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School of Architecture

ACSA 2025 Architectural Education Awards
Diversity Achievement

EXPANDING UNDERSTANDING FRAMEWORK

An action-based framework to expand understanding through design

From the perspective of a minority, first-generation immigrant operating as a guest in an underrepresented context working in between teaching, practice, research, and leadership.

The framework presents fourteen actions for thinking/making architecture that strive to increase the diversity of participants, perspectives, processes, and outputs in architectural education and practice.

Each action, supported by a premise, offers a set of driving questions and is exemplified by a tangible design effort, further described through notes and figures that include images, drawings, diagrams, documents, testimonials, and frameworks.

	ACTION	PREMISE	QUESTIONS
1	Acknowledge Your Positionality	Identity and context play an important role in shaping our understanding of the world, offering an array of perspectives and insights.	<i>Who are we? Where are we from? What are our motives, biases, or preconceptions? How have our privileges shaped our paths? What is our positionality?</i>
2	Recognize Lineages	Projects and ideas have lineage. Lineages can help us understand the root or essence of an idea or the reasons for taking on a project or following certain practices.	<i>Where do our ideas come from? How have individual and collective histories or contexts shaped our designs? What ties us to a specific topic or project?</i>
3	Undertake Groundwork	Design is not a one-size-fits-all endeavor. Context and communities matter, and building relationships rooted in trust requires time and effort.	<i>How do we mediate between local and global forces? How do we operate responsibly in other contexts? How might we begin to normalize not knowing?</i>
4	Open Calls & Platforms	Academics are afforded a voice often uplifted by the infrastructures of their institutions. From our platforms, we have leverage to spotlight others or highlight voices that may otherwise not be heard.	<i>How might we leverage our privileges to increase opportunities for others? How do we elevate works agnostic of name, gender, nationality, inherited prestige, or academic/architectural lineage?</i>
5	Challenge Typologies	Design offers opportunities to translate the urgencies of our communities into tangible space. Topics addressing social equity empower students to voice their perspectives through design.	<i>What other kinds of spaces are needed in our communities? What categories are becoming obsolete or wrongly disappearing? How might we re-imagine typologies for a more equitable society?</i>
6	Make Other Spaces	We need more architecture but don't necessarily need more buildings. Other forms of spatialization may provide more inclusive environments where all feel welcome.	<i>How might we design in different formats to engage new audiences? How might we adjust resolutions or fidelities to create more categories of space?</i>
7	Share Authorship	Design presents unique opportunities to democratize authorship and foster more inclusive creative landscapes.	<i>How might we re-frame the ethics of authorship? How do we avoid extractive practices? How might public institutions serve as testing grounds for new modes of inclusive practice?</i>
8	Involve Users	Architecture is for people. User research can help ensure the voices of potential inhabitants are valued and spaces are designed to best meet their needs.	<i>How might we be more inclusive when we create spaces? How might diverse audiences participate in the design process? What are the opportunities for others to inform our work?</i>
9	Ignite Dialogue	The challenges we are encountering as architects are rapidly evolving. Design tools can help mediate between organizations that provide support and communities in need during natural or human-caused disasters.	<i>What are the necessary considerations to rebuild a place? Who should be involved? How might design tools help build trust?</i>
10	Create Tools & Frameworks	Artifacts that simplify and structure the complexities and language of design can help expand the populations participating in the design process.	<i>How might we empower future inhabitants to voice their needs? How might we develop tools to help include all agents in the design of our built environments?</i>
11	Design Language	Teaching design fundamentals is an early opportunity to celebrate diversity. A balance between prescriptive and open processes gives students the creative freedom to explore their identities with new languages.	<i>What are the fundamental tools, skills, and vocabularies needed to address unknown future challenges? How do we balance rigor and freedom in architectural education?</i>
12	Point Beyond	Architecture is a visual language. It can narrate place and time. It can embody culture, values, and meaning.	<i>How do we teach design through drawing? How do you write with images? What can we learn from our communities and ourselves through image-making?</i>
13	Learn Local	Travel is an essential tool for architects to learn about other cultures. Short immersions provide opportunities to gain knowledge and give back to the communities we visit.	<i>How might visitors participate in taking care of a place? What are the appropriate protocols for approaching design abroad? What are the models for tourism that benefit all?</i>
14	Seek Common Grounds	Academic and cultural exchanges can help bridge cultures and geographies using design as a common language.	<i>How might immersing students in each other's contexts create empathy? How might we cultivate peace through design?</i>

Individual Experiences

Creative Collaborations Including Students, Experts, and Community

Pedagogical Projects

PAIRED EFFORTS

MULTIPLE BEGINNINGS (2020+)
Selected images and drawings created to explain the complexities of who I am to others.

STRAWN SIERRALTA TIMELINE (2003+)
Selected events, people, and places that have influenced our ways of thinking and doing.

FOREIGN UPON ARRIVAL (2016+)
Selected studies and efforts undertaken to understand the complexities of the Hawaiian context.

BUILDING VOICES & DESIGN ISLANDS (2017) A design competition and exhibition system with a unique identity that proposed an inclusive framework and served as a platform to showcase the work of others.

PLURAL TERRITORIES (2018) re-examined the role of the architectural pavilion in contemporary discourse and proposed a series of spatial devices that challenged the proliferation of privately owned public spaces.

LAWN LOUNGERS (2019) is a mobile neighborhood platform for community engagement inspired by the ubiquitous folding lawn/beach chair.

BEYOND WAYFINDING (2018+) is a bi-lingual signage and wayfinding system that celebrates the layered environmental, social, cultural, academic, and historical contexts of the UH Mānoa campus co-designed with SigZane Designs.

'ŌLELO HAWAII' CAMPUS (2020-23) proposes a series of spaces that support the normalization and revitalization of the Hawaiian language. Co-developed with six Native Hawaiian organizations and an ethnographic expert.

SPACES FOR PLACES (2024) is a toolkit to engage the community in place care-taking on sensitive sites. This collection includes sorting cards, miniature sets, and full-scale wireframes that help visualize schemes on the site.

HOLISTIC HOUSING DESIGN TOOLKIT (2023) is a collection of tools and resources for more walkable, sustainable, and equitable communities in Hawai'i and beyond.

SINGLE SERIAL (2016+) is a beginning-design pedagogy centered on systems thinking that leverages the universal language of geometry to empower students to develop their own design identities.

DRAW STORY (2016+) is a graduate-level pedagogy investigating scales and levels of human-spatial interaction, depicting everyday life, exploring identities of self and place, and testing boundaries from object to subject.

NANOTOURISM (2018) with Aljosa Dekleva and Jacob Travnik is an immersion AA Visiting School program focused on local material and social resources to create hyper-site-specific projects on a 1:1 scale.

DESIGN EXCHANGE: PEACE MEMORIAL (2017+) is an undergraduate academic and cultural exchange program with the Nagaoka Institute of Design in Japan.

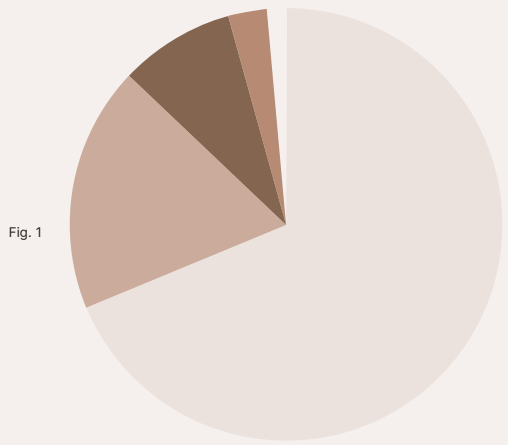


Fig. 1

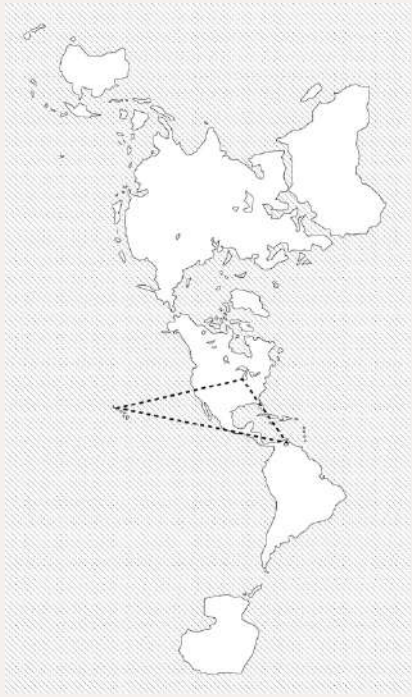
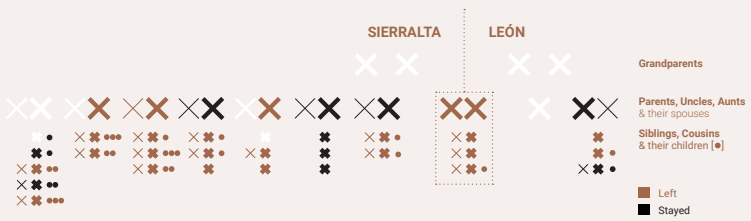


Fig. 3



TITLES/ROLES

- Student
- ESL Instructor
- Architect (1999)
- Teaching Fellow (2001)
- Graduate Student
- Fulbright Grantee
- Co-Founder Strawn Sierralta
- Architectural Designer
- NCARB Intern (2003)
- Adjunct Assistant Professor
- Co-President Arch Club
- Studio Associate Professor
- Advisor
- Curator
- Assistant Prof. T. Track (2016)
- Principal Investigator
- Student
- US Architect, AIA (2019)
- AIA Board of Directors
- Associate Professor (2021)
- Director UG Studies (2021+)
- Mentor

IDENTITIES

- Sierralta León
- Mixed/Brown
- Maracuchan
- Venezuelan
- Caribbean
- Latin American
- Exchange Visitor (2001)
- Sierralta
- Strawn Sierralta (2003)
- Alien of Extraordinary Ability
- Returning Expat (2007)
- Permanent Resident (2009)
- Diaspora
- Advocate
- US Citizen (2013)
- Sierralta León
- Immigrant
- Latinx
- Foreign
- Minority
- Settler/Other (2016)
- Ally

FIRST HAND EXPERIENCES

- Colonization
- Extractive Practices
- Issues of Race
- Indigeneity
- Border Violence
- Tropical Ecology
- Climate Change
- Ecological Devastation
- Global Conflict
- Oppression
- Societal Collapse
- Economic Collapse
- Migration
- Loss
- Misinterpretation
- Remoteness
- Island Conditions
- Occupied State
- Otherness

Fig. 4



Fig. 5

MULTIPLE BEGINNINGS (2020+)
Selected images and drawings created to explain the complexities of who I am to others.

Spanish is my native language. I grew up on the Caribbean coast, in a city renowned for its oil industry, surrounded by international visitors and members of families that were displaced by twentieth century geopolitical conflicts. My grandfather, an immigrant from Puerto Rico, influenced my bilingual upbringing. These experiences shaped my love for languages and my appreciation for diversity.

Like many Venezuelans, my ancestry is mixed—69% European, 18% Indigenous American, 8.5% African, and 3% West Asian. I don't identify with a singular race but instead embrace multiple cultures.

Venezuelan Diaspora Family Map: I was the first in my family to emigrate in 2001. Today, most of my immediate relatives live abroad as ex-pats or refugees.

The Multiple Beginnings map based on Buckminster Fuller's Projection Map (1940-54) illustrates a triangle of homes on "one island with a shared ocean."

List of evolving titles, identities, and first-hand experiences.

Since 2003, I have worked with my partner (and husband) Brian Strawn as Strawn Sierralta. Brian grew up on his family's working farm in mid-central Illinois, established in the 1830s. Our combined backgrounds influence our work.



Fig. 2

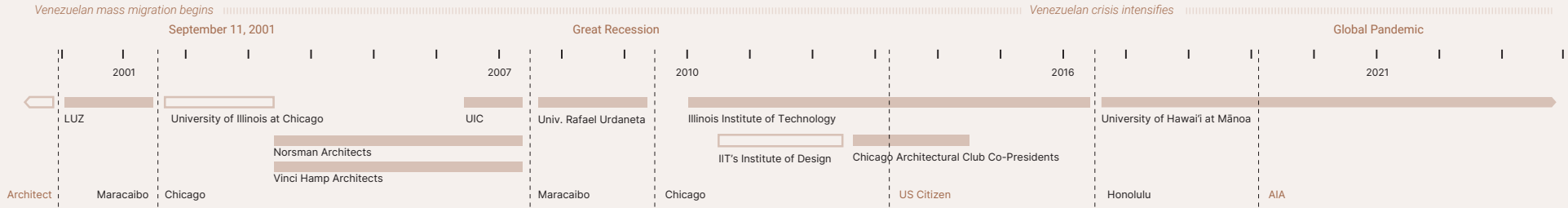
1 Acknowledge Your Positionality

Identity and context play an important role in shaping our understanding of the world, offering an array of perspectives and insights.

Who are we? Where are we from? What are our motives, biases, or preconceptions? How have our privileges shaped our paths? What is our positionality?

STRAWN SIERRALTA TIMELINE (2003+)

Selected events, people, and places that have influenced our ways of thinking and doing.

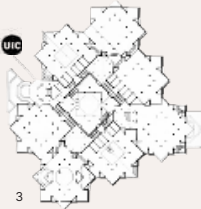


1



2

COLLEGE OF ARCHITECTURE DESIGN AND THE ARTS



3



4



5



6

IIT Institute of Design



8



7



9



10



11



12



13

1. La Universidad del Zulia (LUZ), a public university in northwestern Venezuela, shares its name with an Indigenous principal leader and a river that crosses the border between Colombia and Venezuela. This is my alma mater, where my first architectural learning experiences were deeply influenced by a collective of faculty experts (MGL+P) passionate about urban design/conceptual frameworks (Mustieles), ecology (LaRoche), the history of place (González), and art (Peñaranda).

My first job while attending college was at Cevaz (a language educational institution associated with the US consulate). I served as an English as a second language instructor for four years.

2. In 2001, after becoming a teaching fellow at LUZ, I was chosen as one of twelve individuals to participate in the Fulbright/Laspau program. This academic

and cultural exchange, sponsored by the US and affiliated with Harvard, supported underrepresented young academics from Latin America and the Caribbean in pursuing higher education. I arrived in Chicago in July (just before 9/11) to complete a master's degree at the University of Illinois Chicago (UIC), where I met my partner, Brian Strawn.

3. A geometry-driven building by SOM's Walter Netsch and a stellar group of faculty practicing in the city (Garofalo, Goldberg, Vendrell, Wheeler) guided us through our architectural apprenticeship in a town steeped in architectural legacy.

4. Our first project together (just weeks after graduation) was a proposal for the 9/11 Memorial that was selected as 1 of 8 finalists amongst 5,201 entries. This turned out to be the largest architecture competition ever held.

5. For 15 years, Chicago was our urban laboratory. Our live/work space in Bertrand Goldberg's iconic Marina City was our home base. We practiced developing ideas and translations through anonymous competitions centered on social, political, and environmental issues.

6. Our first built project was a ski-in/ski-out home in Squaw Valley, designed at the emergence of the sharing economy. Ski On Home was widely featured in the media.

7. As an exchange visitor, I was obliged to return to my home country to give back and share what I had learned. This meant re-entering a collapsing society. We lived, taught, and practiced in Venezuela from 2007 to 2009.

8. Amidst the Great Recession, we returned to Chicago, where we experienced first-hand the challenges and vulnerabilities of

a narrowing discipline. We embarked on a journey to expand our definition of design. Brian earned a second master's degree from IIT's Institute of Design, known as the New Bauhaus, with a focus on design strategy and user research.

9. During the same time, I joined the faculty at the College of Architecture at the Illinois Institute of Technology (IIT), where I taught across the graduate and undergraduate curriculum for seven years and served as a curator under Wiel Aret's "Nowness" project, which reimagined Mies curriculum through "Rethinking Metropolis" from elements to institutions.

10. From 2012-14, we served as co-presidents of the Chicago Architectural Club (CAC), founded in 1885.

This platform allowed us to design and curate competitions, lectures, and other

calls to action in collaboration with multiple civic and nonprofit organizations.

11. "Come to the Table," a project developed in partnership with the Art Institute for the CAC on the occasion of the inaugural Chicago Architectural Biennial, proposed flattening hierarchies by transforming Stanley Tigerman's "Titanic" icon into a space for dialogue.

12. In 2016, an invitation to join the University of Hawai'i at Mānoa (a Carnegie R1 research university and a land-, sea-, space-, and sun-grant institution) changed more than our geographic location when we moved from the middle of America to the middle of the Pacific Ocean. Our suddenly foreign condition embedded in an indigenous host culture challenged us to reimagine our positionality.

Surrounded by water, space is perceived differently. Orientation is relational. Topographic formations and wind patterns take precedence over Cardinal directions. The "post" colonial condition colors everything.

13. As part of the start-up team of the University of Hawai'i Community Design Center, we operated as independent Principal Investigators on public-interest design projects for state agencies and nonprofits serving the citizens of Hawai'i.

In search of impact at larger scales, we have most recently taken separate but related leadership positions on campus.

Our projects are ongoing.

2 Recognize Lineages

Projects and ideas have lineage. Lineages can help us understand the root or essence of an idea or the reasons for taking on a project or following certain practices.

Where do our ideas come from? How have individual and collective histories or contexts shaped our designs? What ties us to a specific topic or project?

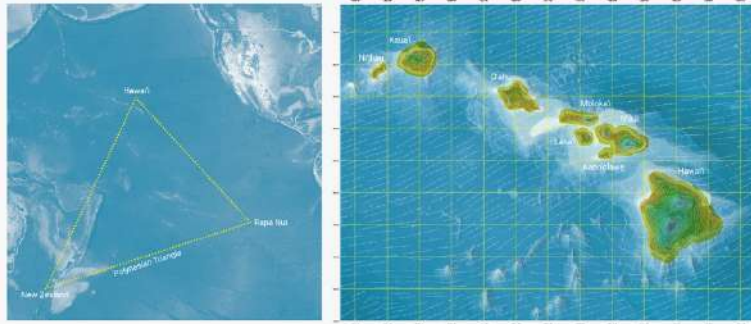


Fig. 1

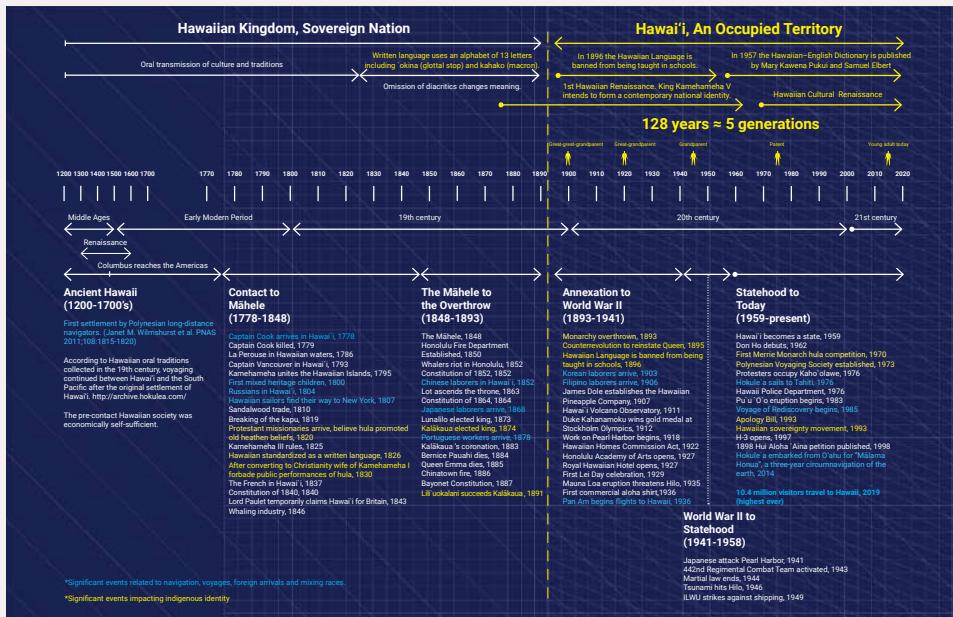
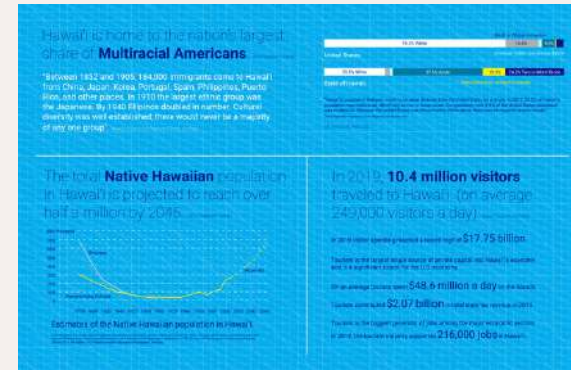


Fig. 2



* In 2024 there were 1% Hispanic architects registered in AIA Honolulu.

Fig. 3

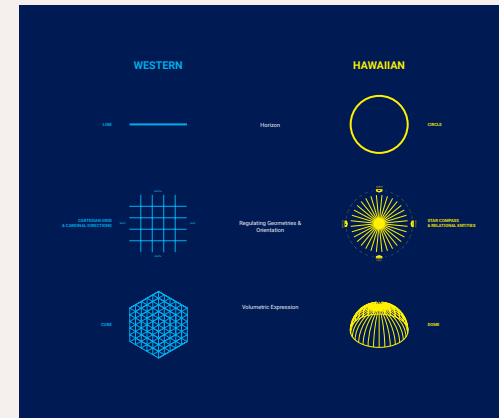


Fig. 4

We acknowledge Hawai'i as an indigenous space whose original people are today identified as Native Hawaiians or Kānaka 'Ōiwi.

Fig. 5



Fig. 6

FOREIGN UPON ARRIVAL (2016+)
Selected studies and efforts undertaken to understand the complexities of the Hawaiian context.

Fig. 1

Study of island conditions. Map of Hawai'i viewed through the Mercator projection vs. Hawai'i located through voyager triangulation.

Fig. 2

Timeline of an occupied state. The recent and illegal overthrow of the Hawaiian Monarchy sets the stage for tensions between the host, settler, and visitor cultures.

Fig. 3

Even though Hawai'i has a diverse population, Asian/Pacific Islanders are the largest ethnic group, with 45.5%, followed by Caucasian at 21.3% (2022).

Fig. 4

In the Pacific region, there are different mental models for understanding space. The concept of latitude and longitude is a cultural production rooted in mathematics and developed in parallel fits and starts across millennia, guiding voyagers, increasing global trade, and enriching empires. Our accretive understanding of navigation was propelled by a mindset focused on expanding powers and accumulating wealth, often summarized as a "colonial" positionality. In the Pacific region, Polynesian navigators understood space differently, developing multiple approaches to voyaging in the open ocean. The modern Star Compass, developed by Nainoa Thompson, translates traditional knowledge into a visual tool bound by the circle of the horizon.

Fig. 5

In Hawai'i, any space where we operate is an indigenous space whose original people are today identified as Native Hawaiians or Kānaka 'Ōiwi. This acknowledgment and understanding invites us to operate with a beginner's mindset.

Fig. 6

Since 2016, I have attended a Hālaulu weekly. Hālaulu are places dedicated to the perpetuation of the Hawaiian culture.

3 Undertake Groundwork

Design is not a one-size-fits-all endeavor. Context and communities matter, and building relationships rooted in trust requires time and effort.

*How do we mediate between local and global forces?
How do we operate responsibly in other contexts?
How might we begin to normalize not knowing?*



Fig. 1

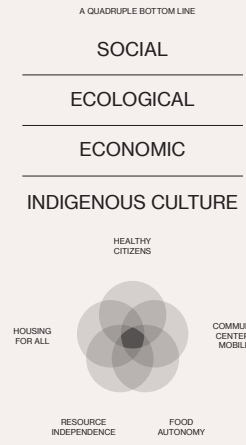


Fig. 2



Fig. 3



Fig. 4

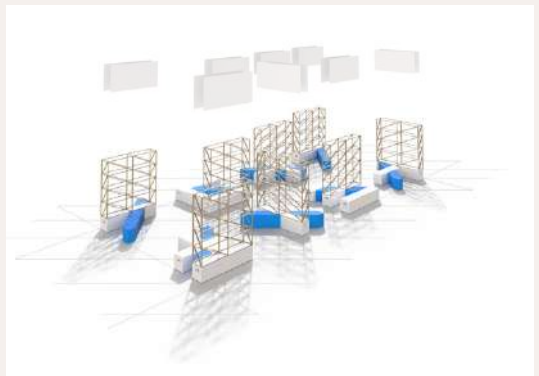


Fig. 5



Fig. 7



Fig. 6

BUILDING VOICES & DESIGN ISLANDS (2017)
Role: Competition & Exhibition Co-Chair

The Building Voices Design Competition proposed an inclusive framework and sought to collect diverse ideas for solving the most critical issues of the Hawaiian Archipelago. The Design Islands exhibition system was a dual installation that attempted to embody our emerging understanding of the Hawaiian context while serving as a platform to showcase the work of others.

- Fig.1 Design Islands displays select competition entries at the Hawai'i State Capitol during Earth Day for the inaugural Building Voices.
- Fig.2 Competition design brief based on a framework for a quadruple bottom line centered on including Indigenous culture and five critical issues.
- Fig.3 Competition jurors. A local team, including Kuha'o Zane, Healoha Johnston, Andrew Tang, and Joe Ferraro, collaborated with a global team of experts.
- Fig.4 Client from Maui viewing their award-winning project on display. "The design is developed around the understanding that the home is not only our private interior space but all the land, no matter where you live."
- Fig.5 Design Islands platform components.
- Fig.6 The exhibition system's multiple cultural readings resulted in an invitation to welcome the Hōkūle'a after circumnavigating the globe at the Polynesian Voyaging Society Benefit Gala held at the Honolulu Convention Center in June 2017.
- Fig.7 This project was made possible by the UHM SoA and the Haigo and Irene Shen Gallery. These efforts helped inform the inaugural agenda of the SoA's UH Community Design Center.

* Contributors included 30 paid student assistants participating in fabrication, installation, and deployment activities.

4 Open Calls & Platforms

Academics are afforded a voice often uplifted by the infrastructures of their institutions. From our platforms, we have leverage to spotlight others or highlight voices that may otherwise not be heard.

How might we leverage our privileges to increase opportunities for others? How might we elevate works agnostic of name, gender, nationality, inherited prestige, or academic/architectural lineage?

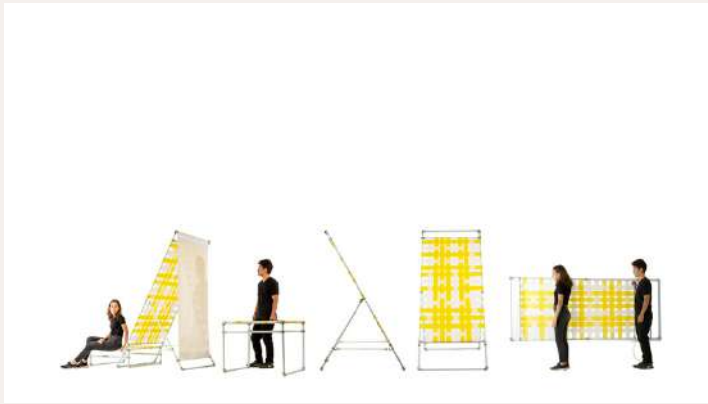


Fig. 1



Fig. 3



Fig. 6



Fig. 2



Fig. 4



Fig. 5

LAWN LOUNGERS (2019)
Role: Co-Principal Investigator

Inspired by the ubiquitous folding lawn/beach chair, Lawn Loungers operate as a mobile neighborhood platform for community engagement.

- Fig.1 A set of eight foldable "loungers," tables, and chairs were fabricated in the SoA FabLab using readily available materials and lawn chair webbing made in the USA.
 - Fig.2 The construct was developed as a prototype for community engagement for the "Future of Hawai'i's Housing" research project conducted for the Hawai'i Public Housing Authority.
 - Fig.3 First deployed in 2019 during Parking Day in the Kaka'ako neighborhood of Honolulu, it elicited public input on the values of more walkable, sustainable, and equitable communities on Oahu.
 - Fig.4 Lawn Loungers draws from Plural Territories.
 - Fig.5 During the global pandemic, our team tested other potential deployments on campus.
 - Fig.6 In 2023, Lawn Loungers was deployed to support an exhibit on visualizing density.
- *11 paid student assistants contributed to the development and fabrication of Lawn Loungers.

6 Make Other Spaces

We need more architecture but don't necessarily need more buildings. Other forms of spatialization may provide more inclusive environments where all feel welcome.

How might we design in other formats to engage new audiences? How might adjust resolutions or fidelities to create other categories of spaces?

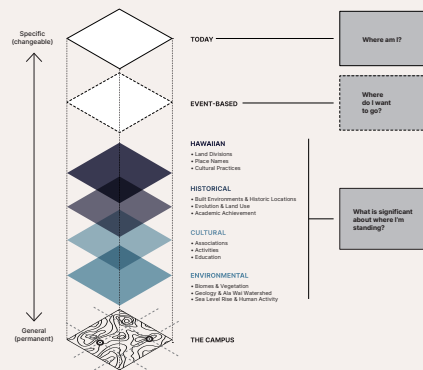


Fig. 1



Fig. 2

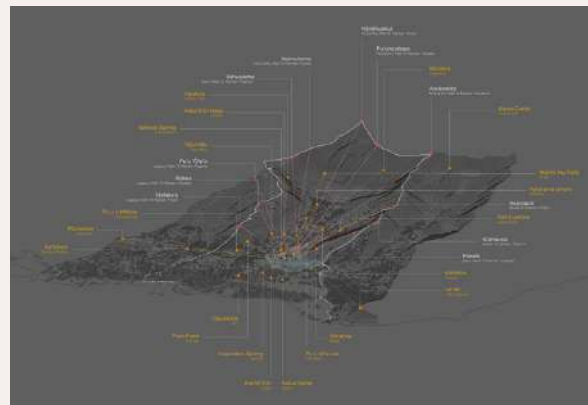


Fig. 3

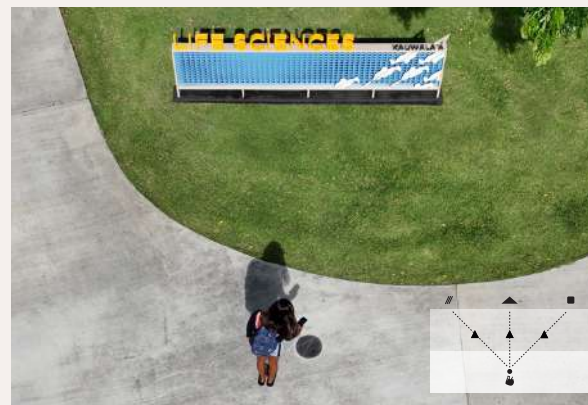


Fig. 4



Fig. 5



Fig. 6



Fig. 7

BEYOND WAYFINDING (2018+)
Co-designed with SigZane Designs.
Role: Co-Principal Investigator

Beyond Wayfinding is a bi-lingual signage and wayfinding system that celebrates the layered environmental, social, cultural, academic, and historical contexts of the UH Mānoa campus. This interactive network was co-designed with Native Hawaiian artists and practitioners to invite guests to learn indigenous navigation techniques and corporal alignment practices.

- Fig.1 Layered Places Framework
- Fig.2 First installed sign at Life Sciences Fall 2022.
- Fig.3 Significant locations from an Indigenous perspective surrounding Mānoa Valley.
- Fig.4 Body alignment practice diagram.
- Fig.5 Alignment medallion. uhmanoawayfinding.org
- Fig.6 Kuha'o Zane explains concepts for UH News.
- Fig.7 Team of architecture students with second sign installed at Bilger Hall.

* This project was made possible by the Office of the Vice President of Administration. All contributors were paid, including 28 student assistants for 3640 hours.

7 Share Authorship

Authorship in design is often linked to privilege and power. However, it also carries with it a sense of responsibility and accountability. Design presents unique opportunities to democratize authorship and foster more inclusive creative landscapes.

*How might we re-frame the ethics of authorship?
How do we avoid extractive practices?
How might public institutions serve as testing grounds for new modes of practice?*

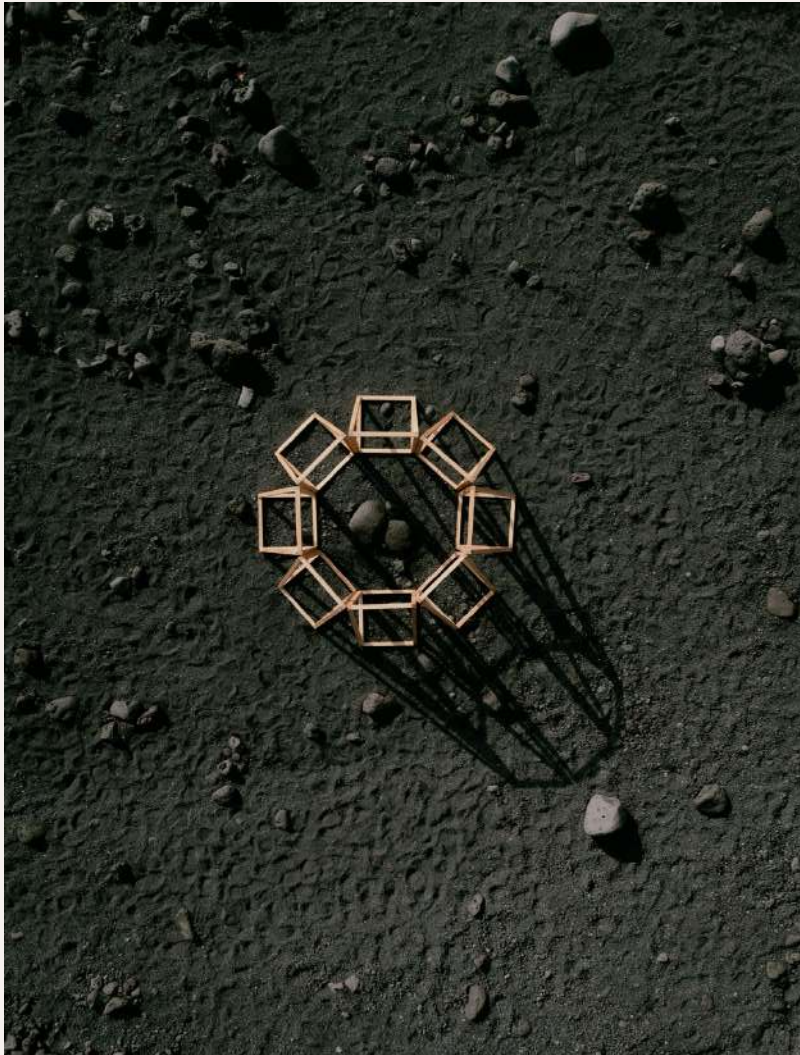


Fig. 1

FRAMEWORK #1	
1 Access	A means of approaching or entering a place.
2 Boundaries	Physical or geographical "lines" that may define this place from another.
3 Place	The community's relationship with geographical boundaries.
4 Event	Climatic, social, cultural, historic, or human-caused events that have, might, or will occur in this place.
5 People	The communities, organizations, or individuals who are related to this place.
6 Stories	The motifs (h)istories that are passed down and shared within the community.
7 Memories	Reflecting community values related to the preparation for, ongoing response to, or the aftermath of an event.
8 Plans	Upcoming plans for healing or preparing this place.



Fig. 2



Fig. 6



Fig. 3



18
SPOT Curved, Vertical
 An arrangement that encourages circulation around the presented information. Viewers can move clockwise or counterclockwise.



Fig. 4



Fig. 5

SPACES FOR PLACES (2024)
 Role: Lead Designer & Project Director

Spaces for Places is a toolkit to engage the community in place care-taking on sensitive sites. This collection includes sorting cards to guide discussions about content, miniature sets to inform spatial configurations and eight full-scale wireframes that help visualize schemes on the site.

This project was developed in collaboration with Hawai'i County and was based on two sites affected by the 2018 volcanic eruption of Kilauea. The toolkit will be available for community use through the county's resilience hub resource library.

- Fig.1 "Spatial Sketches" are created with eight "Field Frames."
 - Fig.2 A framework with eight categories guides conversations.
 - Fig.3 The toolkit is divided into "At the Table" and "In the field" components.
 - Fig.4 Thirty-nine configurations provide different perceptions and opportunities for hyper-specific interpretations.
 - Fig.5 Mock-ups at Pohoiki, where a segment of new land replaced a public beach, a boat ramp, and swimming holes.
 - Fig.6 A public activation served to gather initial feedback.
- * This project was made possible by a National Endowment for the Arts grant. Eight students worked as paid project assistants for 645 hours.

9 Ignite Dialogue

The challenges we are encountering as architects are rapidly evolving. Design tools can help mediate between organizations that provide support and communities in need during, after, and in anticipation of natural or man-made disasters.

What are the necessary considerations to rebuild a place? Who should be involved? How might design tools help build trust?



Fig. 1



Fig. 2

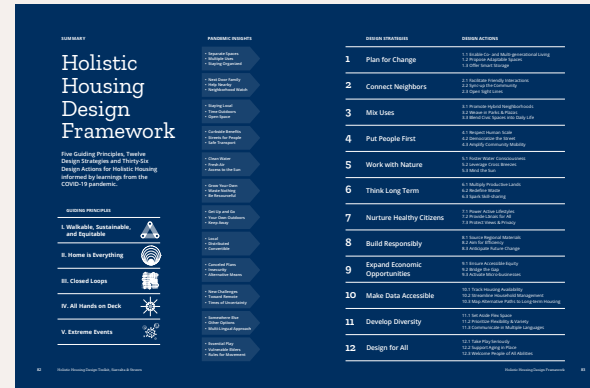


Fig. 3



Fig. 5

HOLISTIC HOUSING DESIGN TOOLKIT (2019-23)

Role: Co-PI, Co-author, Lead Editor

The Holistic Housing Design Toolkit is a collection of tools and resources for more walkable, sustainable, and equitable communities. The toolkit is free and available through the Hawai'i Housing Lab, a platform created to document efforts toward housing for all in Hawai'i.

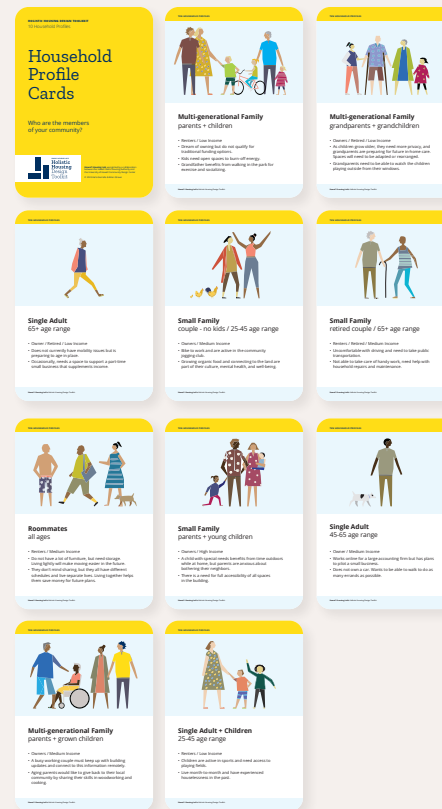


Fig. 4

Fig.1

Fig.2

Fig.3

Fig.4

Fig.5

Components include three manuals and a series of sorting cards organized by color. Blues are centered on values and qualitative attributes. Greens are focused on density or quantitative data, and instructions are identified in yellow.

The concept for the box set was inspired by American cartoonist Chris Ware's Building Stories graphic novel, which comprises fourteen works in different formats that can be read in no particular order. Likewise, this toolkit is not intended to be explored simultaneously but mixed and matched by various agents.

The Holistic Housing Design Framework presents five principles, twelve strategies, and thirty-six design actions for holistic housing.

In 2024, a new set of cards was developed based on custom artwork that illustrates Hawai'i's diverse population. These were used as empathy cards during a workshop for the national AIA Conference held in Washington, DC.

This toolkit emerged from a bottom-up exploratory research project conducted for the Hawai'i Public Housing Authority (HPHA). Collaborating with an ethnographic researcher, we conducted thirty in-home interviews with families living in public housing on five islands across fifteen properties.

* Five project staff and eleven paid student assistants participated in the research that led to this effort.

10 Create Tools & Frameworks

Artifacts that simplify and structure the complexities and language of design can help expand the populations participating in the design process.

How might we empower future inhabitants to voice their needs? How might we develop tools to help include all agents in the design of our built environments?



Fig. 1

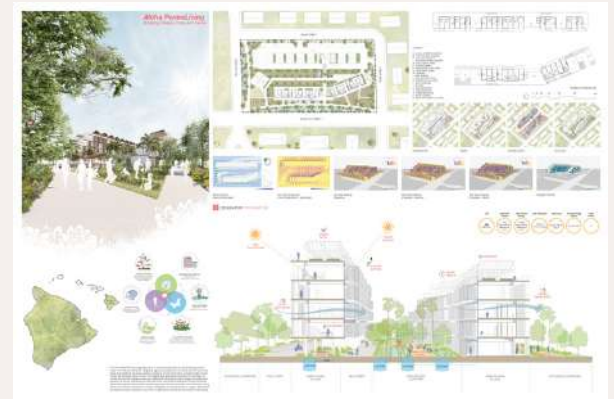
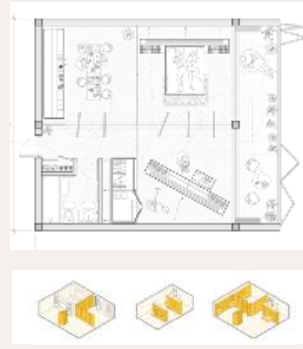


Fig. 2

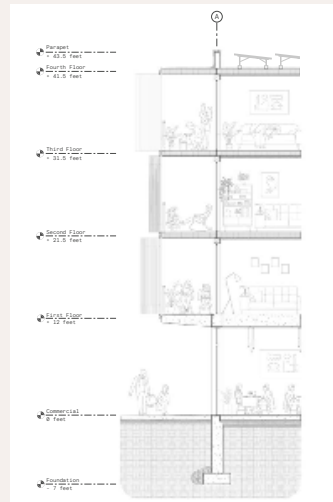
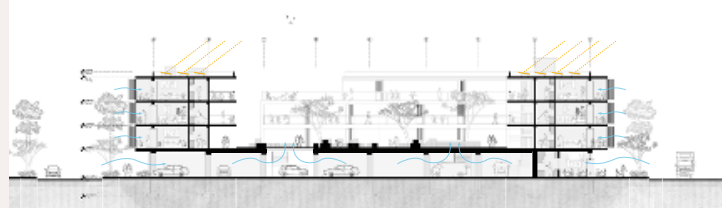


Fig. 5



Fig. 3

Fig. 4



Fig. 6



Fig. 7

The Holistic Housing Design Toolkit is intended for all audiences. It has been tested and refined with architecture students, high school students, community members, and professionals in the industry. This page showcases examples of resulting work using the toolkit.

1. The first undergraduate design studio (Arch 342) to test components of the toolkit developed high-density proposals for Kalihi, a working-class neighborhood composed primarily of minorities. Pictured is one of the students presenting an increased density proposal for an existing public housing property to the Executive Director of HPHA in the Spring of 2019.

2. A different iteration of Arch 342 (Spring 2022) centered on proposals for another property managed by HPHA in Hilo on Hawai'i Island. Students negotiated how their individual ideas may affect their neighbors.

3. In the Spring of 2021, students in Arch 342 developed games based on the Holistic Housing Design Toolkit components. This module was part of the "Just Play" course sequence, awarded the "2021 Course Development Prize in Architecture, Climate Change, and Society" by Columbia University's Temple Hoyne Buell Center for the Study of American Architecture and the ACSA. Students abstracted architectural components and explored architectural artifacts as devices for engagement, decision-making, communication of cause/effect, and envisioning alternative scenarios.

"It was different from our usual projects to design a tool to teach the things we learned...we shifted from being students to trying to think like a teacher. It made us better understand the concepts so we could figure out how to teach them to others."

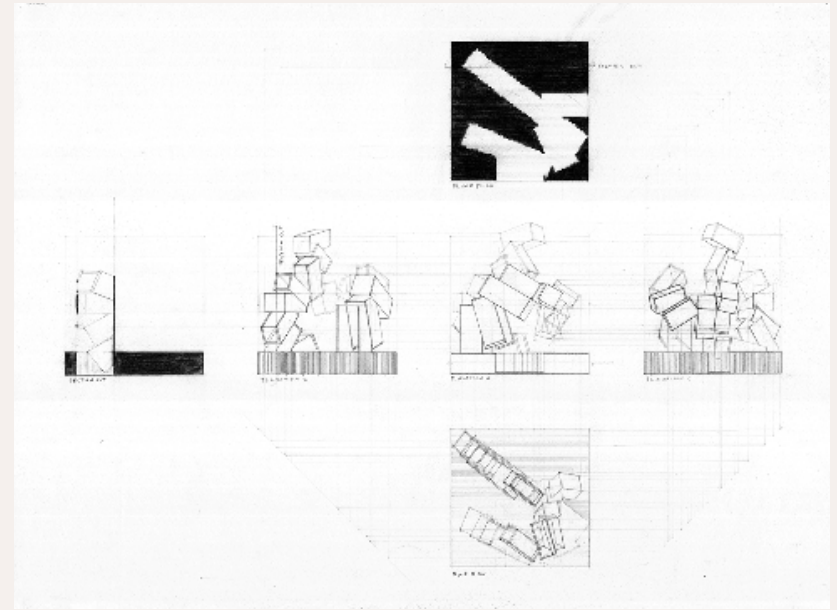
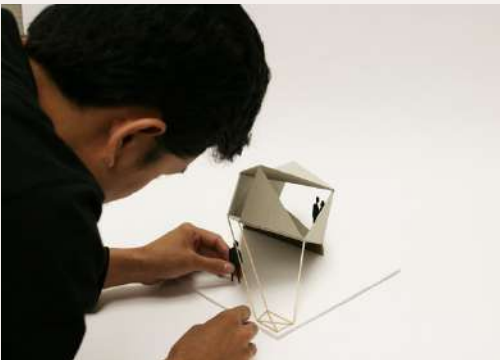
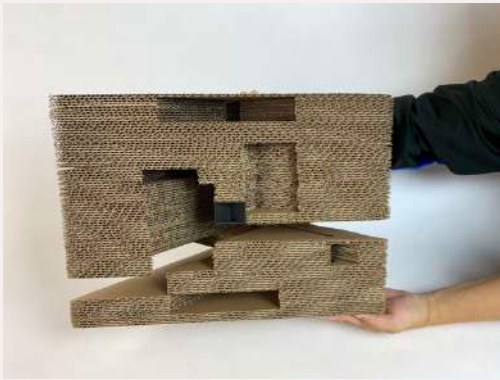
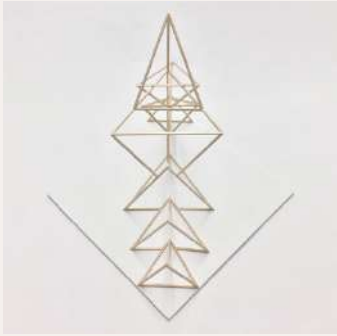
In 2023, during an SoA Open house event, high school students played "Hele," a game developed by Arch 342 students that comments on the inequities of commuting using "time" as the most valuable currency.

4. Sample Arch 342 student work (by Airon C.) for Hilo, exploring unit flexibility and adaptability.

5. A collaboration with the Carbon-Neutral Design Studio taught at Cal Poly Pomona's College of Environmental Design by Professor Pablo La Roche, PhD was held during the Fall 2023 semester. I served as an advisor for the studio, which explored housing solutions for mid-density projects on three Hawaiian islands centered on the Holistic Housing Design Toolkit. Student work by Chris C.

6. The toolkit was the center of a workshop at the 2024 AIA National Conference on Architecture and Design held June 5-8 in Washington, DC. We received feedback from industry professionals.

7. University of Maryland students reached out after participating in the AIA workshop. A version of the workshop was conducted via Zoom to the NOMAS and LatinX Architects United chapters in September 2024.



Single Serial offers an introduction to writing, speaking, drawing, and thinking like a designer; ideating, abstracting, developing iterations; failing positively; thinking critically; constructively critiquing self and peers; collaborating, cooperating, diagramming, model making, prototyping, documenting, editing. Students are exposed to the importance of rigor, craft, and poetic surprises, the competitive nature of design disciplines, and basic design vocabulary, tools, and skills.

We begin with simple three- or four-sided geometries, which quickly transform into unique compositions. Geometry transcends language barriers and can be interpreted differently by various cultures.

Two dimensions evolve into three dimensions, which are then adapted for inhabitation and context. To end, students reflect on architectural productions throughout the semester as a body of work and a library of potential for future ideas.

"The most valuable thing I have learned this semester is that architecture is about problem-solving. The models we create are the built solutions for the problem we are trying to solve...architecture is not just about having creativity but about believing in yourself and having the drive to create something amazing."

"The design process is not linear. The more I tested new ideas and developed the logic, the more the system evolved. With each new discovery, there were revisions and opportunities to look back on earlier iterations. The design process is ongoing and ever-changing."

"I loved this class. As hard and painful as it is sometimes, it shows you that you're capable in terms of thought process, dedication, attention to detail, and rigor. You can take the skills and knowledge you gained and develop them into future projects and life."

"...Having time to reflect on what you have built is an important part of improving your design, and you can't do it if you are always scrambling at the last minute to get things done. I'm so proud of the work I've done this semester."

Featured student work by Kelli K., Hunter W., Beau N., Kirra I., Ken G., Vivianne N., and Micah A.



Fig. 1

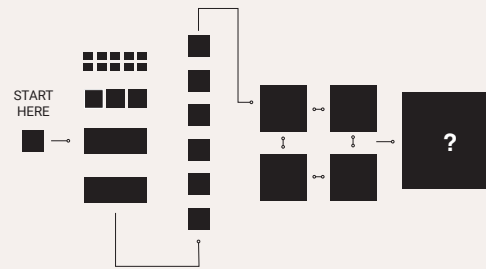
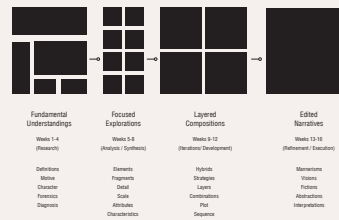


Fig. 3



Fig. 5

DRAW STORY
Arch 690 Special Topics Seminar
(2016, 17, 18, 19, 20, +25)
Role: Instructor

Draw Story is a graduate-level pedagogy that investigates scales and levels of human - spatial interaction, depicting everyday life, exploring identities of self and place, and testing boundaries from object to subject.

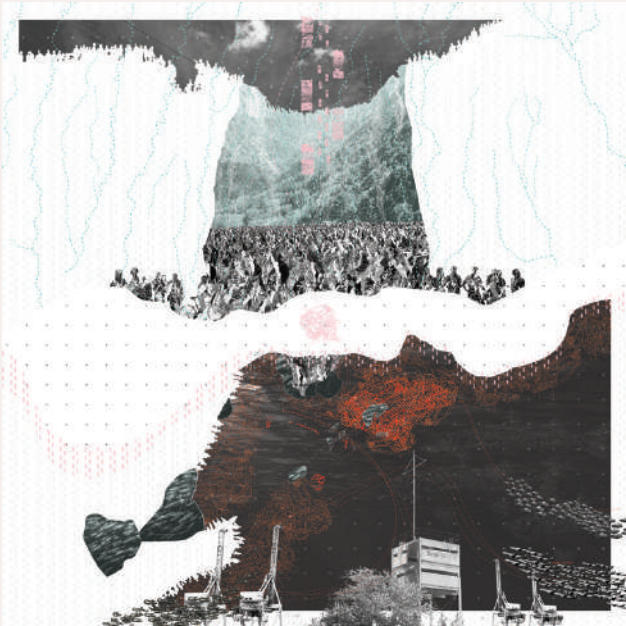


Fig. 2



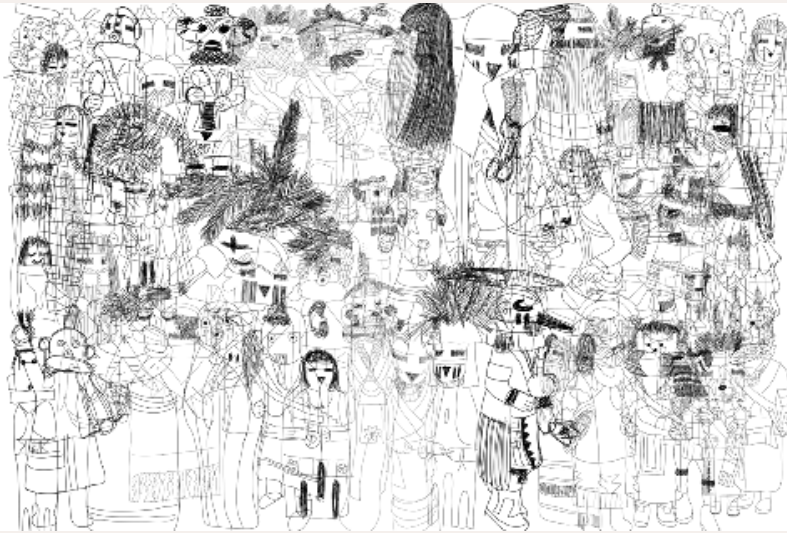
Fig. 4

- Fig.1 "Bridging Kalihi" by Christopher S. was displayed in the Drawing for the Design Imaginary exhibit on occasion of the 2019 ACSA conference "Articulating Architecture's Core in the Post-Digital Era" at the Carnegie Museum of Art Music Hall Foyer and Carnegie Mellon University, Pittsburgh.
- Fig.2 The drawing explores the identity of segments of the city of Honolulu based on the ahupua'a system (Hawaii's indigenous land divisions), which span from mauka (mountain) to makai (sea). This drawing presents the current complex and contrasting relationship between the mauka and makai sides of Kalihi Valley.
- Fig.3 Draw Story's procedural rule-set can be described as a game of forensics. Students are provided with a series of shifting lenses through which they investigate the subject. As evidence is revealed and multiple paths are explored, new narratives are uncovered, culminating in endings that are unforeseen and, at times, wondrous.
- Fig.4 Student project featured on UH News. "It was an honor to be recognized for this drawing project because I did my thesis design in parallel with exploring affordable housing in the Kalihi/Pālama area."
- Fig.5 Chris grew up in Honolulu. His parents are Laotian refugees.

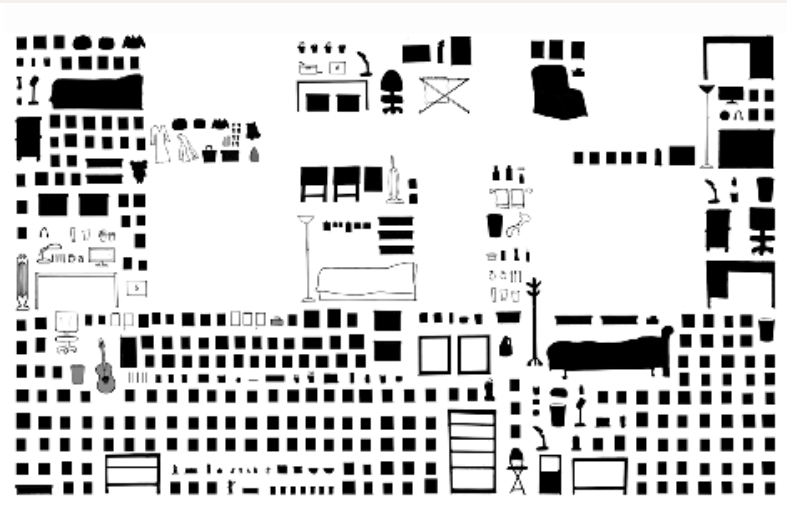
12 Point Beyond

Architecture is a visual language. It can narrate place and time. It can embody culture, values, and meaning.

*How do we teach design through drawing?
How do you write with images? What can we learn from our communities and ourselves through image-making?*



1. Domestic Territories, Hopi Nation and Kahala in Honolulu.



The course investigates scales and levels of human-spatial interaction, depicting everyday life in the context of built environments, exploring identities of self and place, and testing the boundaries of drawings from object to subject.

Explored Themes 2016-2020:

1. Domestic Territories: An introspective examination of the spaces we inhabit (2016) "Cataloged drawings" by BriAnn L. (Hopi Nation) and Michelle M. (Honolulu).

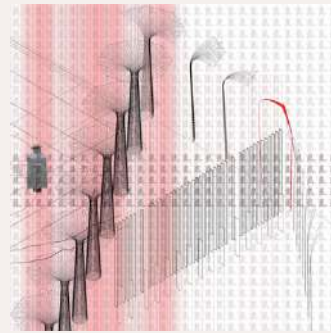
2. Iconic Honolulu: A diagnostic investigation focused on historic buildings (2017).

"Hawai'i State Capitol" (Architect J.C. Warnecke 1969) by Sho T. "IBM Building" (Architect Vladimir Ossipoff 1962) by Bruce W.; "Bachman Hall" (Architect Vladimir Ossipoff 1949) by Danalii I.

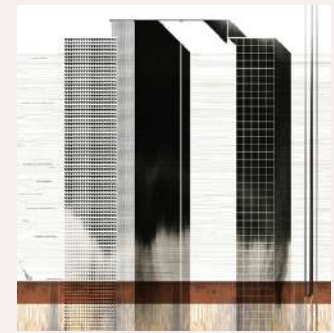
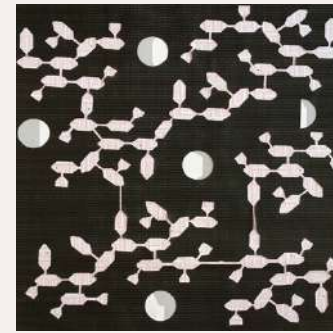
3. Between the City & the Beach: A projective exercise that imagined parallel dimensions of urban environments bound by mauka and makai (2018). See "Bridging Kaihi" on previous page.

4. Nature & Artifice: A study through drawing of the identity of neighborhoods in Honolulu focusing on relationships between natural and human-made (2019). "Palolo Valley" by Ben N.; "Scarred Kaimuki" by Angel A.;

5. Before & After: An illustrated analysis of urban conditions post-critical events (2020). "Virtual World" by My T. "Unoccupying Mō'ili'ili" by Keli K.



2. Iconic Honolulu, Redrawing the Hawai'i State Capitol, Ossipoff's IBM Building, and Bachman Hall.



4. Nature & Artifice, Pālolo Valley and Kaimuki Neighborhoods.



5. Before & After, A pandemic virtual world and a "post" colonial vision of Mō'ili'ili.



"Through this class, I came to understand that, even though our island is small, every piece of land is really rich in context, history, culture, and geography."

"This class put emphasis on building up an idea and diving into a topic from multiple perspectives."

"The journey through discursive drawing leads me to believe that architecture is more than about learning to construct buildings or even

physical space, but more so constructing forms of communication and fostering relationships."

"This class made me think in different ways that I was not used to."

"Allowing us to explore on our own while providing just enough guidance through constructive feedback and examples in the readings and class discussions were most valuable."



Fig. 1



Fig. 2



Fig. 3



Fig. 5



Fig. 4



Fig. 6

NANOTOURISM VISITING SCHOOL HONOLULU (2018)

Role: Local Liaison, Course Co-Instructor, Symposium Co-organizer.

Nanotourism is a program run by the AA Visiting School at the Architectural Association, School of Architecture in London, UK in collaboration with local partners. Founded by Slovenian architect Aljosa Dekleva, it focuses on the development of design strategies which rely on local material and social resources to create hyper site-specific projects in 1:1 scale.

- Fig.1 A two-week full-immersion Nanotourism workshop focused on Honolulu, specifically the Kaka'ako district, was held in July 2018. We partnered with Kamehameha Schools and co-led the workshop as local faculty mentors and liaisons. Driving questions included: What role can Nanotourism play in Kaka'ako's rapid transformation? How can Nanotourism take root in a system designed to accommodate mass tourism? How can Nanotourism create social awareness about the local indigenous history and culture?
- Fig.2 A symposium brought together experts to discuss opportunities to rethink tourism through design.
- Fig.3 Guests included Kumu Hula Nalani Kanaka'ole and Sig Zane.
- Fig.4 An immersive workshop taught by Zach Ikaika Bantolina focused on Native Hawaiian protocols and traditions.
- Fig.5 At the end of the workshop teams refurbished four micro business kiosks to give back to the community.
- Fig. 6 A local University of Hawai'i student was paired with each visiting team. Local students were sponsored by the program and attended for free. Fifteen participants visited from Vienna, Slovenia, London, Australia /China, Serbia, and California.



1. Breath of Kaka'ako



2. Intimate Strangers



3. Shade on You



4. Preserved in Salt



On average, Hawai'i's 1.4 million residents host 220,000 visitors, and up to 35,000 people fly in and out of its airports. Kaka'ako has been developing as a mixed-use, walkable, urban village. As Kaka'ako continues to grow into a popular destination, What role can Nanotourism play in Kaka'ako's rapid transformation? How might Nanotourism take root in a system designed to accommodate mass tourism? How can Nanotourism create social awareness about the local indigenous history and culture?

1. BREATH OF KAKA'AKO by Christopher S., Cameron A., Wenxi C., Luka P. "An analog weather machine that creates a qualitative experience to remind people of the livelihood of the natural elements, such as wind and rain, which give birth to everyday life."
2. INTIMATE STRANGERS by Sara B., Blaz J., Anja M., Melisse N. "Intimate strangers is a platform to promote social change in the spirit of Aloha, Ha, meaning the breath of life and spiritual mana. This project draws upon the positive gestures between strangers exhibited in everyday local behaviors."

3. SHADE ON YOU by Lana A., Žan Š., Sho T., and Yiyi Z. "The project began as an exploration of the negative effects of sunscreen and the collective destruction of coral reefs that both tourists and locals play a role in. Inspired by alternative advertising, Shade on You explores how to leverage the advertising ban in Hawai'i to fulfill the need to protect ourselves from the sun while creating a collective experience at the beach."

4. PRESERVED IN SALT by Lena V., Jiexin W. Poutasi S., Kelli K. "The Preserved in Salt project is exploring and redeveloping the potential of salt production in Kaka'ako to bring awareness to this valued resource that was once prevalent in the area. Li'u i ka pa'akai

means well-seasoned and preserved in salt, which speaks of how ancestral knowledge is preserved in everything we see and do, and sometimes we just need to brush off the salt to tap into our ability to understand the past and co-create new knowledge for the future. The Preserved in Salt project proposes to co-create new methods of salt production in Kaka'ako as a way to create meaningful connections, experiences, and investments in people, places, and cultures. This process provides opportunities to build upon ancestral knowledge and increase community connections and capacity."

All photographs by Jacob Travnik.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

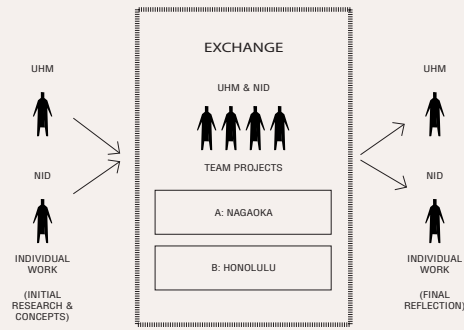


Fig. 7



Fig. 8

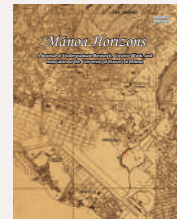


Fig. 9

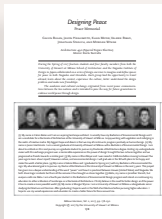


Fig. 10



Fig. 1



Fig. 11

PEACE MEMORIAL
Arch 436 Design Exchange
(2017, 18, 19, 23+)

Roles: Instructor, Coordinator

An academic exchange with students and faculty from the Nagaoka Institute of Design (NID) in Japan.

Fig. 1 Sister cities since 2012, Nagaoka, Japan, and Honolulu, Hawai'i, share the bond of war experience. In August 2015, commemorating the 70th anniversary of peace between Japan and the US, a special fireworks display over Pearl Harbor was held to honor the memory of the war's victims and our nation's renewed commitment to future generations. On this same occasion, UHM SoA and the Nagaoka Institute of Design (NID) signed a MOA establishing a new cultural and academic exchange program.

Fig. 2 A fire bomb, similar to the ones used by the US to attack Nagaoka during WWII, is displayed in the war memorial.

Fig. 3 The Mayor of Nagaoka welcomes the Peace Memorial team in his office in the Aore Nagaoka building designed by architect Kengo Kuma.

Fig. 4 Objects for Peace are exchanged on day one to spark initial conversations.

Fig. 6 Nagaoka and Hawai'i have opposite climates during the visits.

Fig. 7 I drew this diagram to explain my understanding of the exchange to the other faculty during our first visit in 2017.

Fig. 8 Site visits in Nagaoka have included a traditional Sake distillery that survived the fires that burnt over half of the city.

Fig. 9 In 2017, students wrote an essay about their experiences for Mānoa Horizons, UH's undergraduate Peer-reviewed journal.

Fig. 10 The Peace Memorial has been featured in the newspaper and on local television.

Fig. 11 The experience begins with a one-day tour of Tokyo's architecture.

In 2023, The Design Exchange Program was supported in part by the Hawai'i Architectural Foundation.

14 Seek Common Grounds

Academic and cultural exchanges can help bridge cultures and geographies using design as a common language. Architects and architecture students can serve as ambassadors, diplomats, and mediators in resolving conflicts or preserving peace.

How might immersing students in each other's contexts create empathy? How might we cultivate peace through design?



1. Preliminary Studies

Objects for Peace



2. Design Workshop Nagaoka



3. Design Workshop Honolulu



4. Individual Learnings

Mānoa Horizons

1. Preliminary Studies: Defining Peace, Objects for Peace (serve to spark initial conversations, are small enough to be taken on the airplane, and are designed to be gifted away), Understanding Context (preconceptions), Individual Conceptual Frameworks.

2/3. Design Workshops: Honolulu-Tokyo-Nagaoka travel, visits to significant locations, including war memorials, museums, and bombed sites. Students work in mixed teams to develop projects. UHM students then host the NID group in Honolulu, and teams work together to adapt projects to significant locations on Oahu after visiting Pearl Harbor and other sites on the island.

4. Individual Learnings: Students document and reflect on their experiences individually. The works produced in this course have been exhibited in the community and written about in UH News and local press in Honolulu and Nagaoka.

Over sixty students, nine faculty, guest critics, and supporting staff have participated in this program.

2023 / Students: Mike, Sophia, Cailyn, Caitlin, Eli, Zeke, Mia, Nevaeh, Camilo, Walker, Byrne, DELLE. NID Instructors: Junya Sato, Yusuke Kita. Students: Moe, Rina, Shiho, Arisa, Mamana.

2019 / Students: Creasha, Carl, Rand, Micah, Marc, Dong, Renz, Solymar, Brandt, Reid. NID Instructors: Soichiro Ogawa, Nozomu Mori, Seisuke Watanabe. Students: Aoi, Shiho, Mizuki, Akane, Kanna.

2018 / Students: My, Sherry, Krystin, Charissa, Gladys, Bryson / NID Instructors: Tetsuo Goto, Nozomu Mori, Seisuke Watanabe. Students: Anna, Yuzuki, Hiroyuki, Takuya, Yudai, Jun, Akito, Atsuchi.

2017 / Students: Malu, Jason, Khan, Valerie, Calvin, Morgan / NID Instructors: Yoko Shiratori, Yuji Ueno, Seisuke Watanabe. Students: Nozomi, Ayami, Misuzu, Hatsune, Akari, Ryuki, Sarina, Nanako.

"There is no better way to learn about design other than with people who do not speak the same language as you."

"We worked collectively and as individuals to design spaces for peace, respecting the history of conflict between the two cities. Generations later, two groups of people who had been segregated by political and social factors can sit across from one another in both formal and informal settings to communicate and achieve a common goal despite challenges such as speaking different languages."

"By immersing ourselves in the study of memorial monuments and objects, we were challenged to navigate the complexities of memory, meaning, and representation. Through careful analysis and interpretation, we discovered how these creations can serve as catalysts for contemplation, fostering a deeper connection to our shared history and aspirations. They stand as reminders of the collective human experience, inspiring us to strive for a better future while honoring the legacies of the past."

"Engaging in this exchange program brought about a profound shift in perspective, fostering empathy and a dual understanding of diverse viewpoints."