong, J. 2020. 'What about Learning?'. Studio brief, Yale School of Architecture.

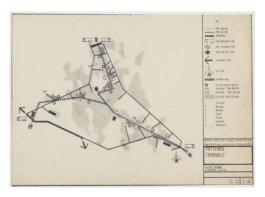
<sup>33</sup>Aykac, Gulsah. 2023. The possibility of radical resourcesand participation in architectural education: autobiographical spatial narratives. Instanbul: Archnet-IJAR: International Journal of Architectural Research.

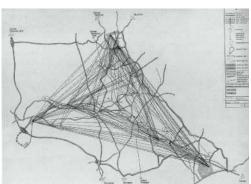
<sup>34</sup>Meister, Anna M, B Colomina, E Kotsioris, and I Galán. 2015. *Radical Pedagogies: Reconstructing Architectural Education*. Volume 45: Learning, October 12.

pedagogical transformations in architectural education

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Cedric Price's 1968 issue of Architectural Design titled "What about Learning?" critically examined the rigid structures of education and institutional learning32. Building on this legacy, the 2020 Yale's course "What About Learning," led by D. Saunt and T. Newton, tackled the challenge of reimagining participation and engagement in spatial practices that could restore a meaningful link between knowledge and civic life. The course questioned how open-access spatial strategies, once designed to democratize education, have been appropriated by privatized institutions and adapted for remote learning, threatening to reduce education to mere dissemination within closed networks, thereby weakening knowledge exchange. What and how we learn are deeply political questions, shaped by the spatial conditions — sites of learning — that influence knowledge dissemination, production, and exchange in both urban and digital environments. This course is just one example of the many contemporary workshops and initiatives promoting critical discourses in architectural education. Today, architects are increasingly encouraged to engage with feminist, postcolonial, radical pedagogies, 33 broadening the scope of architectural practice and education to address deeper societal issues. "Architecture pedagogy has always been a political act."34 In the 1960s, academic institutions were seen as necessary platforms for dismantling entrenched power structures, while also they were often perceived as mechanisms for perpetuating existing systems of domination.



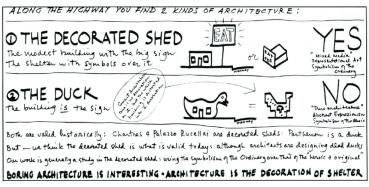


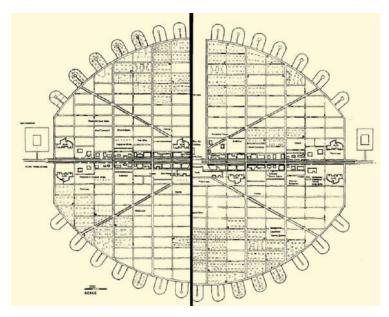












cedric price, potteries thinkbelt project. 1964. cedric price,

potteries thinkbelt's primary road networks with deire lines linkage between housing and faculty transfer areas. 1964.

poster 'le cadre bati, une affaire de specialistes?' unité pédagogique d'architecture no.6 1977.

students in oskar hansen's studio doing the

great number exercise and rhythm exercise. warsaw academy of fine arts museum.

robert venturi, denise scott brown multi-exposure photo of las vegas, may 1977. robert venturi, denise scott brown, and

steven izenour. learning from las vegas. first edition, 1972. town plan of the proposal by the group led by robert venturi

new schools for new towns workshop 1968

<sup>35</sup>Meister, Anna M; Colomina, B; Kotsioris, E; Galán, I. 2015. *Radical Pedagogies: Reconstructing Architectural Education*. Volume 45: Learning, October 12.

<sup>36</sup>Debarre, Anne. 2018. Des Beaux-Arts aux unités pédagogiques parisiennes : des projets de lieux pour l'enseignement de l'architecture, 1960-1980. CHMC1.

<sup>37</sup>Holert, Tom. 2020. *Educationalize and Fail.* e-flux Architecture. Architectures of Education. March.

<sup>38</sup>Lobel, John. 1978. Kahn And Venturi: An Architecture Of Being-In-Context." Artforum. https://www.artforum.com

pedagogical transformations in architectural education

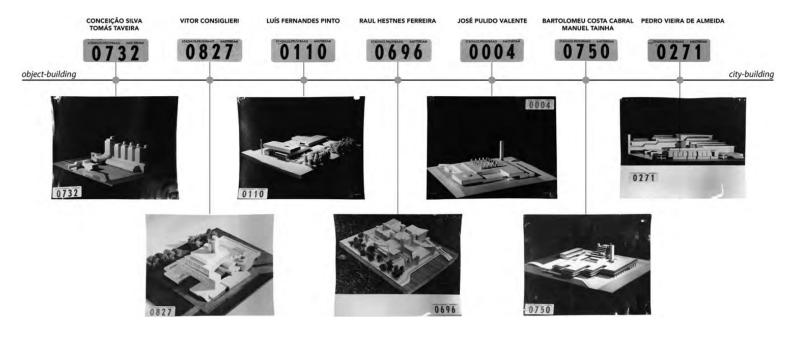
68/89

This tension gave rise to alternative pedagogical movements that sought to challenge hierarchical authority and reconfigure institutional norms.<sup>35</sup> The global student revolts of 1968, which sparked deep social unrest, were a turning point. In Paris, this led to the founding of Unité Pédagogique d'Architecture No. 6 (UP6) in 1969, breaking away from the École des Beaux-Arts tradition. UP6 critiqued conventional curricula for neglecting architecture's social and political responsibilities, advocating for a model that redefined both content and teaching methods.<sup>36</sup> Other educational experiments emerged globally. The New Schools for New Towns workshop (1968), held at Rice University, focused on designing adaptable educational spaces for rapidly urbanizing environments, promoting interdisciplinary collaboration and user-driven design principles.<sup>37</sup> Simultaneously, Venturi and Scott Brown pioneered the Learning from... studios, that developed in the context of the worldwide student protests, civil rights movement, and the destructive fire in Yale's Art and Architecture Building in 1969. Most notable "Learning from Las Vegas" project shifted focus to vernacular architecture, popular culture, and the built environment.38

These radical initiatives were part of a broader global movement that sought to reshape architectural pedagogy, transcending traditional Western frameworks. Architectural education during this era became an international effort, reflecting diverse political and cultural shifts across the world, far beyond Cold War limits.







expo '98 - pavilhão de portugal.

alvaro siza. lisbon world exposition. 1998.

# proposals of portuguese architects for for amsterdam town hall, 1967.

diagram with photos of the models of the portuguese proposals positioned according to the line 'object-building / city-building'. diagram: gil, b; lobo, s; esteves, j. portuguese architecture in transit(ion): the 1967 international competition for amsterdam town hall. 2018.

#### braga municipal stadium

eduardo souto de moura. 2003.

competitions as production of knowledge within academia

69/89

Opinions about competitions vary depending on the perspective — architects, clients, juries, and sponsors all hold different views, often shaped by their personal experiences. However, the role competitions play in shaping the quality of the built environment is undeniable. They typically encourage people to strive for excellence and offer a pathway to achieving outstanding design. In fact, Many public buildings in Europe are the result of architectural competitions, shaping daily experiences for users and passersby. Evidence also suggests that, beyond focusing on business strategies, whether planned or spontaneous, architects see competitions as essential opportunities for research. Similar to other key spaces of interaction within the profession — such as international architecture exhibitions, biennales, workshops, and development aid initiatives — architecture competitions act as dynamic arenas for transcultural and interdisciplinary exchanges of architectural knowledge. These competitions have profoundly influenced how architects perceive and engage with their discipline.

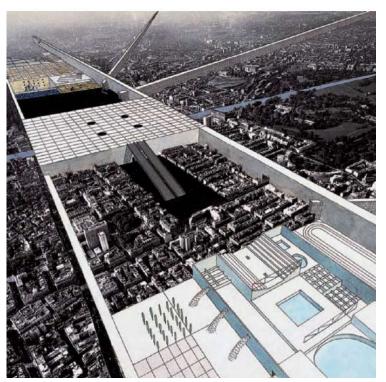
Viewing architecture competitions as sites of interaction and exchange can inspire fresh thinking about architectural theory and practice, encouraging new approaches to design methodology.<sup>40</sup> The use of it as an educational 'medium' can provide platforms that become sites of knowledge production where both teachers and students together engage with challenges.

#### <sup>39</sup> Guilherme, Pedro Miguel Hernandez Salvador. 2014.

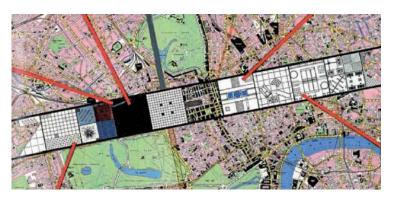
"Competitions serve a larger purpose in architectural knowledge." Fourth International Conference on Architectural Research by Design (ARbD'14).

#### <sup>40</sup> Hernández, Jorge, and Cathelijne Nuijsink. 2020.

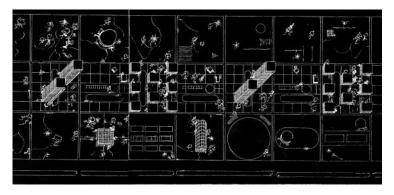
"Architecture as Exchange: Framing the Architecture Competition as Contact Zone." Footprint. DELFT architecture theory journal, November 1: 1-3.













# r. koolhaas, e. zenghelis, z. zenghelis and m. vriesendorp

competition project for an urban structure in london, exodus or the voluntary prisoners of architecture.

general view and map. 1971-72

#### i. leonidov

competition proposal for the town of magnitogorsk. 1930.

#### superstudio

continuous monument 1972

### francisco mujica

100-story city in the neo-american style, during his tenure at the university of mexico city. 1929.

# rem koolhaas, the berlin wall as architecture 'field trip', smlxl, p. 229: copyright rem koolhaas. 1972.

<sup>41</sup>Schön, Donald Alan. 1983. Design as a reflective conversation with the situation."

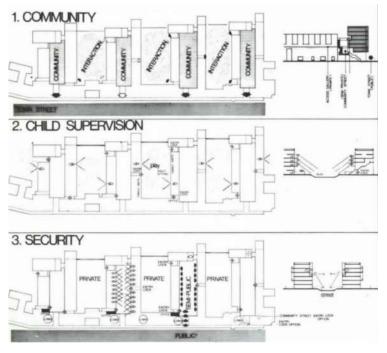
In The Reflective Practitioner. How professionals think in action., 79. Basic Books. 
<sup>42</sup>Fabrizi, Mariabruna. 2016. Ivan Leonidov's Competition Proposal for the Town of Magnitogorsk (1930). SOCKS

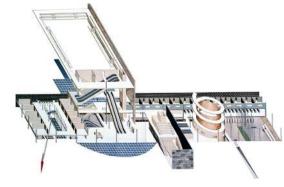
<sup>43</sup>2015. Exodus, or the Voluntary Prisoners of Architecture. https://bravedrawnworlddotnet.wordpress.com/2015/09/18/projects-exodus-or-the-voluntary-prisoners-of-architecture-by-koolhaas-and-zenghelis/.

competitions as production of knowledge within academia

70/89

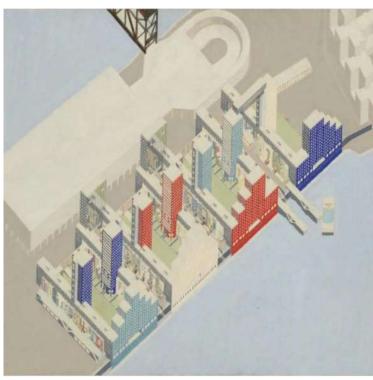
The design process requires to navigate numerous variables, potential actions, norms, and interrelationships, many of which are unpredictable. As designers make decisions, that often lead to unintended consequences. When this happens, designers adapt by developing new insights, which in turn inform subsequent actions. This ongoing interaction between the designer and the changing situation where reflection and response to feedback guide actions — is central to a good design. Through this reflecton, designers reasses problems, adapt and reconfigure the concepts guiding their decisions. 41 Teachers, as mentors, guide this reflective process by helping students interpret the "back-talk" of their designs — feedback generated by the evolving project —and adjust their strategies accordingly. However, we can look into some precedents where never-to-be-built competition proposals were more theoretical and speculative. Leonidov's Linear City (1928), in collaboration with Vkhutemas' students, embodied a utopian vision rooted in socialist ideals, seeking to reshape society through architecture. 42 Exodus, or the Voluntary Prisoners of Architecture (1972) blended utopian aspirations with dystopian critiques of modern urbanism, reminiscent of Soviet avant-garde architects. Following the Berlin Wall visit, Koolhaas stated: "Neither those in the West nor those in the East are free, only those trapped in the wall are truly free," on the interplay between architecture and control."43 It appeared as a response to a competition for a new vision of the city and became his thesis project at AA.

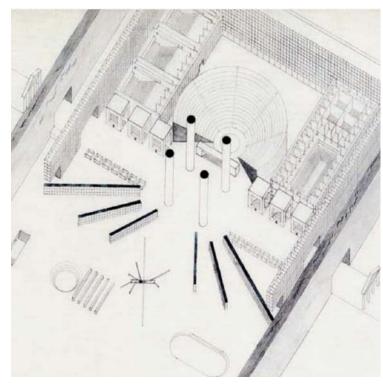












kyu sung woo's winning entry roosevelt island housing competition 1974

oma's scheme of a re-appropriated manhattan typologies (towers, brownstones), roosevelt island housing competition 1974 oma consisting of the zenghelis, vriesendorp, koolhaas and ron steiner, zaha hadid (former 'unit 9' student), and two current 'unit 9' students, elias veneris and richard perlemutter.

dutch parliament extension 1978

# r. koolhaas, e. zenghelis, z. zenghelis and m. vriesendorp

competition project for an urban structure in london, exodus or the voluntary prisoners of architecture.

general view and map. 1971-72

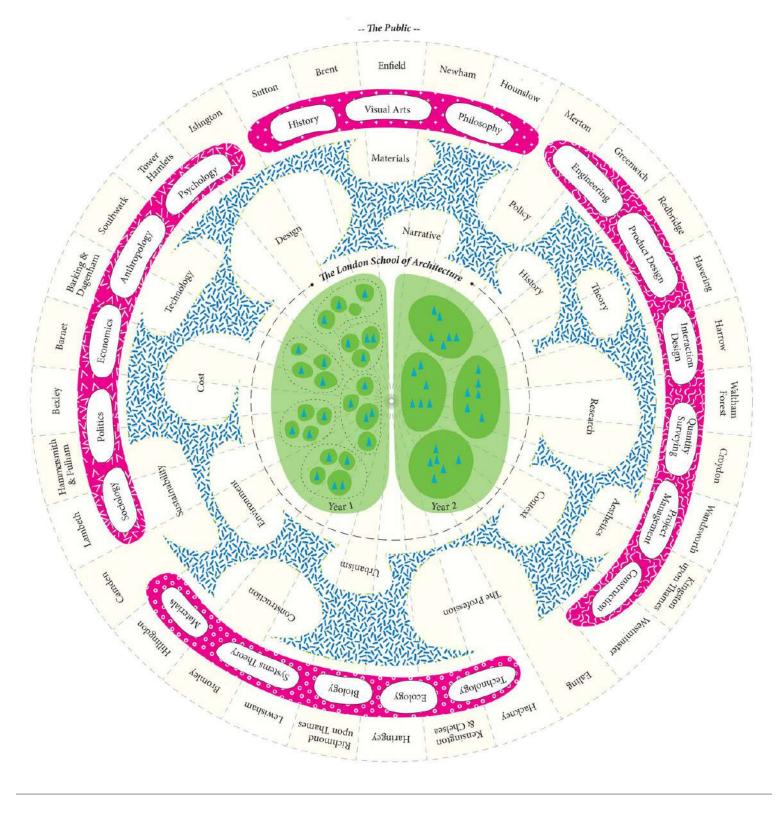
<sup>44</sup> Ortiz, Federico. 2020. Architecture Competitions as Pedagogical Tools: Bridging the Unit and the Office. Footprint. DELFT architecture theory journal, 26, p. 111-121

<sup>45</sup> Sunwoo, Irene. 2012. From the "Well-Laid Table" to the "Market Place:" The Architectural Association Unit System. Journal of Architectural Education 36.

competitions as production of knowledge within academia

71/89

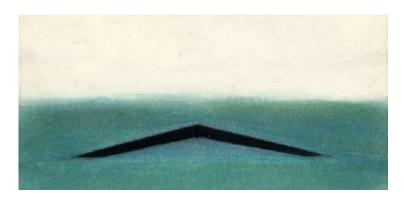
As students engage with the complexities and uncertainties of design, they enter into a dialogue with the project and their community, discovering new meanings and insights that reshape their understanding of the design process. In this way, competitions contribute to the production of knowledge, deepening the participants' reflective capabilities and understanding of their role in shaping the built environment. In the 1970s, the Office of Metropolitan Architecture (OMA) and the Architectural Association's (AA) Diploma Unit 9 studio began collaborating on competitions.44 It was seen as a way to exchange ideas and knowledge, using the range of themes, strategies, and people involved. Unit 9 encouraged "post-Intermediate" students to transition their focus from the realm of 'reality' to the 'possibility. \*\*Is Several key competitions, such as the Roosevelt Island Housing (1974) or Dutch Parliament Extension (1978), were used as educational exercises thus fostered a "cooperative pedagogy", where students and tutors co-produced knowledge. For instance, the Roosevelt Island project connected students from multiple institutions, including the AA and Columbia University, with architects like Peter Eisenman or Robert Stern, demonstrating how academic exercises could lead to cross-cultural intellectual exchanges. Similarly, the Museum of Photography competition (1976) gave students a chance to critique and challenge the established design ideas of their tutors, transforming the competition into a space for both learning and critical reflection. Ortiz summed: "To transform a unit into an office, and vice versa, a series of mechanisms have to be applied. (...) These are: representation, the architecture of drawing techniques; narrative, the textual part which, together with drawings, forms the architectural project; media, engagement with multiple forms of content production, including exhibitions, publications and events; history, the operative use of history to inform practice; and finally, competitions.'

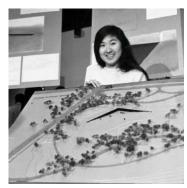


london school of archutecture relationship diagram 2015 competitions as production of knowledge within academia

72/89

The system introduced at the London School of Architecture reimagines the postgraduate phase of studying as a "proto-practice," where students gain hands-on, real-world experience instead of adhering to traditional academic hierarchies. In this model, proposed by Will Hunter, architecture school functions as collaborative network, incorporating not only tutors but also expert consultants, multiple disciplines, and external institutions. By embedding schools within local communities and focusing on practical, real projects, students can engage in group work as well as individual inquiry.<sup>46</sup> Students are also mentored by practitioners. However, it should not merely replicate professional practice; it should provide a space for experimentation, that is free from commercial pressures, allowing architecture to evolve as a discipline that effectively addresses spatial and urban challenges. Although Hunter's proposal centers around a "cost-neutral" model — students work part-time to cover tuition — it inspired me to consider another application: what if local public competitions were used to actively involve students for the benefit of their cities? By participating in real urban projects, students could develop a deeper connection to both their communities and the architectural profession. Competitions thus act as both a framework for learning and a mechanism for generating knowledge. They impose real-world constraints, requiring students to develop and refine their design thinking through cycles of experimentation, feedback, and adaptation.







Joseph Mackey, one of the students of the studio SoftPraxis reflects on this in his project report:

As diploma students at an architecture school that actively tries to challenge this autonomy, it was telling how easily the difficult "critical" way of thinking was discarded in-favour of easier ingrained routines and normative architectural procedures. In many ways the adversarial, pressurised environment of the Hard Sell informed the classic architecture students' response: there was an unquestioning obedience to the dogmatic, paternal voice of the online journal, a heavy reliance on the form and visual appearance of the project and a noticeable tendency developed to try and tick off all the assessment criteria (frequently only token gestures were made to context, sustainability and costing). We all resorted to coping tactics. No one really proposed a radical challenge to the functional and programmatic determinants of the brief. The prevailing trend was simply to parcel up the programme into an ordered rationalist bundle, wrap it in an attractive façade and present it as finished artifice. Essentially the assumption that an architects' role is to "design buildings" was upheld. (Mackey, 2008, p. 19)

Pleased that so much of the work met the expectations of the competition, many in a mature and sophisticated way. Pleased that we have so much stuff to work on, deconstruct, debate. Depressed how a normative brief and a normative competition system can make everyone play the architect game quite so expediently. What is sacrificed on the altar of hard sell? Or should we just be pleased

that architecture students can so quickly get out stuff that looks like architecture, and forget about research, mapping, process, politics, sustained ideas?





maya lin vvmf competition, drawing, model

1981

vietnam veterans memorial

idea: maya lin. architects: maya lin, david osler. landscape architect: henry arnold photo: mark segal. washington, dc.

reflexion of a student, joseph mackey, on the completing a project within a formal competition procedure as an excersize march design studio softpraxis. the university of sheffield. 2008. documented in discard an axiom by tatiana schneider the competition.

documentary movie, 2013.

<sup>47</sup>Menand, Louis. 2002. "Maya Lin and the Vietnam Veterans Memorial." The History Reader. https://www.thehistoryreader.com/military-history/maya-linvietnam-veterans-memorial/.

<sup>48</sup>Tatjana Schneider, 2011. Discard An Axiom. In Book: Transdisciplinary Knowledge Production In Architecture And Urbanism (Pp.97-115)

<sup>49</sup>2013. The Competition. Directed by Angel Borrego Cubero.

mentorship and preparedness of students for public competitions

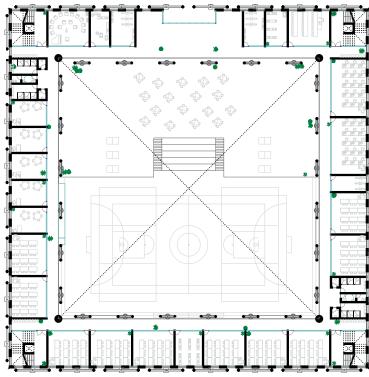
73/89

In student mentoring through competitions, it's important to create an environment free from conflict of interest. Such issues can potentially arise when there are unbalanced power dynamics, gap between educational and professional expectations, or intellectual property concerns. The distance of the public competition and its jury from the academia may mitigate the risk of subjugation to the 'perspective dogma' of tutors. For example, Maya Lin, then a 21-year-old student at Yale, submitted her Vietnam Veterans Memorial design as a class project in 1981. While her professor graded it a B, the design won a national competition, even surpassing her professor's work, among other 1400 etries.<sup>47</sup> However, The 'common goal' of two professors and a student to make a competitive design does not guarantee the complete avoidance of the situation of a weak grip on reality or the lack of a critical stance in the process.<sup>48</sup> Tight deadlines may lead to the presentation taking precedence over the iterative process. For instance, interns in large companies participating in competitions may face an imbalance of power when their role is limited to overproduction rather than creative process.<sup>49</sup> Limited timeframe can foster rapid development in areas such as presentation skills, design efficiency, quick decision-making, and graphic communication. Nevertheless, while public competitions provide valuable opportunities for students to learn through experience rather than being "taught", this accelerated mode may not be suitable for every student's learning style.

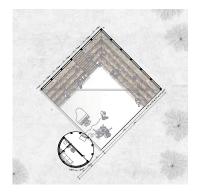


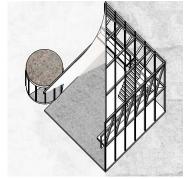


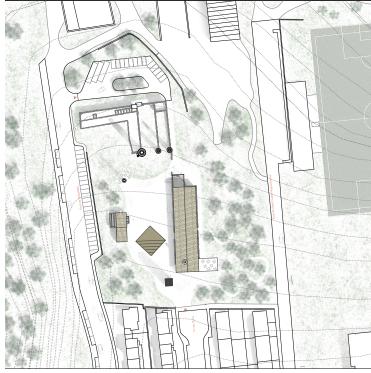












ccc building execution project - cork competences centre, rua alto do picão, santa maria de almas. iscte 11.23 to 11.23 interior view on the workshop space pp. 13-18

#### design competition

"from the monastery to the castle"

iscte 11.23 - 01.24 image of the start of the water course; section of the inside of the block. pp. 20-27.

design competition for the design of residential buildings in rua de santa engrácia and rua da bela vista à graça, in the parish of são vicente. iscte 01.24 to 02.24 view of the interior of the T2 apartment. pp. 29-35

the last jump. iscte 05.24 - 06.24 plan and axonometry p. 53-56.

design competition for the project of the integrated basic school lagoa - são miguel, açores. iscte 10.23 - 10.23

first floor plan

design competition for the creation of the interpretation centre of minas do pintor iscte 04.24 - 05.24 implementation plan. pp. 44-51.

mentorship and preparedness of students for public competitions

74/89

According to the UIA Competition Guide, there are two main types of architectural contests: ideas and project competitions (open/closed). Competitions open to both students and professionals are typically discouraged to maintain fairness and uphold professional standards. Student contests are usually structured as ideas competitions, focusing on education rather than project realization. Occasionally, they serve as project competitions, helping students transition to professional practice, sometimes involving collaboration with professional architects. Clients funding large projects tend to favor firms with proven track records. In contrast, young architects often pursue open competitions to showcase their ideas in environments that prioritize design over reputation.

This dichotomy in preference reflects the architecture industry's broader dynamics, where experience and reputation often dictate access to major projects, while emerging talent seeks opportunities that prioritize ideas. The challenge is balancing these needs to safeguard clients' interests while fostering the growth of new talent in the industry. The contrast between a 'real building project' and an idea competition underscores their differing objectives: the former depends on established practice, while the latter aims to generate ideas. Effective mentorship ensures that students adapt to demanding settings while remaining grounded in creative exploration and critical reflection. It guides them in navigating industry demands and helps build the confidence to present ideas on public platforms.

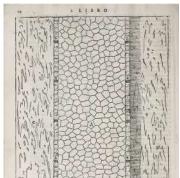
### <sup>50</sup>International Union of Architects (UIA). 2017. UIA Competition Guide.

"Interpreting and implementing the UNESCO "Standard Regulations for International Competitions in Architecture and Town-Planning". Guidelines, UIA.

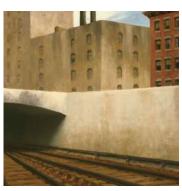
#### <sup>51</sup>Guilherme, Pedro. 2014.

"Competitions serve a larger purpose in architectural knowledge"









via appia. 1910.

the first representation of a path in an architectural treatise. a. palladio, i quattro libri ..., 1570.

the trench of the railway: the first urban cut generated by a terrestrial route.

e. hopper, approaching a city, oil on canvas.

design competition "from the monastery to the castle" iscte 11.23 - 01.24

site analysis and outline of the strategy adopted p.21

<sup>52</sup>Willson, Matthew, and Sean Burns. 2023. *Understanding Site in design* 

pedagogy. Oxon: Routledge. <sup>53</sup>Spence, Charles. 2020. Senses of place: architectural design for the multisensory mind. Cognitive Research 5, 46. doi:https://doi.org/10.1186/s41235-020-00243-4. <sup>54</sup>Burns, Sean. 2021. Collaborative thinking through the dynamics of site and architecture in design education. In Progressive Studio Pedagogy, by Charlie Smith, 79. New York: Routldge Focus.

<sup>55</sup>Alonzo, Éric. 2018. *The Architecture of the Road, History and Theories*. Marseille:

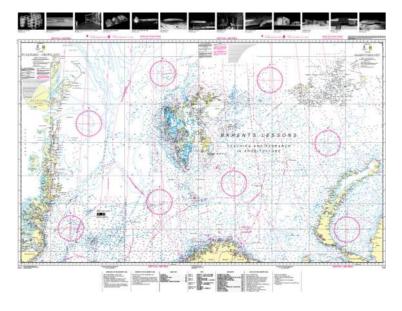
Editions Parenthèses.

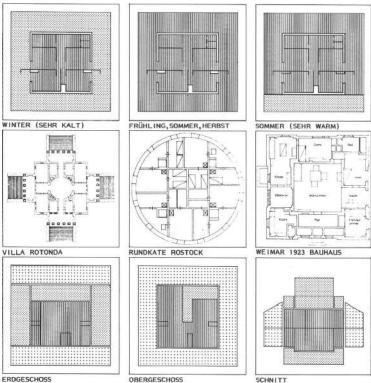
adaptive site analysis

75/89

By recognizing, adapting to, and leveraging the physical, intellectual, and cultural aspects of a site, students are encouraged to explore its history, boundaries, context, and situational elements. These explorations foster a greater understanding of the site and its potential to influence design decisions throughout the creative and iterative process, ultimately deepening students' appreciation for the site's role in shaping design.  $^{52}$  Charles Spence argued that architects should approach spaces with multi-purpose interventions that are both modest and bold, while fostering interaction with the existing elements that belong to everyone. He emphasizes the importance of exploring spatial forms that are open and inviting — not rigid or unchanging, but flexible and conducive to continuous interaction.53

Collaborative thinking in architectural education extends beyond the simple exchange of ideas and information among peers; it also involves understanding how architecture and its context can interact dynamically throughout the design process to achieve optimal solutions. 54 For instance, Éric Alonzo's *The Architecture* of the Road emphasizes how roads, like architecture, influence and respond to shifting landscapes. Road's historical and spatial impact, shaping and connecting the built environment, can be used as a concept in site analysis to recognize the dynamic relationship between architecture and infrastructure, helping students see the site as a constantly evolving entity.55

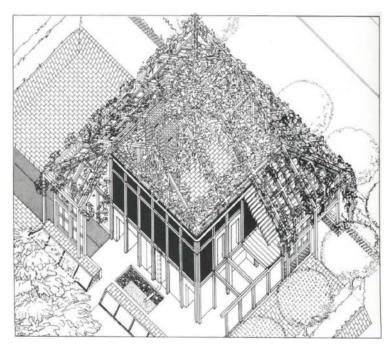












#### 'barents lessons' cover poster

one-year investigation by master students on the barents sea region, professor harry gugger. the region has been analyzed starting with the thesis that the ocean is an urbanised territory. part one: an analysis of the region; part two: the documentation of a field trip; part three: 13 architectural projects. 2012.

the high line. james corner field operations, diller & scofidio + renfro, and piet oudolf. international competition to transform the abandoned elevated railway into a public park. new york. 2003-2009.

blur building. exposition pavillion swiss expo. diller & scofídio + renfo. 2002.

#### solar house.

oswald mathias ungers. competition for a prototypical solar house. 3 references (central plan and a layered principle): villa la rotonda by palladio (1570); a round barn in rostock; and the haus am horn by georg muche, bauhaus (1923). and an axonometry. 1980.

hotel therme vals. peter zumthor. 1996.

wall from corals house of ibrahim bin. 1927.

<sup>56</sup>Burns, Sean. 2021. Collaborative thinking through the dynamics of site and architecture in design education. In Progressive Studio Pedagogy, by Charlie Smith, 79. New York: Routldge Focus. <sup>57</sup>lbid, 78

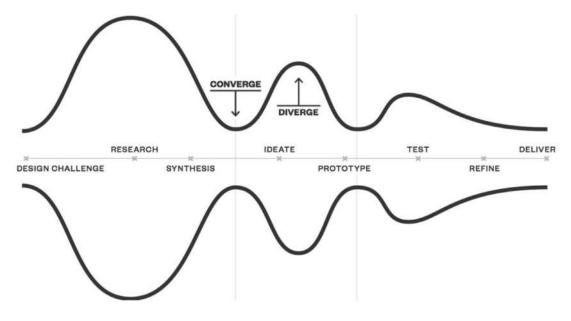
<sup>58</sup>Escher, Cornelia. 2020. Negotiating Ungers I: The aesthetics of sustainability. The solar house. Brüssel: common books.

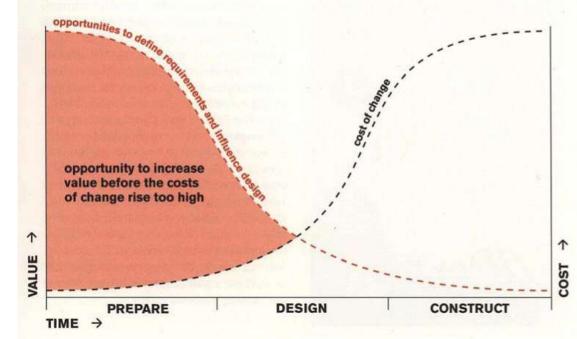
adaptive site analysis

During the initial stages of a project, students are typically guided through a sequential design process that involves observing, recording, and responding to site conditions, which emphasizes context but may lead them to see the site as a fixed constraint. This risks seeing the site as a rigid limit rather than an adaptable element that can evolve with design goals.<sup>56</sup> Burns and Willson argue that creating a memorable architectural experience involves a dialogue between place and architecture, recognizing the cooperative interactions between all built and natural elements, rather than focusing solely on the static characteristics of isolated components within a given area. Thus, students should be encouraged to view both architecture and atmospheric conditions — within, around, and beyond the site — as flexible elements that can be shaped throughout the design process.<sup>57</sup> In 1980, Oswald Ungers entered a competition for a prototypical solar house in response to the 1970s oil crisis, aimed at developing sustainable housing across Germany. Instead of relying on technical devices, Ungers redefined site analysis by treating the house itself as a self-sustaining micro-site.58 His design integrated energy efficiency into the architecture, with a layered structure balancing energy flows through formal and typological inventions. The site was no longer just a geographic location, but a dynamic, adaptive space responding to environmental forces, the house itself becomes a microcosmic "site," where energy, climate, and spatial zones interact.

76/89









### daniel koehler,

thirty-six sectional studies on urban blocks made of mass timber, infused with vertical foresting. 2022.

# interdisciplinary symposium, bauhaus earth innovation lab.

in foreground, earth blocks formed from mining waste residues are displayed prior to structural load testing

#### design thinking models. ideo.

by ramunas balcaitis. design thinking. 2019.

## the opportunity increase value.

source: cabe .2003. p. 22

applying an interdisciplinary approach and collaborative thinking to a competition

77/89

In architectural education, and in design competitions in particular, interdisciplinary design thinking provides a significant advantage. Competitions often present complex, multifaceted challenges that cannot be fully addressed through traditional architectural approaches alone. By leveraging knowledge from diverse fields — such as environmental science, engineering, sociology, or digital technology — students can develop more nuanced and sophisticated design solutions.<sup>59</sup> Yet, focusing solely on a 'form' of the project could isolate design from these broader contexts. An interdisciplinary approach, urging students to consider architecture as a practice embedded within a wider network of influences. For instance, integrating principles of environmental science allows for the creation of truly sustainable designs. Similarly, insights from sociology can inform designs that are more attuned to the social dynamics and needs of specific communities. Visioning, planning, designing, and managing are complex, iterative processes involving implementation, decision-making, and analysis. Outcomes are shaped by numerous daily decisions, which rely on the quality of available information. Incomplete information hinders effective integration in design and implementation. While the focus is on the outcomes, improvements could be made earlier in the process. A shared, place-centered knowledge base might offer a solution for more integrated actions and outcomes.60

<sup>59</sup>Kim, Julie, and Julie Ju-Youn Kim. 2023. *Interdisciplinary Design Thinking in Architecture Education.* 

<sup>60</sup>Chapman, David. 2023. Constructing better places: Integrating disciplines in built environment education

local needs

competition

proto-practice

external expertise

applying an interdisciplinary approach and collaborative thinking to a competition

78/89

In the competitive arena, where innovation is often a key criterion, this breadth of understanding can distinguish a proposal. A competition brief might, for example, require the design of an urban space that facilitates community interaction. A student versed in interdisciplinary thinking might approach this by incorporating urban planning strategies that enhance social connectivity, while also considering the psychological impact of spatial arrangements on human behavior. The result is a design that is not only responsive to the brief but also enriched by a deeper understanding of the human and environmental contexts. Working in interdisciplinary teams during competitions mirrors the collaborative nature of professional architectural practice. Engaging with students/experts from other disciplines—such as urban planning, digital media, or environmental engineering—can introduce fresh perspectives and challenge the architect to think beyond the conventional scope of design. This collaborative approach encourages the synthesis of different viewpoints and expertise. Ultimately, an interdisciplinary approach in architectural education fosters a more critical and contextually aware practice. Architectural design does not exist in a vacuum but interacts with a multitude of external factors. In doing so, students are better prepared to develop designs that are not only architecturally sound but also intellectually rigorous and relevant to contemporary challenges.

conclusion 79/89

Examining competitions in architectural education reveals how they have shaped academic principles across different contexts: from the strict competition process of the French Beaux-Arts system to Germany's more inclusive model, where entry wasn't based on rigid competitions, or the UK's transition from pupillage to formal education with open juries, encouraging greater discussion in projects' evaluation. In today's market-driven environment, participation in public competitions as an intermediary for knowledge acquisition should be approached critically. It is necessary to assess the risks posed by the formal competition process (including commercial pressure) on student practice, and apply appropriate mentoring strategies accordingly. Satisfaction or dissatisfaction with the final outcome of an open competition largely depends on the participant's goal. Is the aim to win? To test oneself within strict boundaries? To enhance employability right out of school, or to experience an environment free from academic constraints? Whether participating in such a competitive framework improves design understanding more than a non-competitive setting remains an open question. Ultimately, competitions might provide a unique educational platform, blending mentorship, reflective practice, and interdisciplinary collaboration. They offer students an opportunity to not only engage with practical design challenges but also to experiment with speculative ideas and critical thinking, preparing them for

the complexities of contemporary architectural practice.

Participation in public design competitions within the Trampoline School Studio allowed me to reflect on and explore how these competitions can contribute to learning and serve as academic exercises. Typically viewed as optional for ambitious students nowadays, public design competitions are not commonly integrated as class projects. This year, as a group of 12 students, rotating in teams and working individually, we participated in seven architectural competitions in Portugal. The challenges I encountered during this time made me realize that what truly matters is the approach taken to integrate them into academia. The experience underscored that competitions are not simply opportunities for project diversification or portfolio building; rather, they offer a framework for deeper engagement with real-world architectural challenges. By asking foundational questions such as "Why participate?" and aligning these competitions with educational objectives, they can become effective platforms for reflective practice, enhancing design awareness and critical thinking.

Each of competitions involved in our school year had a unique context, always pushing us to learn something new. Participation significantly enhanced our design awareness, requiring us to consider the feasibility of our solutions within the local context, budget, program requirements, and other critical factors. Additionally, we benefited from the opportunity to critically analyze and learn from the work of other competitors and winners, all of whom worked within the same initial parameters.

However, the true educational value of competitions is contingent upon careful organization and the provision of adequate time for reflection and iterative development. While deadlines foster essential time management skills, they can, if mismanaged, curtail deeper learning. This raises another important consideration: the dynamics of teamwork and mentorship. Architectural education would benefit from integrating perspectives from engineering, sustainability, sociology, and economics — broadening the scope of competition entries and enhancing their relevance within local and global contexts. Competitions offer an ideal platform for such cross-disciplinary work, and I believe integrating this approach would significantly enhance both the learning experience and the quality of the projects produced. Local competitions, in particular, can become a platform for students to serve their communities, with external experts collaborating alongside students as part of the team.

Historically, competitions have long served as an open forum for debate between diverse architectural cultures, generating new architectural knowledge and concepts. In my work, I have sought to explore the history of this phenomenon, focusing on the formation of architectural academies in Europe, shifts in pedagogical approaches, and the interconnection between competitions and the development of architectural education. The evaluation of overall excellence during the Beaux-Arts era — when winners significantly shaped Europe's architectural heritage — differs greatly from, for example, the approach of the Unit 9 Diploma Studio at the AA in the 1970s. In the latter, competitions were seen as opportunities to think beyond the 'realm of reality' and experiment with new systems of interaction between architectural offices and student groups.

Today, when thoughtfully integrated into education, design competitions offer much more than technical skill-building. They become opportunities for deeper inquiry, creative experimentation, and meaningful collaboration — essentials for shaping a more informed and reflective practice. Ultimately, my participation in these competitions has led me to advocate for their integration into architectural education, not as isolated experiences but as a means to foster critical thinking, innovation, and community engagement.

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