

## *Paris Tea Pavilion*

*Kyoto University*

*Thomas Daniell*



### Challenge

The pandemic panic that began in early 2020 triggered many new rules and codes of behavior, which temporarily transformed various aspects of daily life, notably in education. At Kyoto University, face-to-face teaching became very difficult, or impossible. Students were forced to stay home, and in some cases foreign students were not able to enter Japan. Consequently, most classes took place online, with students watching live lectures and submitting assignments according to programmed deadlines (taking into account time-zone adjustments).

These changes obviously had a negative effect on the usual teacher-student interactions and discussions, as well as relationships between students inside and outside the classroom. The formative experiences of university life – a process of socialization and maturation, of making friends and connections, of learning to participate in the intellectual discourse of seminars and laboratories – was replaced by an enforced isolation that led to psychological and motivational problems among students and teachers alike. Students all too easily stopped paying attention to their screens, and teachers found it difficult to spark responses from them. Yet, as online teaching became more accepted and normal, the limitations being imposed also opened other opportunities. If it were indeed possible to teach effectively without regard to physical proximity or temporal alignment, then what else might be possible? Holding classes online means that students did not need to be in the same room, the same city, or even the same country, and this also allows students anywhere to communicate and collaborate in virtual environments, in real time.

## Response

In the first semester of 2021, Daniell Lab initiated an international joint design studio, using a combination of online and face-to-face teaching. Supported by ADAN (Architectural Design Association of Nippon, led by architects Shuhei Endo and Kiyoshi Sey Takeyama), this was a collaboration with students at ESA (École Special d'Architecture) in Paris, France, led by Professor Frank Salama, and students at Osaka Sangyo University, led by Professor Noriyuki Hikida, and one student from Osaka Institute of Technology, led by Professor Asako Yamamoto. The visiting critics were Kentaro Takeguchi, a partner in the Kyoto-based architecture office Alphaville, and structural engineer Ryo Watada.

The assigned task was to design a pavilion for a site on the bank of the Seine River, adjacent to Asile Flottant, a boat designed by Le Corbusier in the early twentieth century. The ultimate goal was for the students to go to Paris at the end of the semester, and actually build the pavilion.

All sessions took place over Zoom, using large monitors installed in each studio. The students of each school would gather in their respective studios, or participate from their homes. Classes were scheduled during evenings in Japan and mornings in France, allowing a global simultaneity with live communication. Outside regular class hours, the students shared their design ideas and presentation files using private video communication and online group chats. The negative consequences of online teaching were thereby turned into a stimulating and inspiring opportunity, creating new relationships rather than damaging existing ones.

## Background

Asile Flottant (otherwise known as the "Louise-Catherine") was constructed in 1919 as a barge for transporting coal. In 1929 it was donated to the Salvation Army, who commissioned Le Corbusier to convert it into a shelter for refugees and the homeless. The project architect was Kunio Maekawa, a Japanese architect who worked in Le Corbusier's Paris atelier from 1928 to 1930. Asile Flottant is therefore a significant project in the historical relationship between the French and Japanese architectural communities.

Today, Asile Flottant is anchored on the left bank of the River Seine, about one kilometer upstream from Notre Dame Cathedral. By 1995, it had deteriorated to the point that it was no longer being used as a shelter, but since 2005 volunteers have been carrying out restoration work. ADAN raised funds to purchase, renovate,



and convert Asile Flottant into a gallery for architecture-related exhibitions, and to be a symbol of Japan-France friendship and cultural exchange. Renovation is ongoing, though it has been delayed by the accidental submerging of the boat in 2018, and by the COVID-19 pandemic in 2020.

Asile Flottant, drawing by Kunio Maekawa (1929)

During the construction period, ADAN proposed a number of events to raise the profile of Asile Flottant and the work underway there. One of these was to be a small, temporary folly or pavilion located on the adjacent riverbank. With sponsorship from Morihan, an Uji-based company that manufactures green tea, the students were asked to build a pavilion that could also be used as a space for holding traditional Japanese tea ceremonies. The pavilion thereby both celebrates the history of France-Japan architectural relationships, and introduces Japanese tea culture to ordinary Parisians.

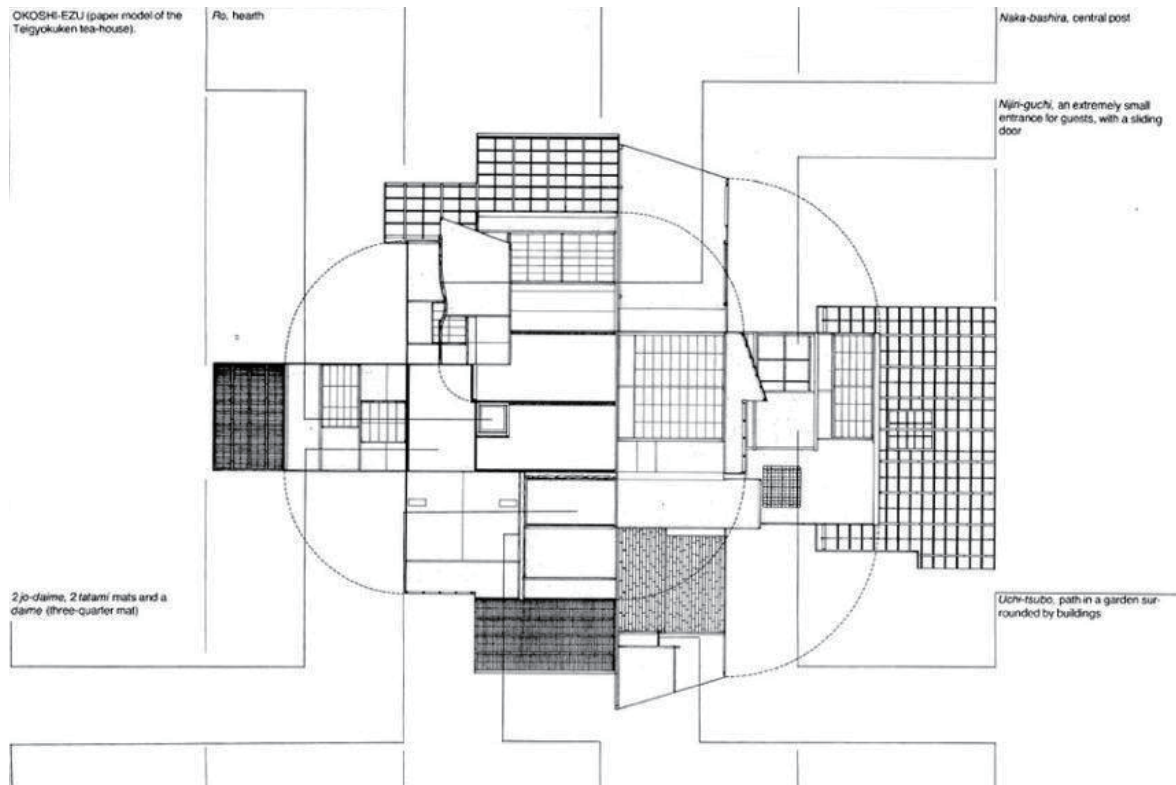


Asile Flottant interior (2021)

## Folly

In architectural education, and in the architectural profession itself, the temporary pavilion or folly has long been a vehicle for experiments in architectural space, form, and material, due to its relatively low cost, short lifespan, and lack of precise function. Free of the need for longevity, waterproofing, efficiency, and so forth, a pavilion may become a relatively pure creative expression of architecture for architecture's sake.

This pavilion design studio has multiple, complementary objectives. It provided students with experience in specific building materials and details, human scale and spatial experience, design collaboration and construction teamwork, schedule



Tea house okoshiezu diagram, taken from Arata Isozaki, MA: Espace-Temps au Japon (1978)

coordination and time management. The construction and display of the pavilion were intended to produce a public event that demonstrates the energy and creativity of the students, while promoting wider community knowledge about the Asile Flottant project.



Working in the university

## Studio

The students designed the pavilion over the course of one semester, moving back and forth between hand sketches, digital models, and physical models. The first task was to study precedents in tea house design, specifically the okoshiezu (fold-up drawing) design method used by sukiya carpenters. Students experimented with this technique in order to understand its inherent spatial and geometric possibilities or limitations, and to begin developing a tea house design appropriate to a European site in the twenty-first century. The final okoshiezu proposals were primarily investigations into surfaces, with an origami-like expression that negotiated the possibilities of unusual spaces in dialogue with the ergonomic, functional, and symbolic aspects of the tea ceremony.

Following the okoshiezu exercise, the students were placed in groups that contained members of each of the three schools, to begin developing actual design proposals. Given the budget constraints from the sponsor, the practical constraints entailed by having the students themselves build the pavilion, and the necessity for rapid assembly and disassembly, it was decided to limit the allowable materials to several hundred pieces of 100 x 50mm timber, with appropriate hardware fixing elements, while allowing for the possibility of additional lightweight, inexpensive materials such as rope, fabric, and bamboo. The okoshiezu experiments with



surface elements were thus superseded by investigations into applying linear elements to define architectural form and space. Given that timber is rarely used for architectural structures in France, this also provided an opportunity for students to investigate traditional Japanese carpentry details, and then introduce them to the French audience.

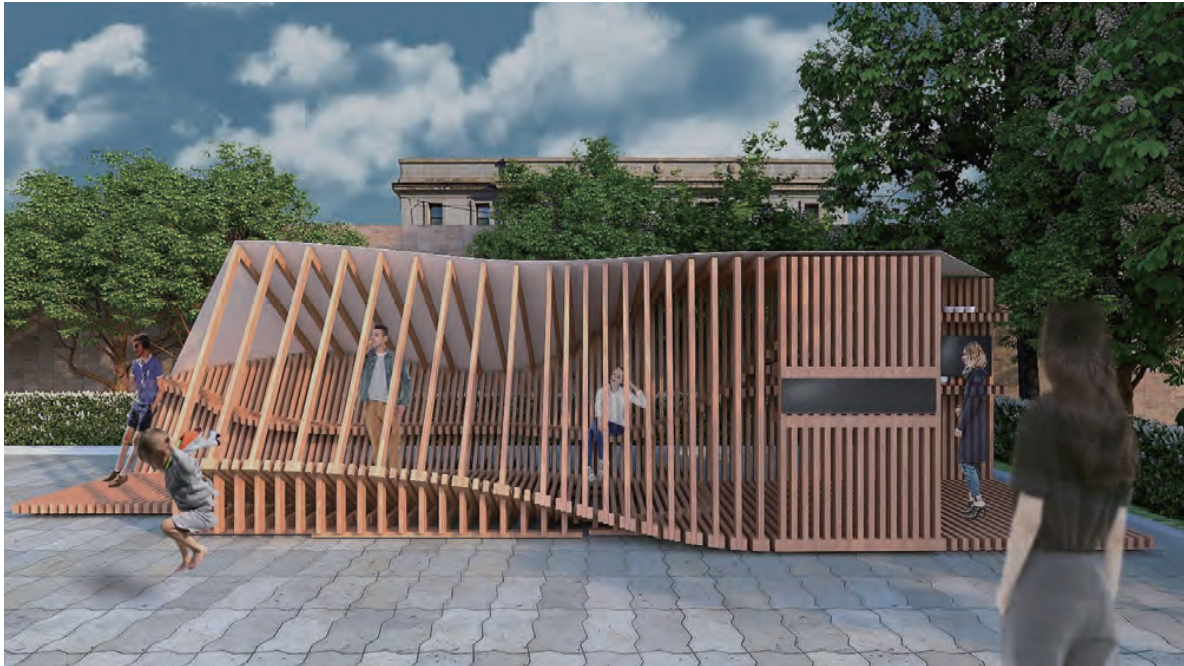
The rest of the semester took the form of a tournament, in which the less compelling designs were progressively eliminated. At each interim review, a vote was held, for which all professors, students, and guest critics participated. Based on the number of votes that each design received, half would be selected and half rejected. Those students whose designs were eliminated were then asked to join the other student groups: for example, after the first interim review, the groups of four students were combined into new groups of eight students to continue developing the remaining designs. At the final review, the winning design was chosen, again through a democratic vote. Creativity, originality, and beauty were important criteria, but the decision was ultimately based on which design would be most feasible, given the available time, budget, and labor. Among other issues, the pavilion had to be demountable, with the intention that the materials would be used again in future, for building other variations of the basic pavilion idea.

At the final presentation, there were two remaining designs, with different but very strong approaches to the problem. One proposal was in fact subdivided into a set of smaller pavilions, more or less cubic in form, linked by an irregular, orthogonal pathway. Each pavilion was intended to contain a specific activity, such as resting, viewing, shopping, storage, and the tea ceremony itself. They were also demonstrations of potential timber assembly methods, such as variations in the patterns of louvers, slats, and grids. The allusions and inspirations from traditional Japanese building methods were clear and attractive, though relatively conservative in the final forms.

Second-place winning design



International collaboration by Zoom



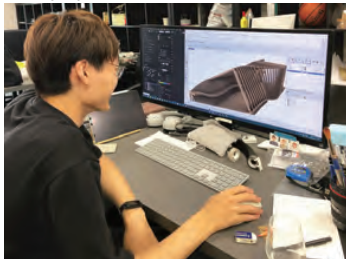
First-place winning design

The other design was a single volume comprising square frames that were sequentially aligned but progressively torqued and distorted to create spatial and functional variety. This design had far less obvious relationships to traditional Japanese tea house architecture, and clear influences from contemporary digital design techniques. The final vote was extremely close, but the second design won.

The tournament format created a positive atmosphere of internal competitiveness, rivalry, and effort. Rather than awaiting judgment from their instructors, the students actively debated and criticized the proposals of their peers. Finally, one design had to be chosen and all others rejected, but dealing with the inevitable disappointments and compromises was considered to be part of the learning process.



Final jury



Between physical and digital

### Construction

At the end of the semester, preparations began for construction in Paris. Permission to place the pavilion beside the Seine was sought and received from the local authorities. Several students from Kyoto University and Osaka Sangyo University flew to France to assist the ESA students – and so, finally, they were able to meet each other in person. The Japanese students brought with them tea samples and a noren curtain provided by Morihan.

Wood and other necessary materials were sourced from local suppliers in the Paris region. Thomas Daniell and Kentaro Takeguchi spent a day with the students at the beginning of the construction period, which included a tour of Asile Flottant. Construction took approximately one week, using the courtyard of ESA for prefabrication and assembly. Onsite improvisation led to a slightly different form than the students' original design drawings. Budget constraints caused the pavilion

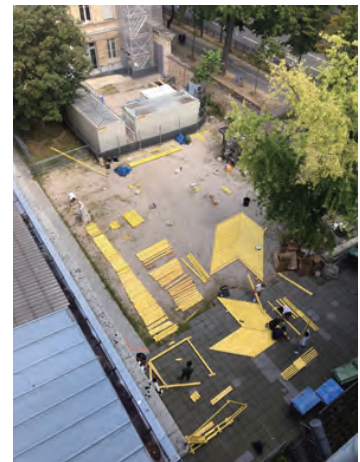


to be reduced in size by about a third, and other modifications were made to the elements and details as a consequence of problems or opportunities revealed by the initial mockups.

The built result is thus a manifestation of both idealized design conceptions and practical proof-of-concept tests, achieved through sensitive responses to the available time, people, materials, and environment. As of this writing, the pavilion remains at ESA, with the long-term goal of moving it to the Seine River site. It will eventually be disassembled, and the wood put in storage to be used for future projects.

### Outcome

Hands-on construction work with real materials allows the direct testing of innovative detail solutions and design possibilities. Confronted with the freedom of form now permitted by digital modeling, it may seem romantic and reactionary to advocate the use of physical models and full-scale mockups. Paradoxically, the merits of the physical model lie in its material rigidity, and the drawbacks of the digital model lie in its unlimited flexibility. The design process should be predicated on an awareness of the friction and resistance of the real world. The issue is not the comparative speed and precision of computers versus handcraft, but the feasibility of the shapes they each engender. No matter how precise the original pavilion design appears on paper or on a computer monitor, it is unavoidably transformed by the properties of the materials. The Paris Pavilion studio forced students to engage with the tactile, responsive, material world, to respond to the



Construction in Paris



Completed pavilion

resistance and friction of real things. And, not least, to engage with other people during a period when the pandemic panic seemed to make that all but impossible.

### Comments from students of Kyoto University

#### Nasu Mayuko

The students from the French university, as well as from Osaka Sangyo University, all had different knowledge and experiences, and different points of view. This was a bit of an inconvenience, but it was interesting to see for the first time that my ideas were discussed from a different point of view and that I was able to interpret and shape other people's ideas in my own way.

#### Anju Kato

It was my first experience of creating something with multiple people online, and I found it both interesting and challenging. As we progressed through the stages, the number of team members increased, and I learned how hard it is to respect each team member's opinion and give them a role. It was also interesting to see the time adjustments due to the time difference and how the values and cultural differences between countries really showed in the design process. I would like to apply what I learnt from this opportunity in my next project.

#### Taichi Kaga

All in all, it was a very stimulating experience. It took a lot of time and energy to exchange opinions in English, which is not our mother tongue, with the person on the other side of the screen, who is very difficult to communicate with even in





Japanese, but we learned a lot from the process of sharing our feelings and thoughts with other students of architecture. The result is a work that is full of the aspirations of all the friends, teachers and colleagues involved.

We are very proud to have been involved in this first real project, from the basic design to the construction, and at the same time we can't thank enough all the people who have supported us in this precious experience. We hope that this project will continue to develop and prove to be very fruitful for the next participants.

#### Jiro Akita

Although it was only a simple pavilion, it was the first time for me to design and construct a building in a foreign country, and it was very difficult at times. I would like to thank all my friends and teachers who participated in the workshop with me.

#### Usaki Tsujimoto

I learned how difficult it is to design a building while taking into account the practical limitations. It was also a great experience for me to see what other universities are doing.

#### Comments from students of École Special d'Architecture

For the final part of the workshop, four students from Japan, Fuma, Jiro, Kota, and Taichi (who designed the pavilion), flew all the way to Paris to build the tea pavilion with us: Adrien, Ece, Ha, Henri, Kim, Mariam, Mariken, and Maxence. We were all so glad to finally see the Japanese students at our school after months of working with them online. The first time we actually met was, to be honest, a little awkward, but once we got past the initial introductions, we instantly hit it off, and became friendly with each other right away, despite our cultural differences. We started having conversations about Japan and France, we learned a lot about Japan, about their culture, their architecture, and simply, their lifestyles. After some time, we walked around our school, and admired the Parisian architecture of the 14th arrondissement, all the while talking about French culture, and teaching them some common sentences in French.

The construction took a couple weeks, and we got to build everything from scratch. We first measured and hand-cut wood planks, then assembled and built the whole structure using screws and drills. We all got to participate and worked very efficiently together. Taichi, Fuma, Kota, and Jiro always knew what was the next step, and made sure we understood the project



and how to build it. We all worked harmoniously and everyone had a specific "role," whether it was measuring the wood, carrying the wood, cutting the wood, drilling the wood, etc. A typical day of construction would start around 10am, and would end around 6pm. During those times we would solely focus on building the pavilion. We would always have lunch all together around 1pm, with all the students, Japanese and French, and it was always during those times that we would get to know each other more. We got to learn more about each other's personal lives, hobbies, aspirations, and so on... Jiro, Fuma, Kota, and Taichi were extremely open minded about French culture, and we were actually surprised. Working with them was so much fun and such an enriching experience, they are all so knowledgeable and hardworking and they would always take the extra mile to make sure that everything was perfect, we all definitely learned a lot from their strong work ethic and perseverance.

After successfully building the tea pavilion and completing the workshop, despite only having known each other for less than a month, we felt like we truly connected with Kota, Fuma, Jiro, and Taichi, and that we had a real bond all together. On the last day, we had a tea ceremony all together in the completed pavilion, and at the end, it was quite sad when we had to say goodbye to each other. This experience is definitely one to remember, and Kota, Fuma, Jiro, and Taichi will always have a special place in our hearts. We thank you again for this wonderful and extremely rewarding experience, we are all very grateful. Hopefully, one day, we can all meet up again, and maybe this time in Japan. Until then, you are always welcome here.

#### Manh Ha Tran

My personal favorite moment was when we had dinner together on the last day before the Japanese students left. We ate at a French restaurant near the school. After a few glasses of wine, we had some heart-to-heart conversations. I think that was when I bonded the most with them. It was a little sad to say goodbye to them at the end of that night.

#### Mariam Darboe

Something that I will remember from this experience is the positive and uplifting energy that Taichi, Kota, Fuma, and Jiro had. They were always smiling, and seemed extremely grateful to be here, which was very heart-warming and nice to see.

#### Mariken Gillet

We made a very nice construction team and the atmosphere was very nice. We were all listening to each other, everything



was well organized and the tasks were distributed well: while one team measured and prepared the parts, the other cut and assembled the parts between them. Our international meeting around architecture allowed us to have very interesting discussions.

Lauren Sabah

My favorite moments were when we had online meetings with Taichi and Fuma until 3am, trying to understand each other so that we could work together and make the best project. Those were genuine moments of fun, sharing and exchange that I will not forget.

Yedidia Senoussi

To have been part of this international workshop will always be an unforgettable experience for me. A great moment of exchange between cultures, different working approaches and methods. During this workshop, Mayuko and Kajiura inspired me a lot with their perseverance.

Comments from Instructors

Frank Salama (École Spéciale d'Architecture)

The little story of the tea pavilion... The first month, in June, consisted of a collaboration by Zoom of students residing in two countries (Japan and France) and three different cities (Kyoto, Osaka, and Paris). The collaboration between these students was

surprisingly productive. They exchanged ideas with each other during the week and every Wednesday there was a presentation in front of the instructors. There were initially eight teams of four students, then after a first selection there were four teams of eight students left. One project among the four finalists was declared the winner following a vote of teachers and students. In July, the winning team drew up execution plans in order to be able to have the project priced, and obtain the legal authorizations.

In August I took care of the costing and authorization of the project. At the beginning of September, we received the delivery of the wood. Four Japanese students and about fifteen French students then together began construction of the pavilion in the courtyard of ESA. The Japanese students, who had a little experience of wood construction, organized the site perfectly.

The pavilion was inaugurated in mid-September and we could then have a little tea ceremony all together. Finally, the pavilion will stay in the schoolyard for a few months. The workshop was a great new adventure for teachers and students alike. I hope we can repeat this experience.

Noriyuki Hikida (Osaka Sangyo University)

I would like to express my sincere gratitude to Osaka Sangyo University for allowing our students to participate in this international workshop. It was a great experience not only for the students, but also for the faculty members, as we were able to make it this far with warmth and perseverance in the face of many difficulties, such as differences in language and architectural experience. I would like to express my gratitude once again to all the people who have worked so hard to bring us to this point.

The theme of the project was an exciting one: to design a contemporary tearoom in front of the remains of a Le Corbusier design, and it was not just a spatial pavilion, but also a fabrication that entailed a certain amount of limited materials. In particular, the question of how to approach the cultural existence of the tea house was answered differently in each school, and overcoming this question is what made this workshop meaningful.

I hope that these workshops will continue to be held and that we will have the opportunity to participate, and I hope that we can continue to cooperate in the future.

Asako Yamamoto (Osaka Institute of Technology)

First of all, I'm happy and pleased that this workshop was completed with the realized architecture, as to experience the design at 1:1 scale after deep reflection using smaller

scale models, or inside a computer, could be the best way to learn about spatial design. Secondly, I think the students were also satisfied with not only the result but also the extraordinary experience of talking and collaborating with foreign students who have different cultural backgrounds and ways to address the problems.

Finally, although all the plans that the teachers made at first didn't work entirely, because of the difficult situation caused by COVID-19, we could manage to achieve the goal, which was to construct a place to have a cup of tea, even if we had to change many details. I think it is an essential experience for designers who are going to work in society.

All these three points are what I have experienced so far, and what I wanted all the students to discover in some way. So I'm so proud of the outcome and grateful to all the other teachers who made a big effort to finish this project. I would like to visit the construction site as soon as possible!

Kentaro Takeguchi (Alphaville)

The workshop began with the possibility of using the banks of the Seine, where Asile Flottant is located. Fortunately, Kyoei Tea, the famous Morihan tea company that Alphaville had met during the proposal process, agreed to sponsor the project. However, as with Asile Flottant, there were many differences in controlling the construction in a remote and metropolitan city like Paris. Estimates from the carpenters were far behind schedule, and when the order was placed, there was talk of a wood scarcity in September. In the end, I prepared a "Plan B" to reduce the amount of wood by two-thirds, so I activated it with the students and ordered the wood from Marseille (I was participating in another workshop) to Professor Salama by phone.

However, thanks to the students' good sense of construction, the construction was completed in the expected number of days, without any carpentry training and with the help of a team of French students, which was a good and unexpected thing. On the contrary, with a structure of this size, the designers can put the timber together as if they were modelling it in 3D CAD. The fact that the construction of the architectural space by a human being was pursued as if it were an instinct, makes it a success at the moment.

## Participants

### Kyoto University

Instructor: Thomas Daniell

Teaching assistant: Anju Kato

Students: Hotaka Iwami, Mayuko Nasu, Wang Guoyi, Taichi Kaga, Jiro Akita, Usaki Tsujimoto

### École Special d'Architecture

Instructor: Frank Salama

Teaching assistant: Maxime Font

Students: Louise LeBlanc, Mariken Gillet, Lauren Sabah, Sunny Choukroun, Henri Zenatti, Adrien Bousquet, Maxence Rondel, Ece Gurkan, Kim Gommery, Mariam Darboe, Manh Ha Tran, Yedidia Senoussi, Gravine Lokoto Mbokawa, Louisa Rachedi, Suphi Zencirkiran, Ahmed Khalil

### Osaka Sangyo University

Instructor: Noriyuki Hikida

Teaching assistant: Shuji Fujioka

Students: Kota Murayama, Fuma Takakura, Saya Hashimoto, Sayaka Yamazaki, Keita Miyazaki, Takeshi Kajiura, Kyogo Shibata, Thomas Loncq

### Osaka Institute of Technology

Instructor: Asako Yamamoto

Student: Yoshihiro Okamoto

### Guest critics

Kentaro Takeguchi

Ryo Watada

### Support

ADAN (Architectural Design Association of Nippon / Shuhei Endo, Kiyoshi Sey Takeyama)

### Sponsor

Kyoeiseicha Co., Ltd. Morihan