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Building with Stories

The Space of Words Design Studio

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Publication date
2023
Document Version
Final published version
Published in
Charrette

Important note
To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Building with Stories: The Space of Words design studio

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ABSTRACT

Engaging the educational context, topic, working process, and theoretical framework of the first month of The Space of Words design studio, this article addresses the threshold of graduate education. The article presents the potential for stories and model-making to foster strong collaborations among peers — particularly within a multicultural group of incoming master students — making the first month of graduate studies a pivotal moment in architectural education.

Beginning architecture: The Space of Words

While beginning architecture at the level of the bachelor studies is the focus of many pedagogical conversations, the initial stages of the master-level professional education attract less scholarly attention. I wish to discuss a case-study focused on this specific pedagogic threshold. In this article, I will present the structure, context, and philosophical underpinning of the first month of The Space of Words design studio. In June 2021, I was awarded the Comenius Teaching Fellowship Personal Grant, by the Dutch Ministry of Education and Culture, to run The Space of Words, a beginning master studio I conceived for the Department of Architecture, TU Delft Netherlands, where I currently teach. This teaching fellowship is awarded to educators who suggest a pedagogical innovation that addresses a difficulty within the context they teach. The Space of Words was devised precisely to assist students overcome a difficulty characteristic of the TU Delft master level architectural program.

TU Delft's professional Master's program in architecture attracts a diverse cohort of international and Dutch students. These students bring along notably dissimilar pedagogical experiences and architectural expertise when starting their studies. Some of them hold a five-year professional diploma and have worked in architectural offices (usually around Europe). Others are registered in the program after a three-year bachelor's degree with no involvement in practice and comparatively less life experience. Students' architectural knowledge, capacities, and level of maturity can create a noteworthy imbalance in the design studio course, particularly during the first weeks. It is expected, by the way the curriculum works, that the students will be able to cope with these differences by dedicating as much time as possible to their studio assignments. Besides studio, the students' only other commitment in the first semester is a short theory course. Given that studio assignments require teamwork, the students need to collaborate and interact productively right away, despite their dissimilar capacities. It is not a surprise that these collaborations are not always successful. Poor class dynamics occur and opportunities for peer learning — much needed in the engineering field — are missed. The students advance at different speeds, and a small but significant percentage drops the studio course or fails every year.

This situation was worrisome for my colleagues and myself, as well as for the students, who voiced their concerns through *B-News*, the independent student-run platform and monthly journal of the Faculty of Architecture and the Built Environment (Fig.1).[1] The students dedicated an issue on the discrepancies noticed in the beginning stages of their master-level education asking for changes while identifying the problems, which:

> [...] did not have to do so much with the actual content of courses, but rather with study group dynamics and the efforts that were needed to work with some students, who lacked skills, had low motivation, and hardly engaged in group activities.[2]

Figure 1:
B-News distribution locations,
Faculty of Architecture and the Built
Environment (Angeliki Sioli 2023).

Figure 2:
1:1 scale installation exploring domestic atmospheres through sound - Selma Beltifa and Rens Hoofs (Pierre Jennen 2022).

Figure 3:
1:1 scale installation exploring domestic atmospheres through textures - Maja Lijo, Selma Beltifa, and Justus Schäfer
(Pierre Jennen 2022).

The Space of Words was a creative response to this situation, a pedagogical intervention that focused on what is common among the incoming students, rather than different, hoping to create stronger bonds among them and set a solid foundation for the months to come.

The first month: building with stories

This graduate beginning design studio explored the topic of domestic atmospheres through phenomenological investigations on sound, scents and textures, focusing on stories and building 1:1 scale installations (Fig.2 & 3). Co-

teaching this studio brought together my background in architectural theory and my colleague Pierre Jennen's architectural experience focused on timber.

As research on educational psychology shows, pedagogical contexts based on students' commonalities, while offering them similar challenges, ensure constructive and meaningful collaborations among peers (Fig.4).[3] During the first month we introduced stories and storytelling, as a fundamental capacity of humans across times and cultures. We envisioned and structured this first month as an initiation into an environment where students could feel empowered to share their stories to develop their critical and creative skills. The plan was that during the first month all students will collaborate with each other on various assignments, while the group as a whole produces a common output.

The emphasis on stories seemed appropriate for working with a multicultural group of beginning master students. In their collective volume, *The Need for Story: Cultural Diversity in Classroom and Community*, educators Anne Haas Dyson and Celia Genishi support the basic need that we all have for stories, a need to organise our experiences into tales of important happenings.[4] What might seem obvious is actually a belief shared by many researchers. Psychologist Jerome Bruner in his study *The Culture of Education* supports that stories are the means through which people make sense of their experiences, framing their cultural origins and most cherished beliefs.[5] Geneva Gay in the work, *Cultural Responsive Teaching*, further supports that stories are powerful means for people to establish bridges across factors that separate them like race, culture, gender and social class.[6] She cites research showing how stories enable people to 'penetrate barriers to understanding, and create feelings of kindredness'.[7] My own work with stories in different architectural pedagogical contexts and for various courses before embarking on The Space of Words design studio, had convinced me of the credibility of such theoretical discourse.[8]

Stemming from this research, we started our very first meeting with the exchange of stories. We asked the fourteen students that joined the course to introduce themselves by sharing a story about their first name. This story could be the reason their parents or caregivers selected this name; a tradition from their culture explaining the choice of their names; whether the students themselves like their names or not and why. My colleague and I also shared our own name-related stories. Cultural customs, regional traditions, word meanings, parental dreams and expectations emerged from our conversation (Fig.5).

During this exchange, there was lots of nodding, when the stories would evoke empathy; laughter, when the stories would be amusing and light; and surprised or concerned looks when the stories would be a bit more dramatic than expected. These reactions were reassuring; the interaction could connect a varied group of students on an emotional level. Their pre-acquired architectural skills and capacities (where they did their bachelor's degree, if they have worked in an architecture practice, or not) were deliberately never discussed. From these stories we moved directly to introduce the topic (and working process) of the first month.

Domestic sounds and acoustic atmospheres

The topic of the studio's first month, domestic sounds and atmospheres, was approached from a phenomenological and experiential perspective. The emphasis was on the lived experience of place, as defined by Maurice Merleau-Ponty in his landmark work *Phenomenology of Perception*. In explaining lived space, Merleau-Ponty starts from the notion of lived distance writing, 'beyond the physical or geometrical distance existing between me and all things, a lived distance links me to things that count and exist for me and links them to each other'.[9] This lived distance measures the scope of one's life and defines the lived space, which is always *situational*, connected with specific places and experiences. Contemporary philosopher Tonino Griffero, elaborating this line of thinking, opposes lived space to geometric space, because, as he argues, geometry:

> is incapable of justifying the (not only metaphorical) volume of a Sunday silence or the narrowness of a living room (perhaps metrically identical to another which is yet perceived as more spacious); the different length of a journey for someone who strolls casually and someone with a precise destination in mind, but also banally, for those who leave and those who return. This very extradimensional and non-epistemic sense of space brings a fundamental contraposition to light. While physical space, made of places and measurable distances, enjoys an abstract uniformity (isotropy and Euclidian three-dimensionality), *lived* space claims to have an absoluteness and an irreversibility tied to the felt-body (above/below, right/left, up/down) and to our actions.[10]

Figure 6:
Looking for quiet locations
(Iris Pradillo 2022).

Through examples on what *lived experience* constitutes and how it connects with space and architecture, the students were initiated into the philosophical context of the studio. The first guest, Elisavet Kiourtsoglou, offered them a workshop exploring how sound works in our *lived experience of place*, how memory is part of this experience and how sound is both culturally and spatially specific. She challenged the students to walk around the faculty building and discover the quietest location possible, a task that proved more challenging than it initially seemed. The ventilation system of the building was particularly noted as disturbing to the notion of quietness (Fig.6).

The working process of the first month proceeded in a two-fold way. Each Tuesday afternoon we would meet the students in a seminar room unpacking stories related to domestic sounds and atmospheres, working towards the design and production of a collective volume with these stories. Each Friday morning, we would meet the students in the faculty's model hall and work with the collection of stories, in order to understand its acoustic qualities, while creating and building acoustic devices. These devices were meant to create a domestic sound within the building of our faculty. In what follows I will present these two seemingly separate but deeply interwoven assignments in further detail.

Dictionary definitions

Every Tuesday the students were asked to bring in class three written short stories describing sounds and atmospheres from various acoustic environments. These stories were meant to be written in the form of short definitions. The definitions had to start with a title related to the sound and then present, briefly, what the sound *sounded like* in space, what kind of atmosphere it created, how did it make the student feel and act. The first

Figure 7:
Students collaborate, edit and revise sound definitions (Angeliki Sioli 2022).

week's focus was acoustic atmospheres of past domestic environments, stories emerging from remembered spatial experiences. The second week we moved to acoustic atmospheres of the student's current domestic environments, exploring lived spatial experiences. The third week we envisioned acoustic atmospheres of future environments, challenging stories to become carriers of imagined spatial scenarios.[11] This last part was a way for students to also share future aspirations, dreams and hopes related to their envisioned domestic environments, realising how some of these aspirations are shared among the whole group. Stories and atmospheres were not approached as subjective spatial experiences but rather as intersubjective tools and qualities of space (respectively) that can be shared, studied, and analysed. Conversations with our guests Lisa Landrum, on the importance of narrative imagination as well as the theoretician, Alberto Pérez-Gómez, on the linguistic aspects of spatial atmospheres, created a framework on how to approach both storytelling and the — what may seem as elusive — notion of atmospheres.[12]

The stories were written initially in the students' mother language and then translated by the students into English, the official language of the master program at TU Delft. It quickly became obvious that writing in their own language helped the students express themselves more fluently, more precisely and more freely. Marianna Angelini, an Italian student, observed she would have never known all these words she needed for her definitions in English; by writing firstly in Italian, she could communicate the acoustic atmospheres more vividly and more evocatively.

All stories were collected in a shared online drive, accessible to everyone, so that the editing process could start. The students formed teams of two or three (different groups each week) following our instruction to collaborate with someone as culturally diverse from them as possible. We wanted to

Figure 8:
Up Pérez Gómez with students,
and below Arvind Lachman's draft
acoustic device
(Angeliki Sioli 2022).

discourage students who speak the same language from grouping together, as
we thought this might form a separation among the class. The task of the teams
was to share their stories and help each other edit and refine them (Fig.7).
The criteria for this editing were set by the students themselves in our first
collective discussion, creating among the group a strong sense of ownership
of the produced material and the working process.[13] The students shared their
impressions regarding their classmates' definitions and noticed that in some
cases the space was not clearly described, or that the sound was not tangibly
documented. Helping each other clarify and further elucidate their writings
was an assignment that allowed the class to advance collectively, reaching
an equal level of evocation in their descriptive and imaginative writings. This
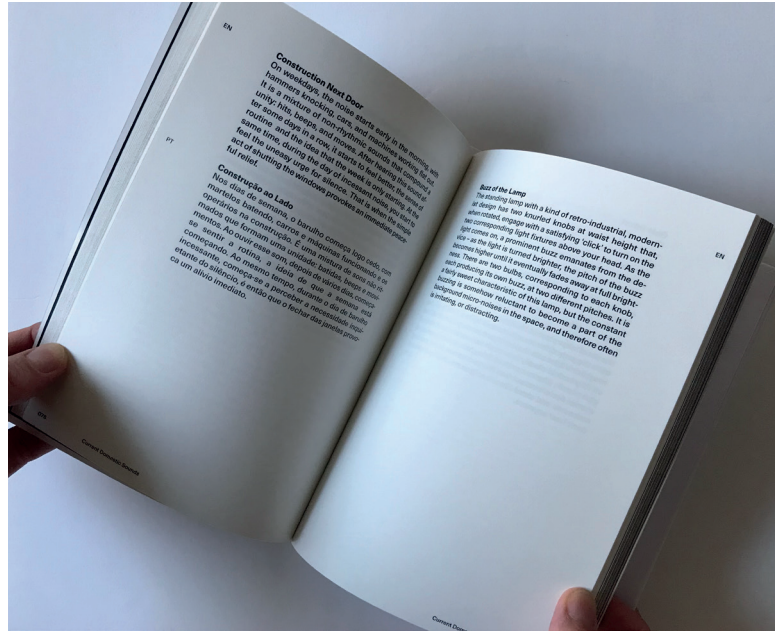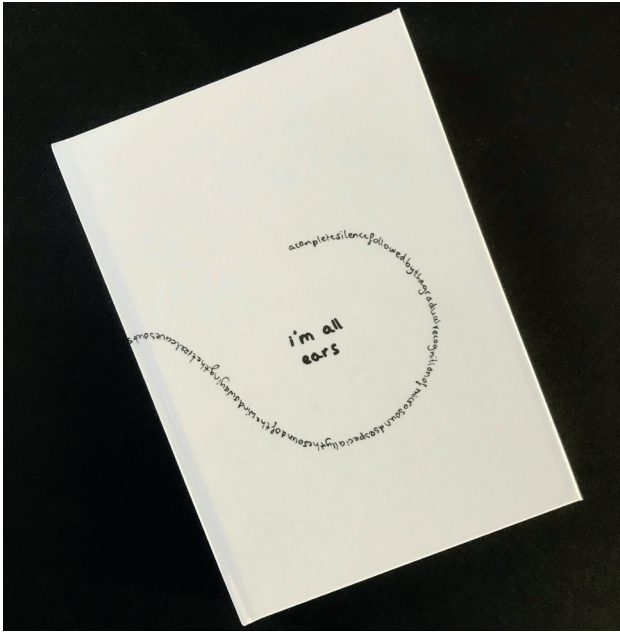
Figure 9:
Students' acoustic dictionary *I Am All Ears* above (Angeliki Sioli, 2022)

Figure 10:
Group conversations among students (Rens Hoofs, 2022)

method of work created a constructivist learning environment, a place where learners may work together and support each other within a motivating context in which they can solve problems, interact with others, and assess their learning.[14]

As this process was advancing, we assigned the students the collective project of creating a small dictionary with all their definitions. It was around the time that Alberto Pérez-Gómez joined two of our sessions (Fig.8). Besides discussing issues of atmospheres and lived experience with him — as mentioned already — the students had the chance to hear about his on-going and still unpublished work on a lexicon. Our guest shared with the group definitions of architectural elements, written as stories of his personal experiences and encounters with these elements. He also heard some of the students' definitions and offered

collegial and creative feedback, discussing his own struggles in writing his stories in the form of a definition.

To create their dictionary the students divided themselves into a few working groups: a concept team, an editing and proof-reading team, a graphic design team and a production team (Fig.9). Dedicated time in class, allowed them to voice their ideas, test them out, get feedback and continue developing the work in agreement with each other (Fig.10). When I suggested that maybe a different colour could be used to highlight each different mother tongue — there were seven different mother tongues in total within the group — they respectfully but assertively rejected my recommendation. Their argument was that the mother languages are what differentiates them, and this is not what they wish to highlight, as this process of writing, sharing, and collecting stories had brought them together. As they wrote in their dictionary's introduction:

> This book aims to create a collective narrative: the story of fourteen people — each with their own particular paths — who encounter each other in a shared context, and eventually follow their own paths in the future.[15]

Site diaries and acoustic devices

In parallel with the work on their definitions and the compilation of the dictionary, the students were challenged with the task to create new acoustic atmospheres in the space of our faculty building. To this end they had to build an interactive acoustic device, made entirely of wood, that would bring a domestic sound and its respective atmosphere into the building. The choice of

Figure 12:
Students Ramona Buia and Sem Verwey recording conversations and coffeeshop sounds (Angeliki Sioli 2022).

wood was based on three criteria. Firstly, it is a material intimately connected with domestic environments. Secondly (and this was a determining factor for my colleague Pierre), it is a low-threshold material. Wood can be worked with hand tools and even students with no (or little) experience can engage with it right away, thus ensuring our intention to work beyond the students' differences in experience and skills. Lastly, the wood had to be refurbished, an additional requirement consistent with TU Delft's policy for sustainable and circular education (Fig.11).

To further help overcome possible imbalances in experience with woodworking we asked the students to collaborate in teams of two, pairing students that had diverse experience with the material. Additionally, all students followed a three-hour workshop in the faculty's wood shop. They were introduced to basic techniques and informed about the available machines and their capacities. While the students were creating their device, the employees of the wood shop were always available to help troubleshoot issues and suggest ideas on how to work with the material. Providing this supplemental training and support, students' capacities were advancing collectively, bridging pre-existing gaps. Building on the collaborative spirit initiated with the work on the dictionary, we once again made sure that everyone could fall back on the whole group for guidance and advice, the way they could while working on their definitions.
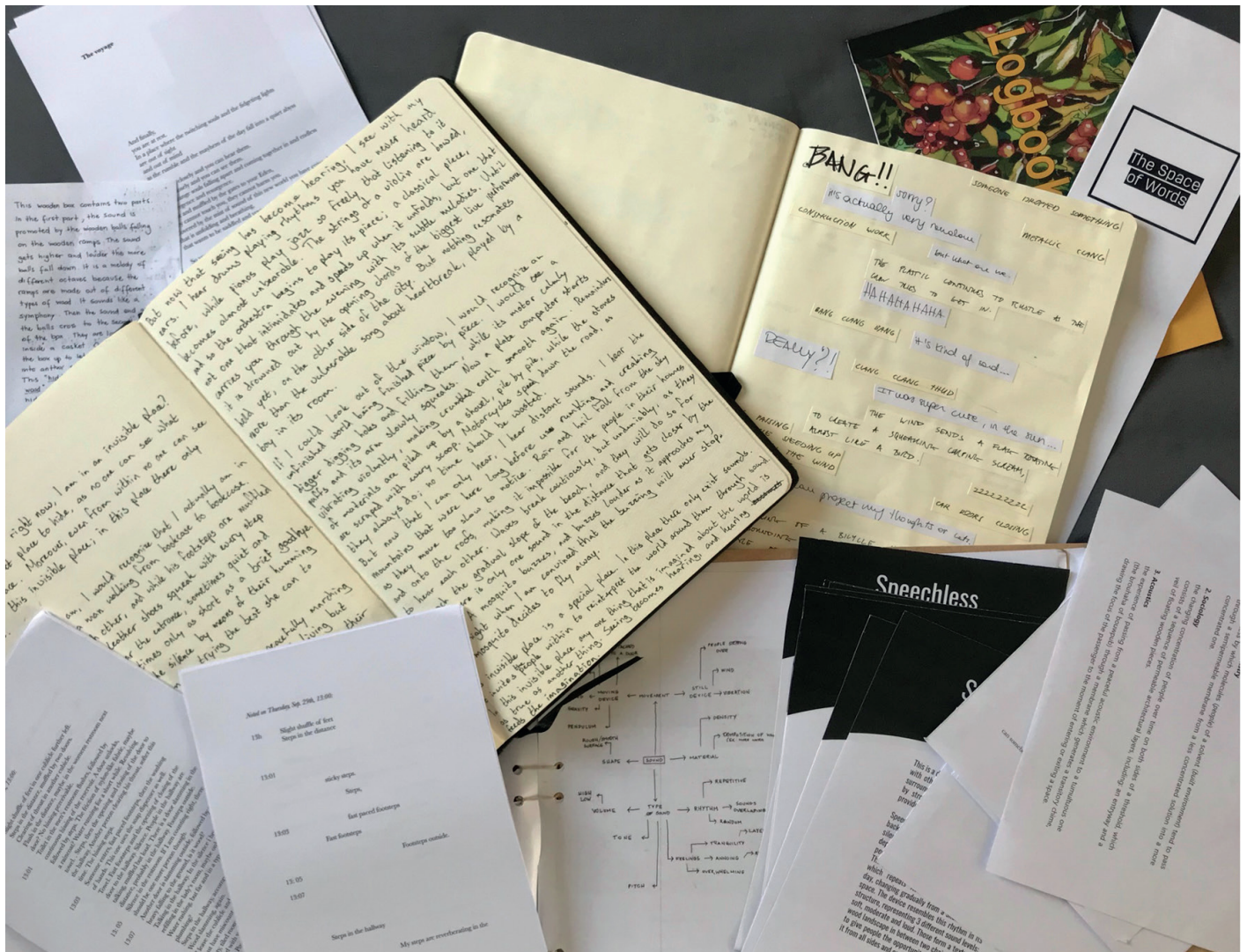
Figure 13:
Student diaries capturing stories of sound and acoustic atmospheres (Angeliki Sioli 2022).

Before starting work on the acoustic devices, the students had to first select a location in the building. Stories (recorded in writing) were used as a tool for site analysis. Working on acoustic diaries of the building's different locations, the students spent time observing and writing about the place's diverse and changing acoustic qualities, namely the acoustic stories of various places (Fig.12). They visited these locations at different times of the day, noticing how the acoustic changes influenced the atmospheres in place. The diary entries varied from exact transcriptions of sounds (footsteps, conversations, vending machines, doors, etc.) to descriptions of how specific acoustic atmospheres were perceived, how they would change people's behaviour in space or how they would make the students' themselves feel (Fig.13). An important reference for these explorations was Frederick Kiesler's work *Inside the Endless House; Art, People and Architecture: A Journal*, a collection of diary entries full of stories regarding architecture, places, model making, travels — which we studied in detail in class.[16] Alongside Kiesler's diary entries, references from the literary field, like George Perec's *Species of Spaces*, served as further points for inspiration.[17]

At the same time, the students worked with scaled, wooden models (as a way to think through their acoustic devices). Since the end result was the creation of a specific sound and atmosphere, we did not work with drawings. We had to be able to hear what sound the devices could create — drawings could not provide that. Every week we would explore the new iterations and test them on the spot and *in situ*, to offer appropriate feedback toward the final device (Fig.14). Practically that meant that during every Friday meeting we would all together walk around the building, visit the locations that students had chosen to work with, test the devices and assess the success of the intended atmosphere. All the studio participants would be involved in using the devices, offering ideas or suggestions for future iterations and improvements (conceptually and technically). This was of paramount importance for the group's collaborative spirit and their feeling of ownership of the work. While each two-student team had authorship of their journal and device, the group was also clearly aware that they had the responsibility to help each team advance and enhance their projects. After two weeks of such practice, the devices felt more shared and collective than just the individual work of each team.

Students Marianna Angelini, Maja Liro and Christopher Clarkson experimented with the creation of a wooden curtain which was installed in one of the building's entrances and would create a welcoming sound when crossed (Fig.15,16 & 17). Students Babette van Tilborg and Justus Schäfer explored the private space of the bathrooms. The sound of water through pipes became their focus. Their device was activated every time someone opened the door to enter one of the restrooms, causing some initial hesitation about the functioning capacity of the facility (Fig.18). Students Ana Carolina de Souza Mello and Roos Scholten worked through various devices in an attempt to recreate the sound of wooden kid's games. It was a familiar sound they grew up with as children themselves and was intimately connected with atmospheres of their past domestic environments (Fig.19).

Figure 17:
Different iterations of the acoustic curtain - Marianna Angelini, Maja Liro and Christopher Clarkson (Angeliki Sioli 2022).
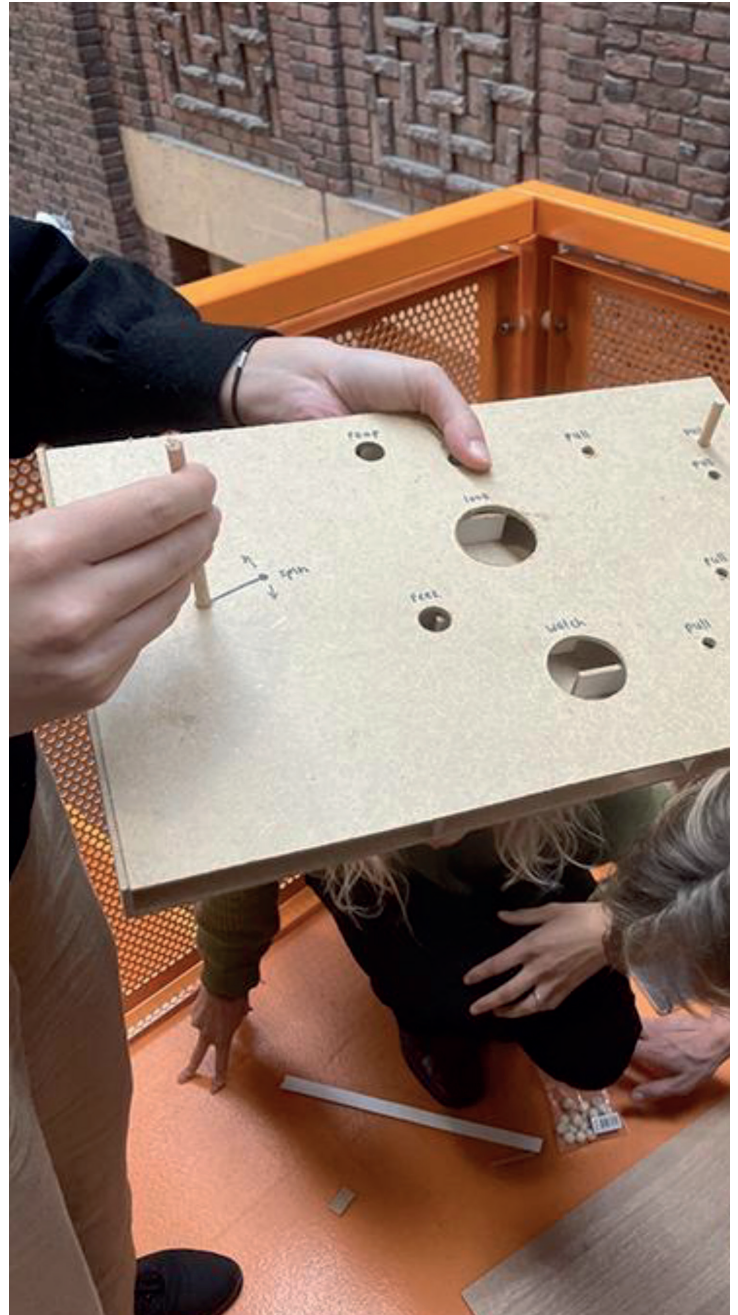
Figure 18:
Water pipe device -
Babette van Tilborg and
Justus Schäfer (Angeliki Sioli 2022).

Figure 19:
Attempts to recreate the sound of kid's toys - Ana Carolina de Souza Mello and Roos Scholten (Pierre Jennen 2022).

Nöelle van Kouwen and Sepehr Asadi were among the quieter students of the group, struggling to design the device they were envisioning. Their intention from the beginning was to recreate the sound of rain falling on a roof and the warm feeling this sound gave them. They struggled with both conceptual and technical parameters while building multiple devices trying to create this sound. The only condition they would not negotiate was the location they had picked to work with. At the west side of the faculty building (a wing not that busy and populated), there is a three-stories-high, beautiful, old staircase. The hollow space in between reverberates and magnifies every sound. Nöelle van Kouwen and Sepehr Asadi, along with their colleagues, agreed that this was the only location for their device. After multiple iterations the device took shape in a system of hanging mobiles, made of hollow wooden compartments

Figure 20:
System of hanging mobiles - Nöelle
van Kouwen and Sepehr Asadi
(Sepehr Asadi 2022).
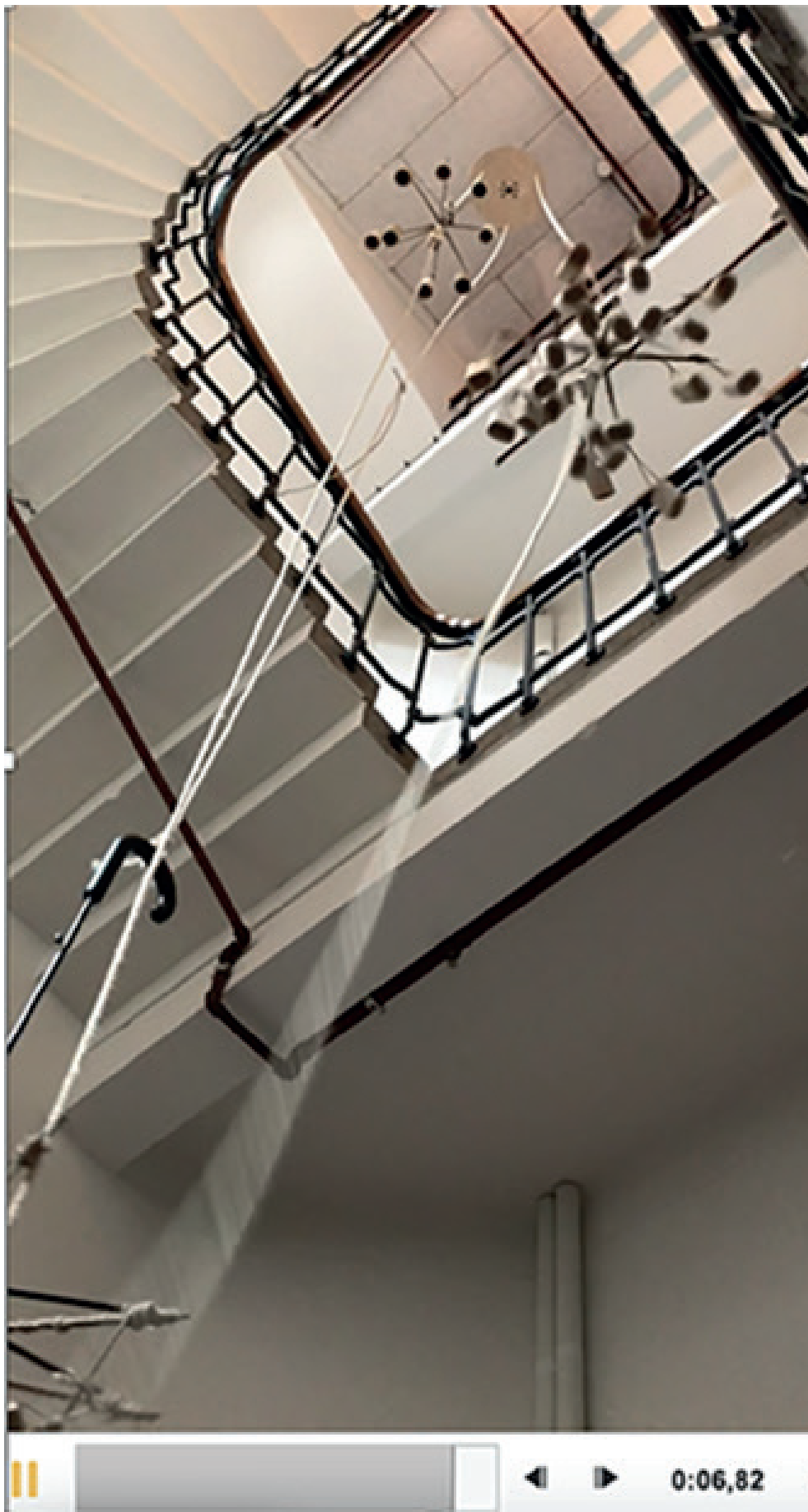
Figure 21 - Video:
Sound of rain on the roof floods the space of the staircase - Nöelle van Kouwen and Sepehr Asadi. Link: https://youtube.com/shorts/MgslwS_ZPrc
(Angeliki Sioli 2022).
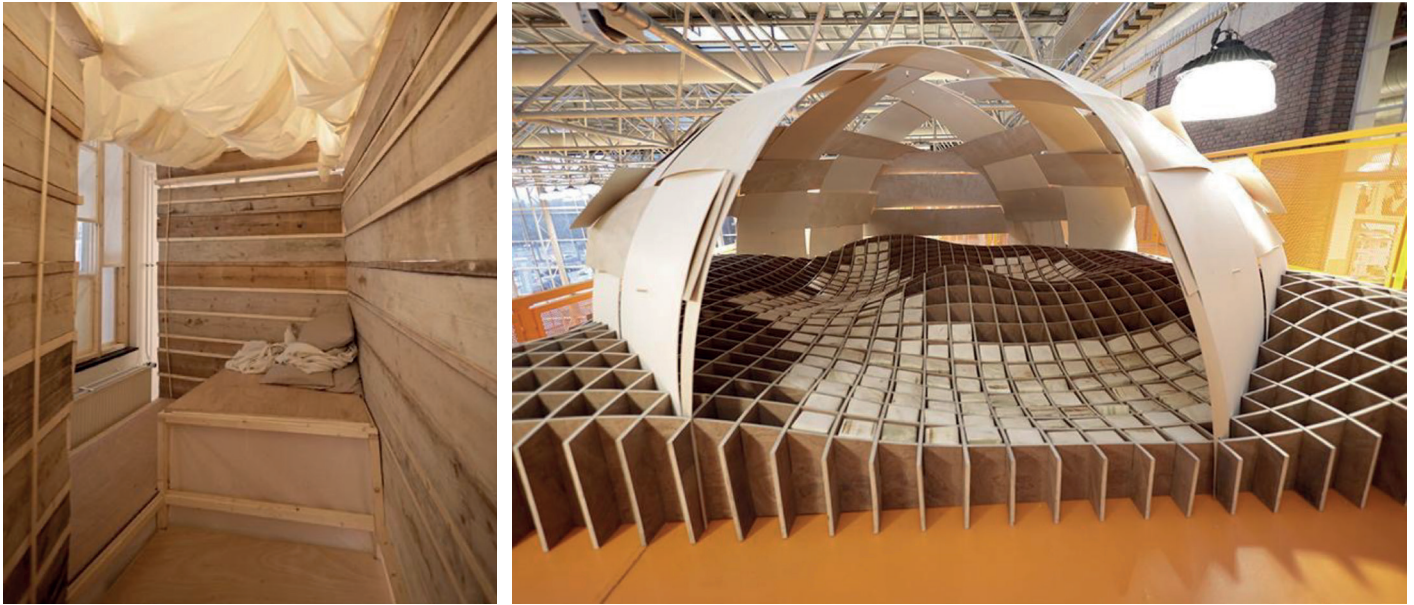
Figure 22:
Interior of wooden rooms
(Willemijn Wilms-Floet 2023).

of different sizes and shapes (Fig.20). Each of the three mobiles had a long rope hanging from its middle with a wooden handle reaching all the way to the ground floor. The building's users could shake, twirl, and swing the handles, making the compartments of each mobile reverberate and the sound of rain on the roof flood the space of the staircase (Fig.21 — Video).

Reverberations: a conclusion

The first month of The Space of Words concluded with a big celebration of the students' work. We walked to and experienced all installed devices in the building along with guest reviewers. In the afternoon of the same day we hosted a public event — open to all students and colleagues — showcasing all devices, launching the dictionary, and enjoying a lecture by Pamela Jordan on the role of sound in archaeological and heritage studies. The students oversaw the organisation of the event and reception. The months that followed built on this collective and collaborative spirit, (while still working through stories and installations) and focused on investigations of scents and domestic atmospheres (two weeks), textures and atmospheres of domesticity (four weeks) and the building of two wooden rooms (six weeks), within the faculty building, creating moments and atmospheres of domesticity for all its users. (Fig.22). These rooms, along with most of the first month's acoustic devices, have now become a permanent element of the building.

None of the participating students failed the studio at the end of the semester. The Space of Words fostered creative collaborations among the incoming graduate students, helping them advance collectively and reaching high quality results. The main tools of the studio were stories and model-making, both engaged in various forms and purposes. Stories were explored as descriptive tools, when students wrote definitions of acoustic atmospheres in past and current domestic environments. Stories were

employed as tools for site analysis when students recorded existing acoustic atmospheres in their sound diaries. Stories served as tools for imaginative thinking towards design when students drafted definitions for atmospheres of envisioned domestic environments. Lastly, stories were constantly a tool for collaborative communication among all of us, when sharing and discussing in the classroom, creating an interactive and motivating environment. Model-making was used to further create an interactive and collegial environment, while advancing students building skills. Through wood, as the only material, model-making helped students get their hands dirty and learn how to collaborate and ask for advice. Model-making also worked in favour of the phenomenological intention of the studio. It allowed students to experiment with sounds actively, instead of just imagining possible sounds and the produced acoustic atmospheres.

The Space of Words negated the notion of a genius architect whose individual thoughts and ideas, many times scribbled on a napkin, lead to a landmark architectural object. Architecture was taught as a collective act of embodied inhabitation for which we are responsible collectively. The active involvement of all students in all projects, created a camaraderie, a spirit of teamwork, a sense of collective achievement and responsibility that helped the students overcome difficulties which in previous studios would have differentiated them. Thus, the threshold of the beginning architecture education at the master-level prepared the students for a profession that thrives on collaboration and teamwork.

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