

Serious Play

ACSA Creative Achievement
2024 Award Submission



Reimagining Children's Playscapes, From Speculation to Fabrication

Joseph Altshuler

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Illinois School of Architecture
University of Illinois at Urbana-Champaign

Advanced Design Research Studio +
Fabrication and Participatory Design Seminar

Chicago Studio Residency Program

Community Partners:

Chicago Children's Museum
Design Museum of Chicago
Building Brown Workshop
KIPP One Primary Elementary School

Students:

Sim Agci
Allan Barajas
Nick Beard
Anisha Datta
Charlotte Elo
Sofia Flores
Josh Hakimian

Krishna Jayachandran
Daeun Lee
Hadiel Mohilldean
Frida Palacios
Jesus Sanchez
Andrew Chun-An Wei
Amir Zarei
Will Zhang



Overview

Serious Play is a new graduate design program and community-engaged fabrication curriculum for the University of Illinois at Urbana-Champaign's semester-long residency program in Chicago. The program includes (1) an Advanced Design Research Studio and (2) a companion Fabrication and Participatory Design Seminar that collectively explore **contemporary playscapes**—spaces where play and learning converge, and where architecture becomes an active character that sparks curiosity and care, nurtures physical and emotional risk, and strengthens multi-generational relationships.

As an institutional lens aligned with this agenda, the program re-imagines the future of children's museums. While conventional children's museums operate as a container for discrete exhibits designed by others, this curriculum challenges students to transform children museum's architecture into a dynamic and interactive installation of its own, where the normative dichotomy between architecture as container versus architecture as content is strategically dismantled.

The program brought together architecture and landscape architecture students, setting up interdisciplinary teams where playscapes seamlessly mediate between building- and landscape-oriented strategies engaged with specific Chicago neighborhoods.

With an emphatic effort to empower the students to work closely with real-world community partners, stakeholders, and collaborators and to take advantage of the fact that students from Urbana-Champaign were spending a semester "abroad" in Chicago, **Altshuler initiated creative working partnerships with cultural institutions** (the Chicago Children's Museum and Design Museum of Chicago), **local fabricators** (Building Brown Workshop), and **a K-8 school community** (KIPP One Primary).

Outcomes of this creative achievement include:

- award-winning student design proposals for speculative children's museums (recognized by multiple departments at University of Illinois and the AIA Chicago),
- a well-attended exhibition at the Design Museum of Chicago that broadcast research on the future of playscapes to broad public audiences, and
- a fabricated permanent play structure installed in a local elementary school informed by a participatory process that engaged the school's 4th students.



LABOR ATTRIBUTION

- 15 University of Illinois students contributed to this project via a 6-credit design studio course and a 3-credit design seminar course.
- Building Brown Workshop, a Chicago-based fabricator was paid for 60 hours of labor that contributed to the construction of the play structure.
- A 4th grade public school teacher donated 3 hours towards the participatory design workshop that took place in his classroom. The workshop engaged twenty 4th grade students.

Part 1

Advanced Design Research Studio

The Advanced Design Research Studio worked closely with a real-world community partner at the top of their game, the Chicago Children's Museum, to envision the future of interactive spaces for play and learning. Rather than adding an extension connected to the museum's existing building on Navy Pier centered among tourists, the studio envisions a constellation of children's museum "outpost" facilities distributed among Chicago's diverse neighborhoods. **These nimble, intimate, and public-facing buildings provide a more engaged interface with Chicago families directly within the local cultural landscapes where they reside.**

This studio engages in multiple scales of design research, civic life, and the city. At the urban scale, students immerse themselves among the diverse cultures, landscapes, and identities of the city's south-side (Bronzeville), west-side (Little Village), and north-side (Albany Park) neighborhoods. At the architectural scale, students design a children's museum outpost building situated within a specific community. At the personal scale, students delve into exhibition design for interactive galleries within the museum.

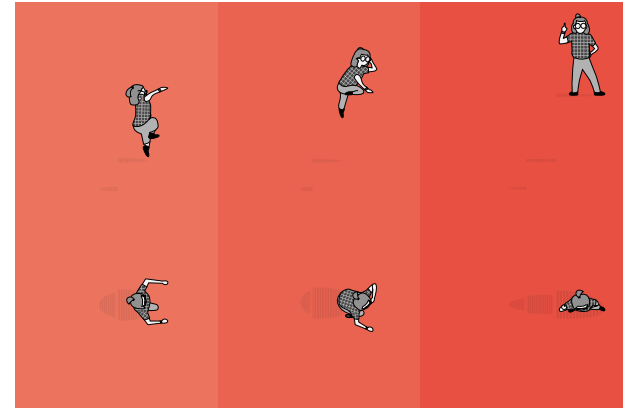
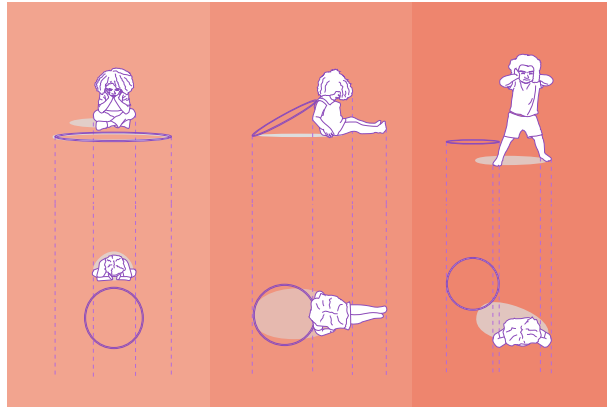


COURSE GOALS

- To cultivate a highly respectful, collaborative, and productive workflow in a multi-disciplinary design team.
- To engage an immersive study (social, cultural, morphological, political) of a particular Chicago neighborhood.
- To practice working with a real-world community partner as client, and to incorporate external feedback in meaningful ways.
- To explore and understand unique design requirements and opportunities for children and youth.
- To explore architecture and landscape architecture strategies that amplify play, learning, and participation for children and families.
- To cultivate a specific and emphatic *tone of voice* in architectural representation that initiates pleasure among multiple audiences.
- To communicate spatial design ideas to broad public audiences, including community members who do not have training in architecture or knowledge of architecture drawing conventions.

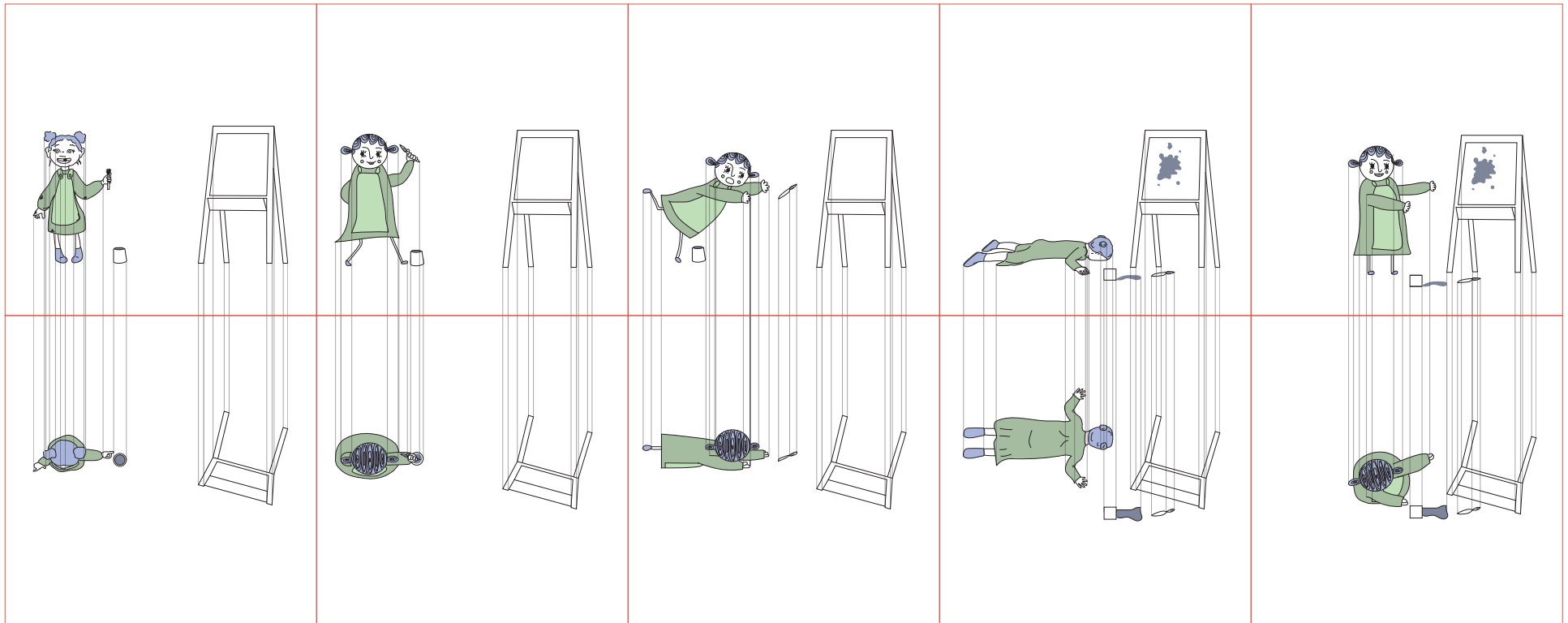
Drawing Childhood

Typically, human figures in architectural drawings and renderings are inserted late in the process or after-the-fact, almost exclusively as a means to clarify scale. Design research in this studio commenced by challenging students to embrace the human figure's capacity to communicate spatial criteria *in advance* of drawing its surrounding built environment. How can the figure itself, in tandem with essential props, suggest physical, behavioral, and affectual attributes of space-making and world-building? Moreover, children are typically under-represented in architectural drawings.



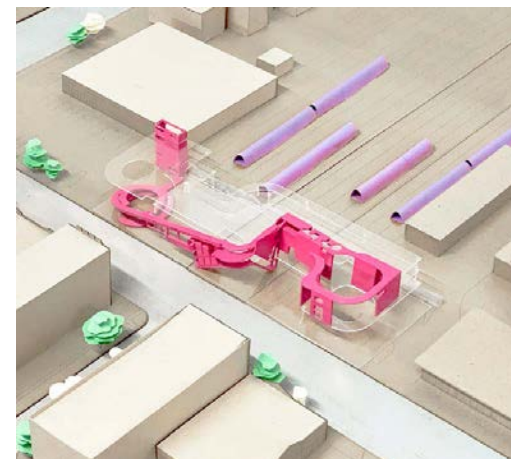
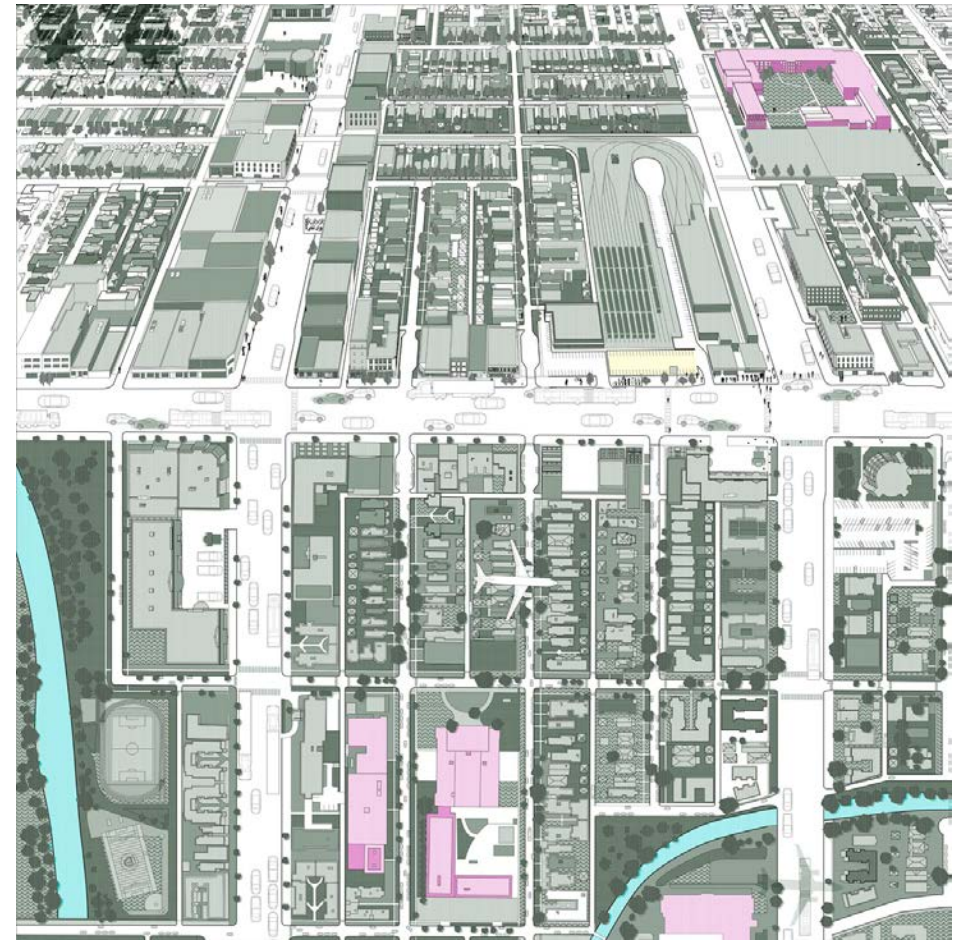
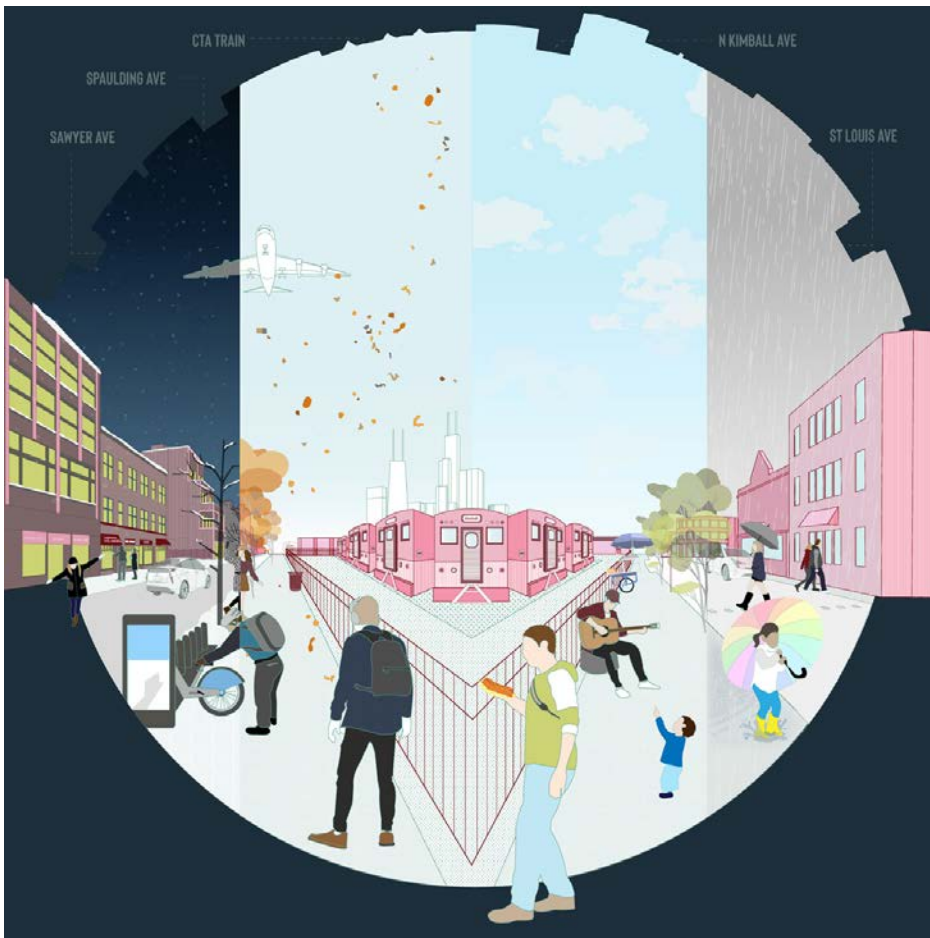
To heighten our sensitivity for children's representation in the built environment (including anthropometric data, socio-emotional developmental milestones, and character affinities), the studio co-created a catalog of youthful characters, leading to deeper

understanding the **physical and emotional dimensions of childhood**. The result is an open-source vector catalog of youthful characters (drawn in elevation and plan) that ultimately inform and inhabit the drawings of the design projects later in the semester.



Neighborhood Portraits

Working in teams, students collaborate to produce a **diptych** of two site analysis drawings that collectively provide a lively portraiture of the team's assigned site and surrounding neighborhood. One panel of the diptych projects a "top-down" analytic survey, while the other panel of the diptych depicts a "bottom up" personal and experiential approach. Ultimately, these rich drawings provide a **canvas of pressure points, contextual factors, and diverse realities** that inform the siting and relationship-making potentials of the children's museum outpost design proposals relative to their neighborhood environs.



Student team: Nick Beard,
Charlotte Elo, Josh Hakimian,
Daeun Lee, Amir Zarei

STUDENT PROJECT: Once Upon a Climb

Triple award-winning student project:

UIUC Department of Landscape Architecture
Sasaki Landscape Architecture Award: 1st place

UIUC School of Architecture
Graduate Design Award: 2nd place

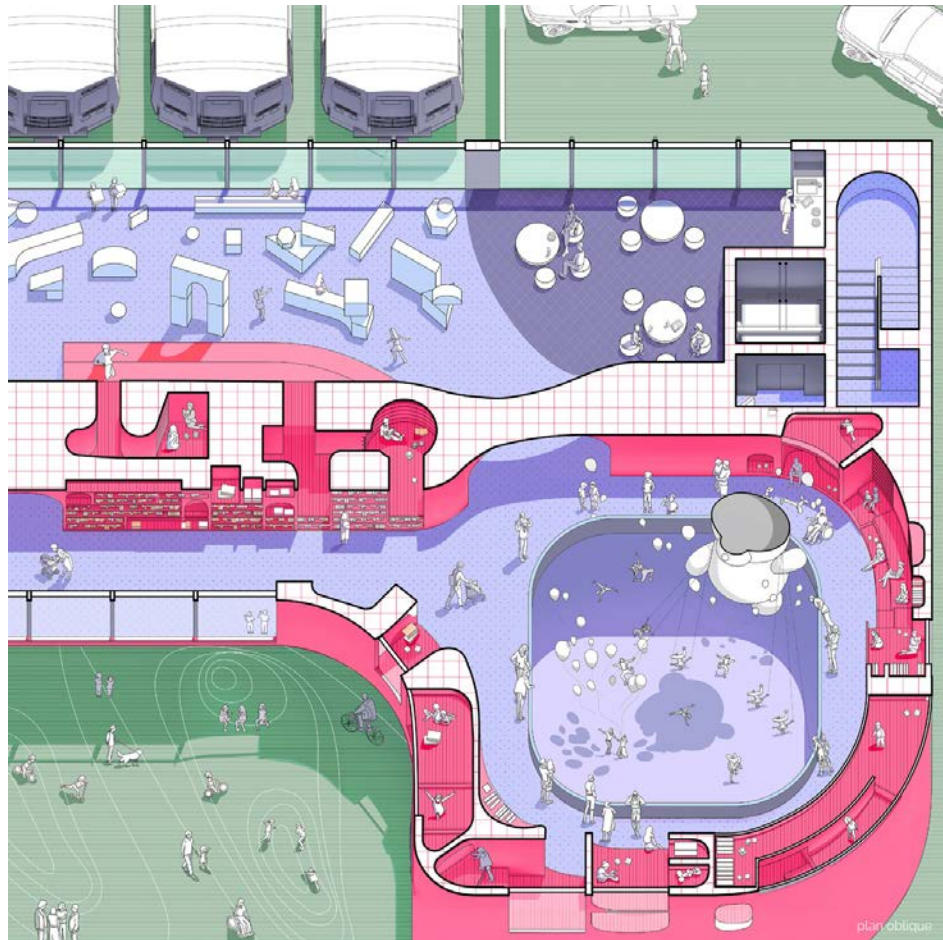
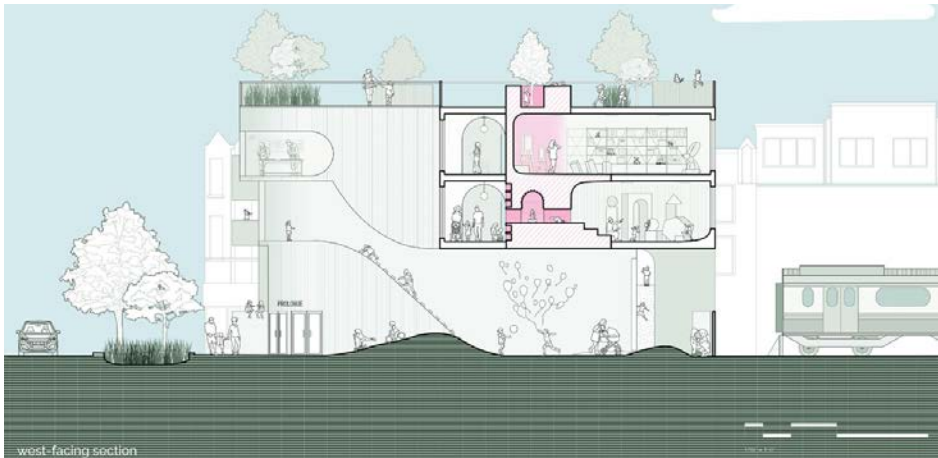
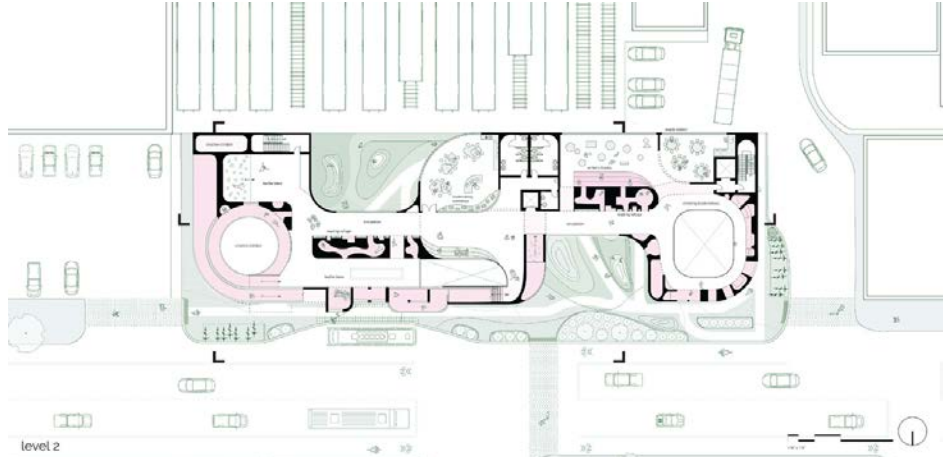
AIA Chicago
2022 Chicago Award in Architecture: 2nd place

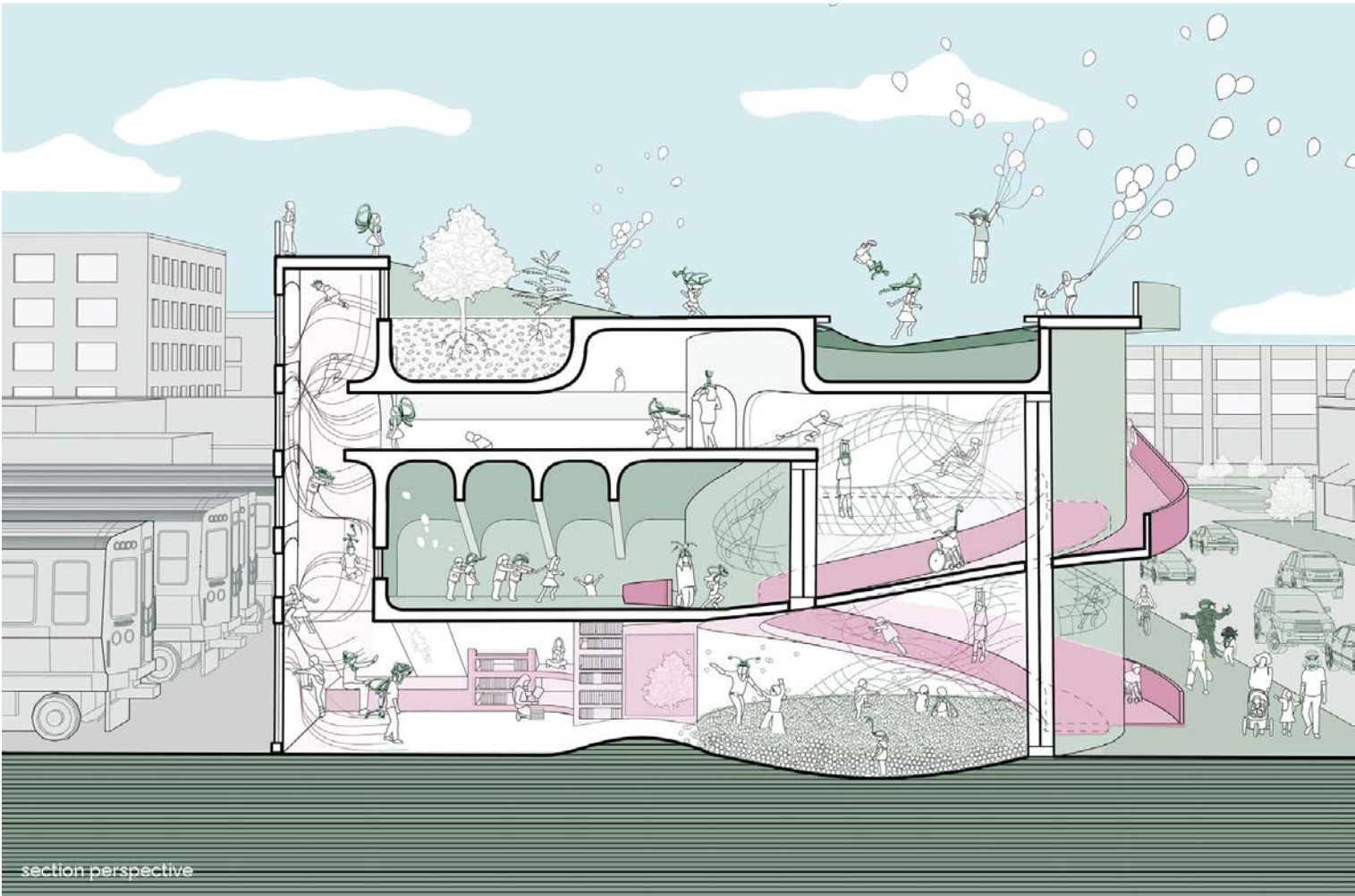
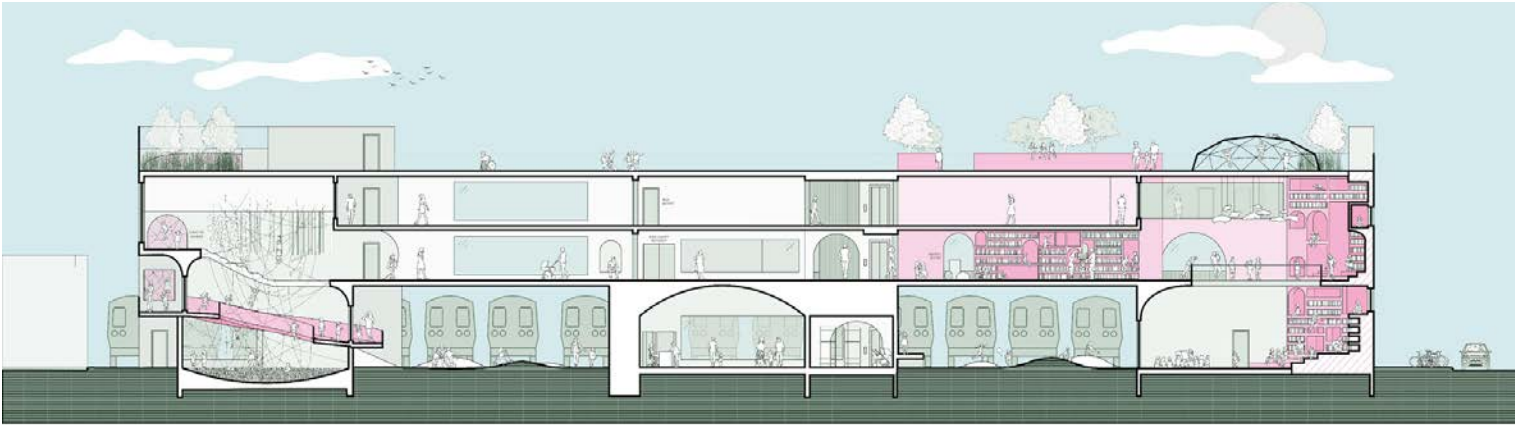
'Once Upon a Climb' is a Chicago Children's Museum outpost located in Chicago's Albany Park neighborhood, near the terminus and railyard of the CTA Brown Line trains. The design combines the quintessential childhood experiences of climbing and storytelling to generate a new typology: THE CLIMBRARY! Rather than conceiving of a climbing structure as a discrete object or a library as a closed room, this design proposes a continuous spatial landscape intertwined with climbing and storytelling experiences that run throughout its entirety. Thickened walls, or poché spaces, generate intimate book nooks and climbable challenges at the scale of a child, where children can take

ownership of their play. At the neighborhood scale, ground-level exterior public spaces make the building/landscape permeable to the neighborhood and provide dynamic views of the CTA trains pulling in and out of the adjacent railyard. These open vantage points to the active backdrop of the train "parking lot" pull museum-goers, CTA commuters, and the general public into and around the site, inviting neighbors to experience the climbrary both inside and out.

Project by Charlotte Elo, Daeun Lee, and Amir Zarei.

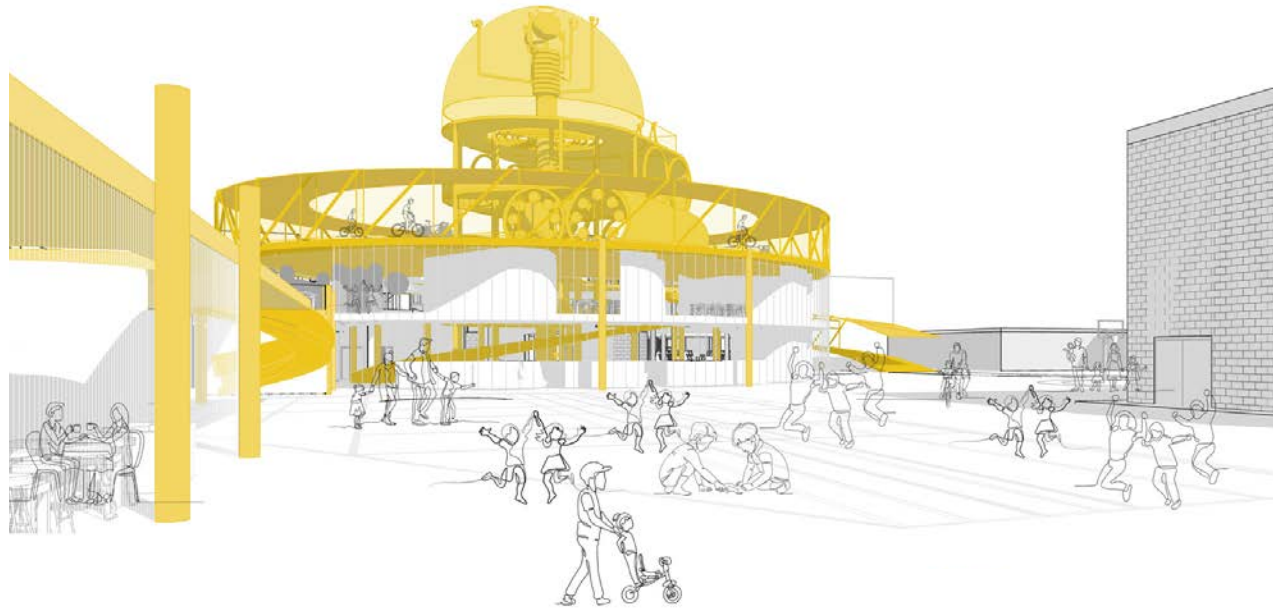






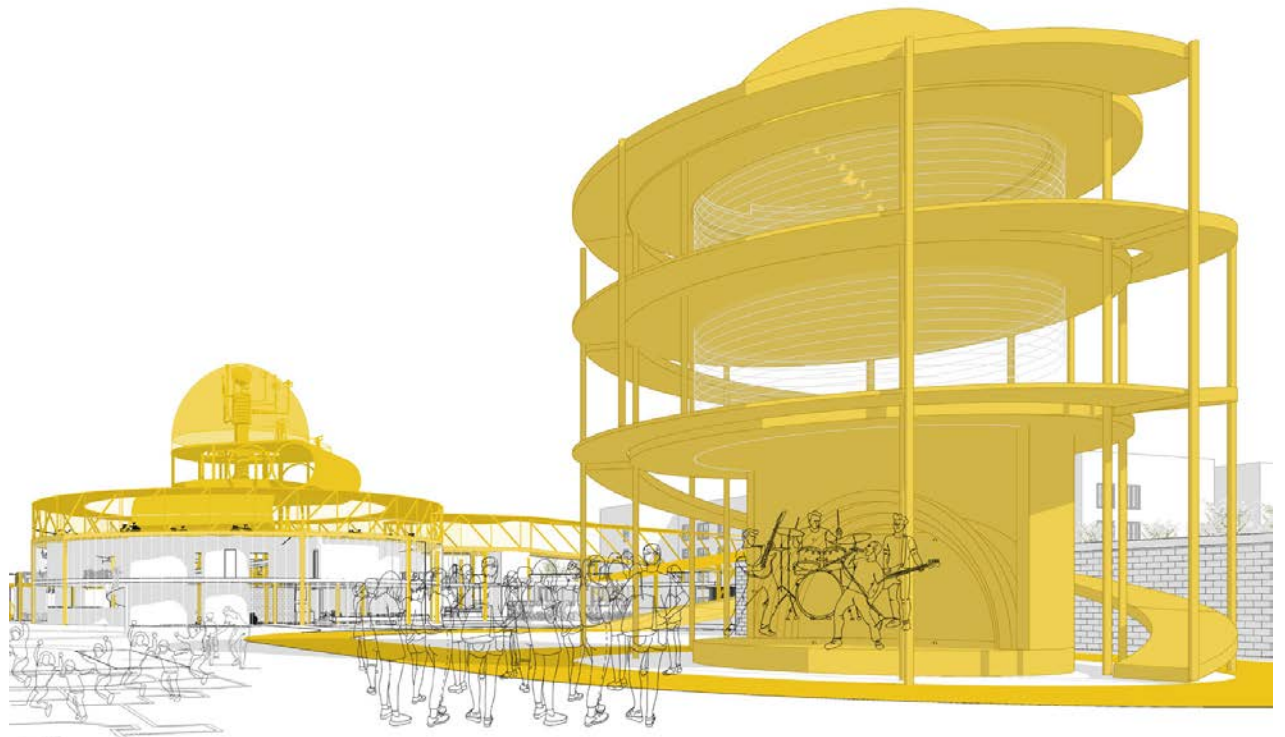
section perspective

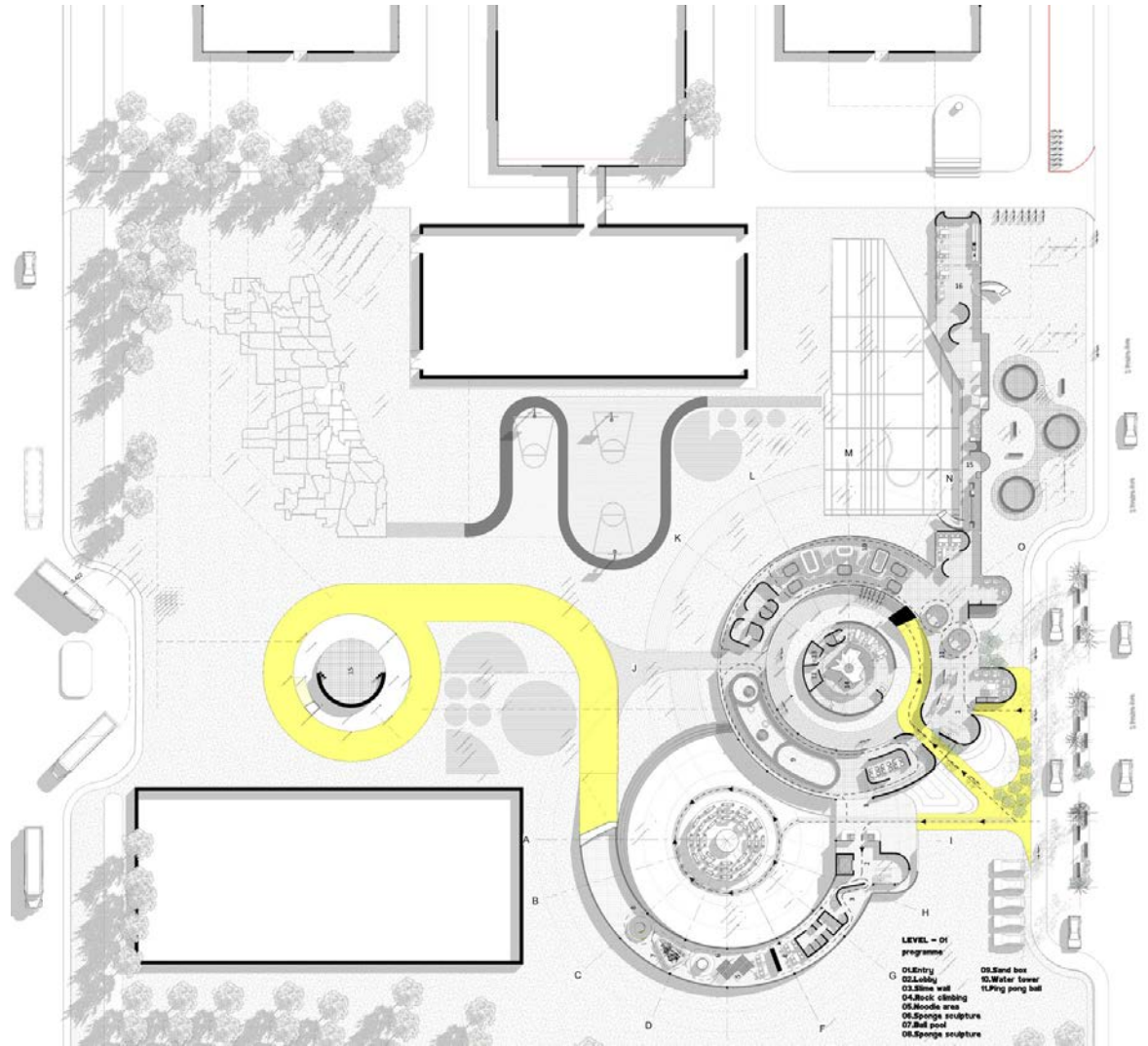
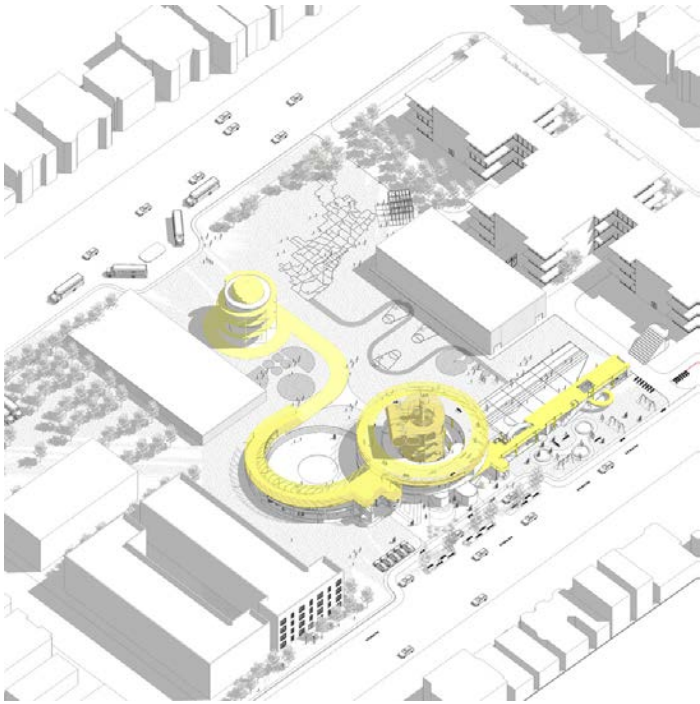
STUDENT PROJECT: Sensory Circus



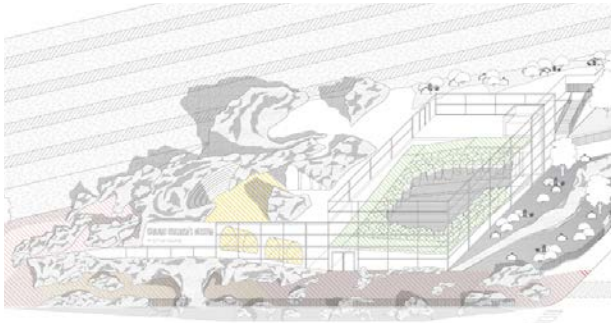
Sensory Circus is located in Chicago's Bronzeville neighborhood, adjacent to Anthony Overton Elementary School. The project emphasizes the importance of sensory play in early childhood while providing a platform to highlight the cultural vibrancy of the neighborhood. Taking a carnivalesque approach, the museum consists of a series of infrastructural "attractions" that frame and activate the existing schoolyard, including play towers, walkways, a velodrome, and a bandshell. In addition, the *Science Fair Tower* can be utilized for science fairs all year round by Chicago Public Schools citywide.

Project by Krishna Jayachandran, Sim Agci, and Will Zhang.





STUDENT PROJECT: What Kind of Non-sense?

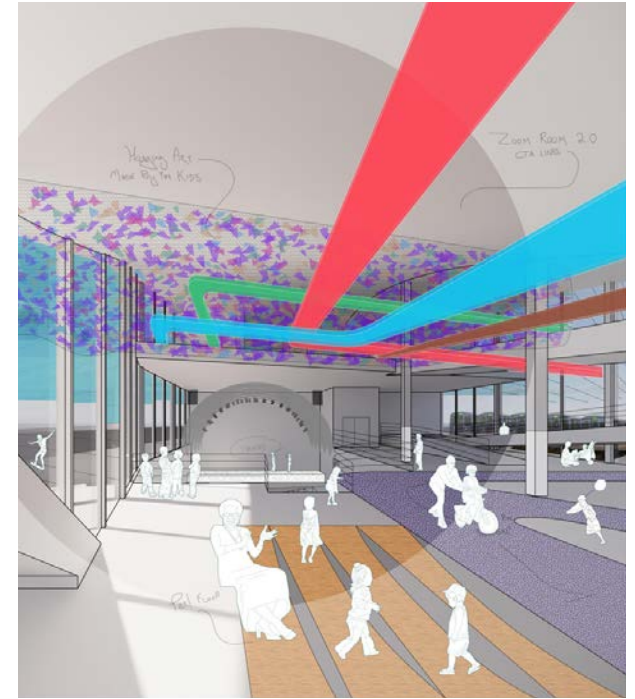
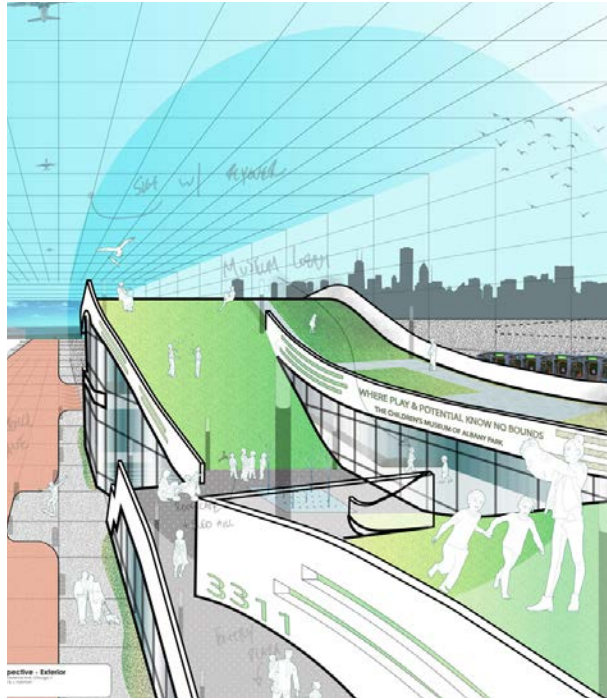


What Kind of Non-Sense is a Chicago Children's Museum outpost in Chicago's Little Village neighborhood that invites children and families to choose their own sensory adventures. Museum-goers navigate auditory, visual, and tactile landscapes in both indoor and outdoor contexts. For example, the auditory landscape operates as an interior climbing structure and building-scaled musical instrument, where climbers produce tonal and percussive sounds as they climb and explore. The visual landscape invites children to investigate perspective and distortion by inhabiting optical illusions from multiple vantage points. The exterior tactile landscape combines haptic experiences with smell and taste: boulders pose various levels of physical engagement and risk, while carefully selected plantings generate aromas and opportunities for harvesting. The overlap of indoor and outdoor landscape experiences invites children to discover new sensory adventures year-round.

Project by Allan Barajas, Anisha Datta, and Andrew Chun-An Wei.



STUDENT PROJECT: Elevated Potential



Elevated Potential is a Chicago Children's Museum outpost located in Chicago's Albany Park neighborhood, near the terminus of the CTA Brown Line train. The design amplifies the capacity of the building's split-level section and undulating form to create multi-sensory opportunities for exhibit programming, both outdoors and indoors. An inhabitable roovescape offers a playful hill to the neighborhood and museum-goers, functioning as splash-pad in the summer and a public sledding hill in the winter. Many of the programmed exhibits draw inspiration from the building's high-traffic location, referencing the multiple means of movement and transportation that traverse in (and over) Albany Park, including the Lawrence Avenue "flyway" to O'Hare International Airport. For example, the "Aero Hero" exhibit invites children to create their own artful paper airplanes that accumulate as a living art installation in a giant overhead mesh canopy.

Project by Nick Beard and Josh Hakimian.



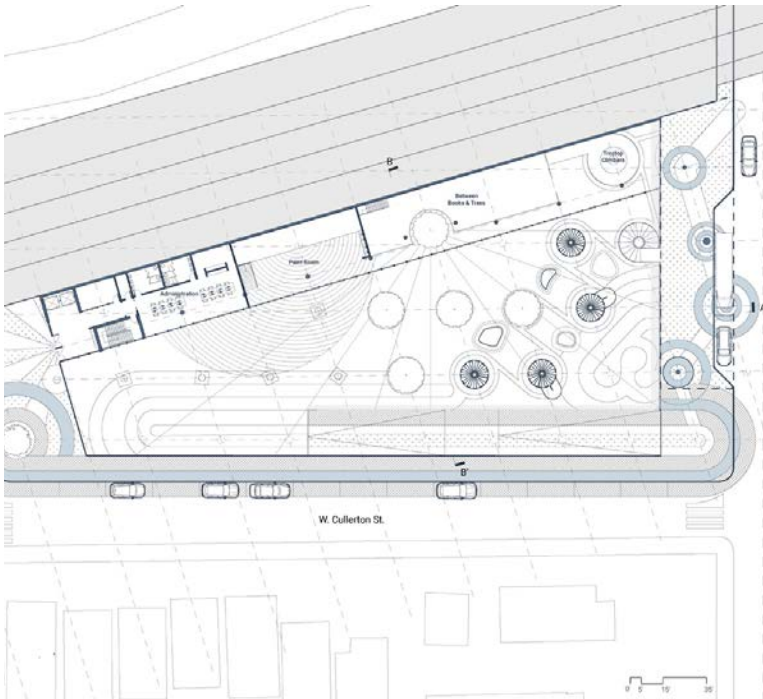
STUDENT PROJECT: Sunken Play



Sunken Play is an interactive, and community-based proposal for the Chicago Children's Museum. The design ethos behind *Sunken Play* is to provide an inviting and non-disruptive intervention catered to both children and the community of Little Village. *Sunken Play* hosts unique interactive spaces in its "sunken" plaza, filled with play-structures, local food vendors, and safe spaces for parents to relax while keeping an eye on their kids. Through the use of vibrant colors, supergraphic landscapes, and a permeable facade, *Sunken Play* re-imagines the museum as a vibrant civic space for the city of Chicago.

Project by Frida Palacios and Jesùs Sanchez.





Part 2

Fabrication and Participatory Design Seminar



This advanced seminar in Fabrication and Participatory Design challenges students to research, design, and oversee the fabrication of a play and climbing structure for children ages 3–8. Starting at the initial phase of conceptual design in January 2022, the student designers collaborated with Building Brown Workshop (BBW), a Chicago-based fabrication shop, to co-create the play structure. Students met frequently with BBW to establish design goals, analyze constructability, optimize budget, discuss fabrication details, and participate in the build. **The built play structure was initially exhibited at Design Museum of Chicago for a public debut that invited families and youth to give it a “test drive” and provide post-occupancy feedback.** After the exhibition, the structure was fine-tuned in response to feedback, re-located, and permanently installed at an elementary school in Chicago’s Humboldt Park neighborhood.

The students hosted participatory workshops with the 4th grade students at the elementary school to co-envision design goals and programmatic opportunities for the play structure in the context of the school day. The resulting design, entitled LIFT, provides an informal sanctuary for small groups of elementary school students to take a break from the hustle and bustle of everyday life, to change their physical vantage points, and to engage physical play to reset their social and emotional energies.



COURSE GOALS

- To explore installation design and fabrication as a mode of contemporary architectural research.
- To explore installation design as a spatial opportunity that prompts interaction, participation, and play for young audiences.
- To practice working collaboratively as part of a multi-person design team.
- To model professional practice workflows required for working with fabricator, including active shop visits.

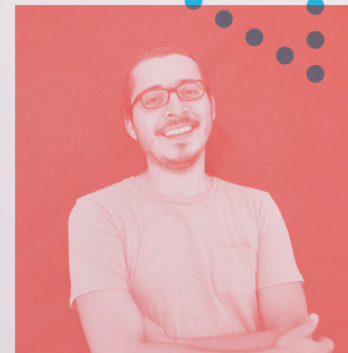
Serious Play Lecture Series



**GERMANE
BARNES**



**JULIA
JAMROZIK**



**ANDRÉS
LEMUS-SPONT**



**SPENCER
LUCKEY**



**PETER
EXLEY**

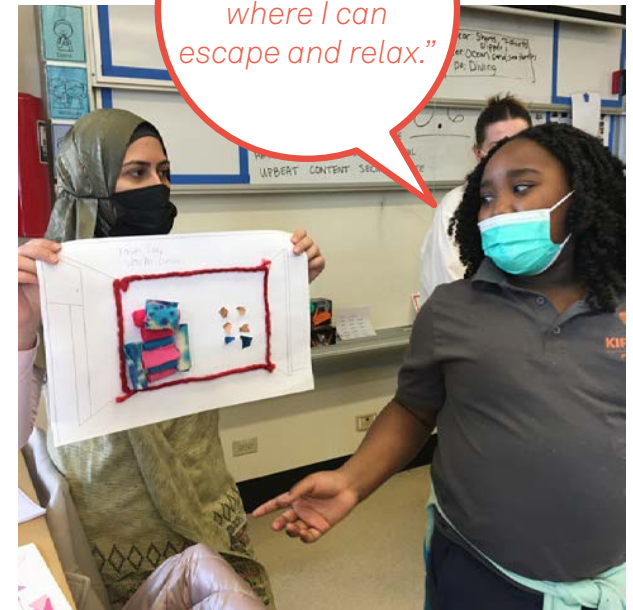
An integral component of the seminar was an internal lecture and discussion series with leading professionals and thinkers in the field of design for children's play structures. The students connected with the guest speakers in-person or via Zoom to engage in intimate conversation, candid Q&A, professional development advice, and design critique round-tables.

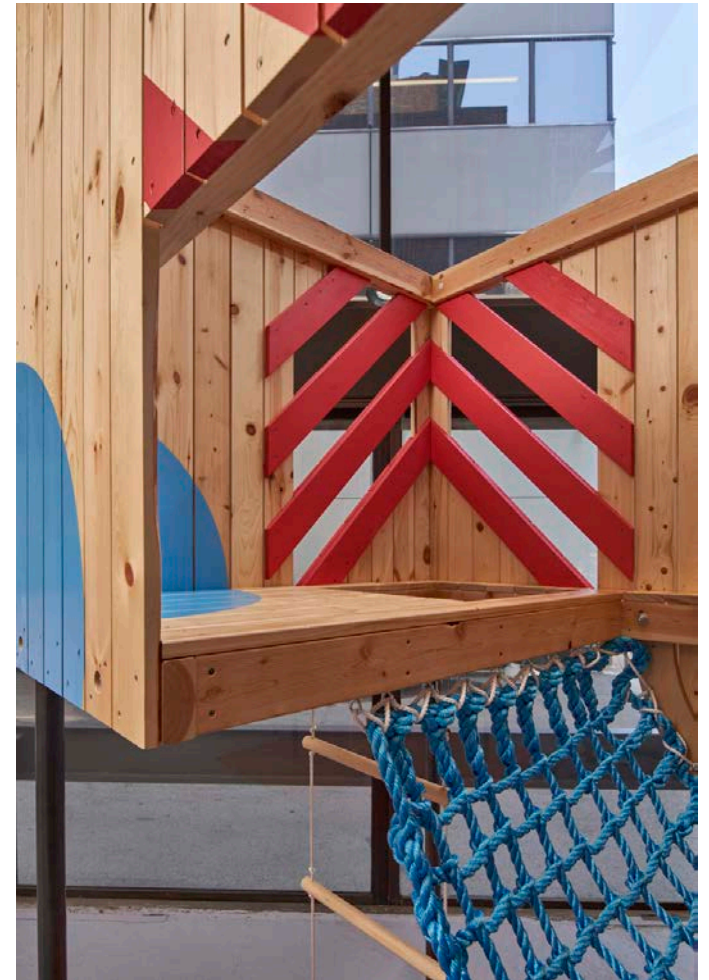
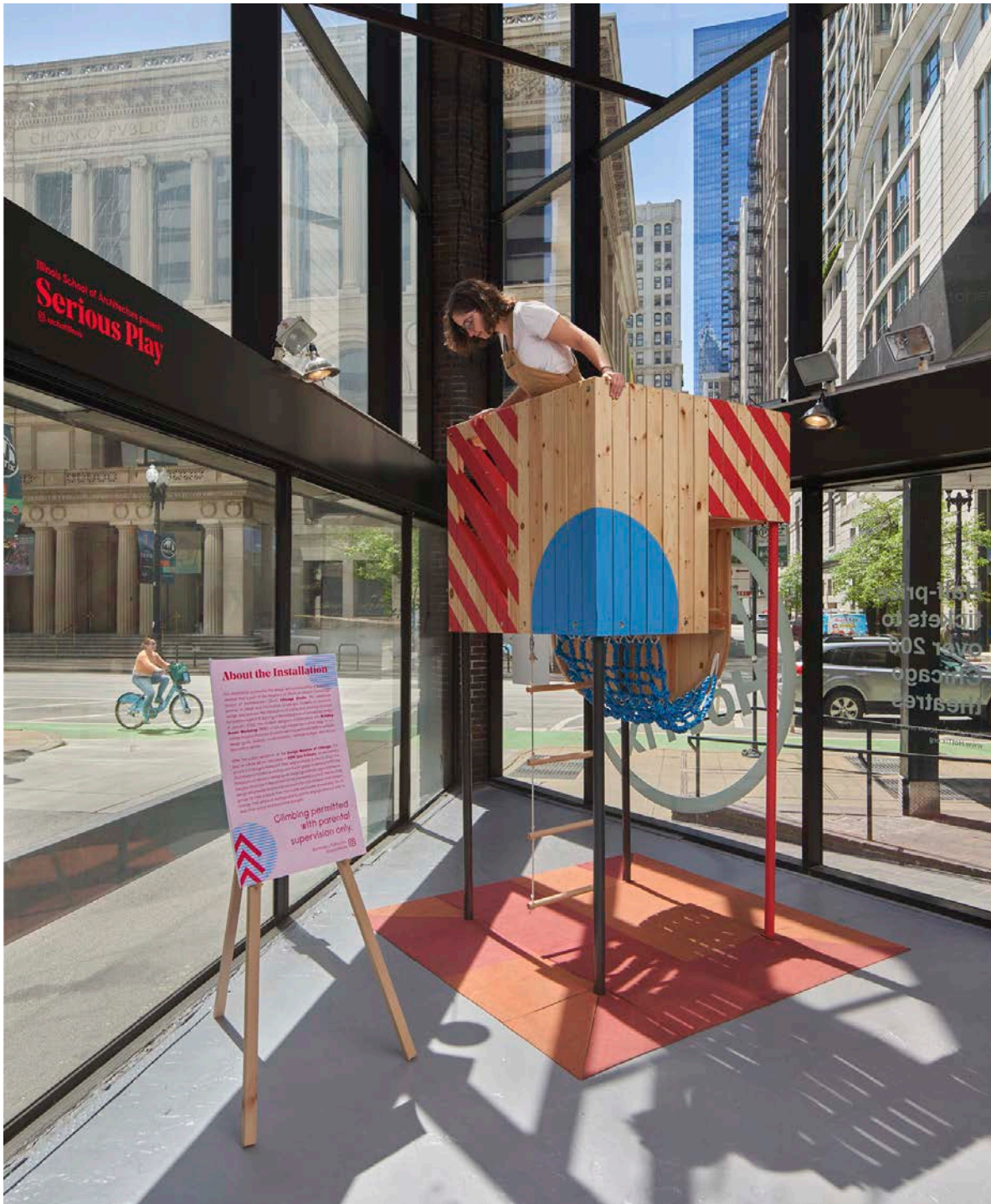
Pictured here: *Serious Play* Lecture Series poster.

Participatory Process

Graduate students Hadiel Mohilldean, Frida Palacios, and Charlotte Elo visited KIPP One Primary, an elementary school in Humboldt Park, to engage with a class of 4th grade students about architecture's role in the world, and to lead a creative workshop to **co-create programmatic objectives**. The workshop empowered the students to articulate their desires, ideas, and affinities through words, shapes, and materials.

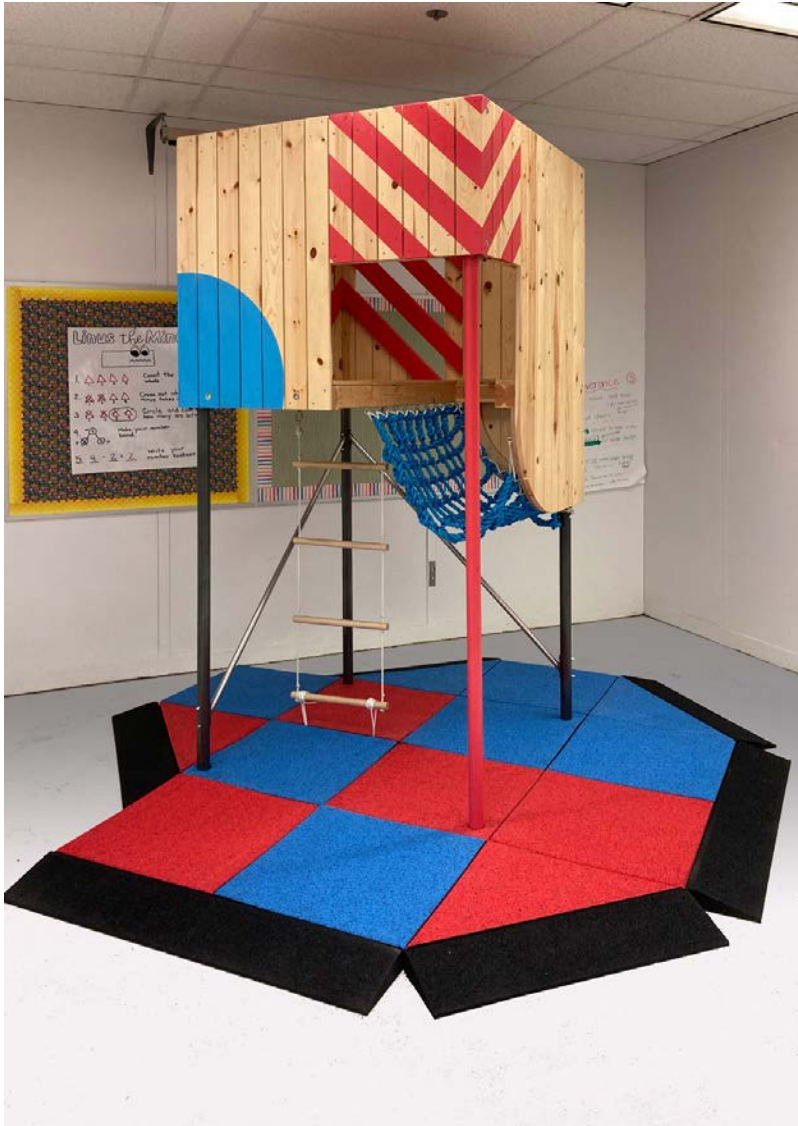
The workshop and discussion with students highlighted that the students were eager to inhabit a play structure in their school that provided a **safe space of rest, relaxation, retreat as much as physical activity or risk**. In turn, the workshop steered the final design toward its more open-ended, tree-house-like qualities. The built installation was installed at KIPP in the summer of 2022, just in time for the new school year to begin.





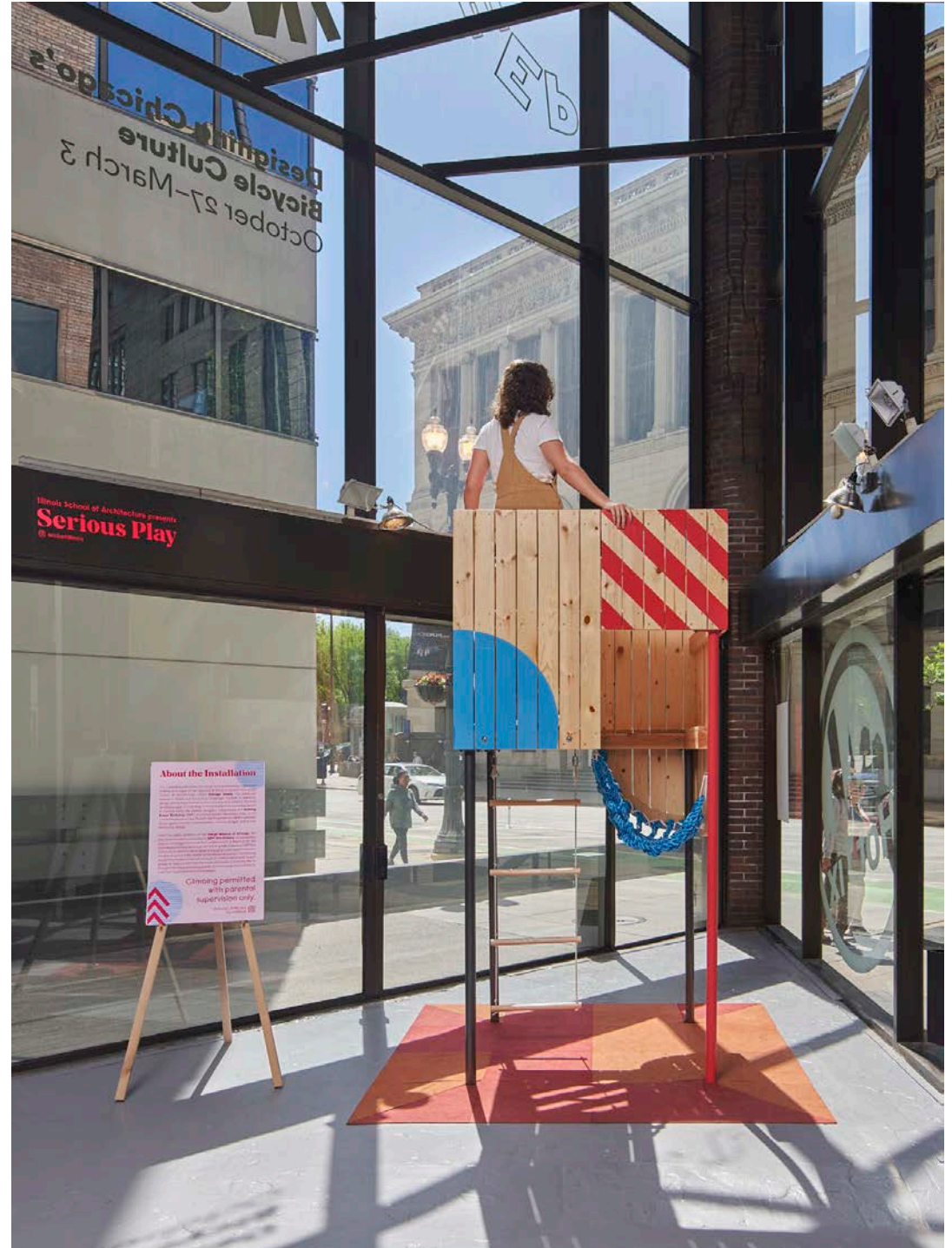
The finished play structure debuted to the public at the **Design Museum of Chicago** in May 2022. With prominent visibility to the street and the Chicago Cultural Center in downtown Chicago, children and families from all over the city were invited to climb, inhabit, engage, and provide feedback during a public exhibition spanning three months.

Photographs by Brian Griffin.



Feedback from Design Museum of Chicago visitors helped inform a final round of **fabrication tweaks and touch-ups** that ensure maximum durability for use in the elementary school. The structure was re-located and re-installed at KIPP One Primary elementary school in September 2022.

Photographs by Brian Griffin.



Student Feedback

The Instructor & Course Evaluation System (ICES) is used across the University of Illinois as the official end-of-semester student ratings system for faculty and teaching assistants. Feedback listed here is anonymous and pasted directly from the ICES results portal.



Part 1 STUDIO:
ARCH 474 / ARCH 573 E3 / LA 438 C / LA 539 C -
Architectural Design & Making

“Joseph is a brilliant instructor whose passion for architecture is clearly reflected in the way he teaches. I appreciate that he recognizes thinking as work and is able to tell intentionality in design decisions quickly. Overall an extremely rewarding course from a great instructor”

“One of the best studios which is offered by the school. It was one of the few studios which focused on innovation and it was happening in 2022 in contrast to the repetitive old school studios which are offered each semester.”

“Prof. Altshuler was extremely involved and brought a good energy and level of excitement to this course. Every unit and assignment in the course had a very helpful presentation and lesson to help guide us in the production of the assignment, and his guidance throughout the process was very helpful.”

“Prof Altschuler is so far one of the good studio instructors, I happened to work within my architectural education including undergraduate and graduate. He is very clear about what to teach us for this course. for ex: He showed us precedents before any assignment, which made us think before finishing the assignment.”

“Explanation of assignments were always detailed and organized. Desk crits were very helpful and allowed me to thinking deeper about design.”

Part 2 SEMINAR:
ARCH 593 - Special Prob in Detail and Fabrication

“Joseph’s experience in design and fabrication is very helpful throughout our design process. I appreciated his candid and input”

“This course was one of the first electives I took on the detail and fabrication concentration and it was really good. He brought a lot of speakers who are doing well in their careers following this path, which gave us an insight into the professional aspect too. We happened to design and build a structure that will be exhibited in the design museum, and prof made sure we are a part of that curational experience too.”

“Instructor is awesome, he has a unique perspective on architecture which I haven’t really been exposed to before.”

