

KLJAT 2231

MORE ACTION

CONSCIOUS **SHIFTS** IN ARCHITECTURAL EDUCATION

ABSTRACT BOOK

LESS TALK | MORE ACTION:

Conscious Shifts in Architectural Education
2019 ACSA Fall Conference

ABSTRACT BOOK

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FRIDAY, SEPTEMBER 13, 2019

2:00pm – 2:45pm

ACT UP Architecture!

Michael Carroll, Kennesaw State University

The starting point for the re-structuring of my third-year undergraduate design studio was launched by my appointment as a Sustainability Diversity Fellow for 2018-19 by my university's Office of Inclusion and Diversity. One of my main objectives as a Diversity Fellow was to address cultural sustainability through issues of inclusion, diversity and equity within the context of architectural design. The impetus of the design studio for Fall 2019 began with my membership in an ad-hoc co-operative that is heading an effort for the creation of a permanent LGBTQ+ outreach center located in an historic African-American neighborhood of Atlanta. The studio focused on the material and the spatial expression of traditionally marginalized groups of people and was structured into three parts that included the design of: a political poster (See Images 1 and 2) a façade light box (See Images 3 and 4) and a Diversity Resource Center for LGBTQ+, African-American and homeless youth. The studio included visits to the Martin Luther King Center in Atlanta, GA and the National Memorial of Peace and Justice in Montgomery, AL. Other activities included reading excerpts of Betsky's Queer Space and a seminar discussion structured by a PhD candidate whose dissertation focuses on issues of HIV infection and Queer advocacy. My intended mode of engagement for LESS TALK | MORE ACTION is inspired by the initial two exercises assigned to my students for the Fall 2019 studio: the creation of a political poster and the design of a façade lightbox. The poster introduction highlighted the work of Barbara Kruger, Jenny Holzer, as well as, Grand Fury who created artwork and posters for ACT UP (AIDS Coalition to Unleash Power).

The posters created by my students comprised of three components: an image, an aphorism and a vibrant base color. For the façade lightbox exercise entitled In Your Face, students were paired up to design a façade for a non-profit organization that provides support for various minorities in Atlanta. Students began with individual portraits that were then merged to create a composite image that generated hybrid identities that blurred the lines between gender, sexual identity and race. The images created were then abstracted and distorted to create a performative façade that not only filtered light and air but also contributed to the identity and expression of various organizations addressed. To engage the audience of my presentation and to simulate a political protest, 24"x 24"

reproductions of the posters will be distributed to each attendee. I intend to invert the traditional paper presentation by aiming the digital projector towards the audience and the room's back wall where a large cut out that will resemble the outline profile of the White House will be mounted. Provocative images and text derived from both the poster and façade exercises will be projected on this White House screen (See Image 5). Audience members will be able to see themselves and the accompanying background through a live FaceTime feed projected wirelessly from an iPhone onto a flat screen positioned at the front of the room.

Designing the User

Galo Canizares, The Ohio State University

As our planet grows increasingly reliant on platforms and software for every conceivable task, a new subjectivity has emerged: the user. In general, users are figures at the tail end of computed activities and are in active negotiation with anonymous creators (programmers) about how tasks should be done. In the design professions, users combine their disciplinary knowledge with optimized workflows to produce solutions to design problems. But this ideal relationship between users and software is a constructed myth in itself. If the abundance of online help forums are any indication, users are far more complex beings than software engineers ever expected. In this sense, the user is a fickle subject that warrants further study, especially in design professions where the role of designer is becoming increasingly synonymous with user. This paper puts forth an alternative course syllabus for designing the user. Putting aside the techno-positivism pervading traditional user-centered design, the questions asked here prioritize a narrative approach focusing on conflicts, absurd scenarios, and weird collaborations between software and users. In other words, students are asked to design less-than-ideal relationships between designers and their instruments ranging from the parasitical to the symbiotic. Designing the user thus becomes an exercise in creating problems as much as solving them. References and sources for this course rely heavily on work by Keller Easterling (Medium Design), Julian Oliver (The Critical Engineering Manifesto), Metahaven (The Sprawl), Olia Lialina and Dragan Espenschied (Do You Believe in Users), and my own work on the politics of software. Students will look closely at the historical evolution of the user from the early days of computation (the user as mathematician/problem solver) to today (the user as consumer). They will then form both concepts of ideal and non-ideal users, forming narratives about each. Like a choreographer or theater director, each student will design scenarios about design, carefully examining the web of events that may happen. The course works allegorically to address the highly-

complex world of software. It also enables students to scrutinize both the media in which they work as well as the larger context of digital culture. Software plays a crucial role in the development of cultural artifacts, but it also brings with it a host of unexpected behaviors that contribute to our perception of technology. These behaviors are largely quotidian and overlooked in an academic context, such as misplacing hard drives, engaging an unfamiliar app, or using someone else's mouse. Stories, however, rely on the mundane to enhance the narrative experience, sometimes exploiting both the familiar and the uncanny. Associating the user with a character would then give more agency to this anonymous subject and shed more light on our own ongoing transformation.

Shaping Public Space, in Public, with the Public: Co-Drawing the Continuous Campus
Antje Steinmuller, California College of the Arts
Chris Falliers, California College of the Arts

Protocols of public space production have been evolving in recent years, with the public no longer solely the end user of an architect-designed space. A growing number of urban space activation projects combine tactics for citizen initiative, collaboration, and shared stewardship into what can best be described as a contemporary 'commons', involving citizens in a process of rediscovery, and reappropriation, of urban space according to their needs and desires. The form of public space as the domain of architects is increasingly replaced by a need to structure a process of formation – a forum – that positions architects as collaborators with the public, designing sites, artifacts, and protocols for citizen engagement. This paper puts forward an engaged teaching methodology for public space formation that operates in public and with the public. It leverages public space as a classroom within which architecture students develop inclusive protocols for shaping new urban commons. The evolution of such protocols draws from two spheres of influence – relational art and design activism. In his book *Relational Aesthetics* [1998], Nicolas Bourriaud identifies art practices that position the artist as the 'catalyst of exchange' or 'producer of an encounter', with outcomes taking the form of lived social environments. Catalyzing collaborations between people in places of gathering, such works put on display the human interactions they engender. From Rikrit Tiravanja's 1992 Thai dinner inside New York's 303 Gallery to Candy Chang's interactive stickers in empty storefronts in "I Wish This Was", relational art produces artifacts and/or actions in public to be played out by the public. The second sphere is rooted in design practices merging design advocacy and activism with short-term catalytic interventions. Built on Lefebvre's understanding that space is inherently a social product, such projects are often designed as a process of learning not determined by hierarchy and

professional norms, but opening doors to collectively acquiring knowledge through engagement. Projects like Archigram's "Instant City" protocols, Santiago Cirugeda's "Urban Recipes", or Raumlabor's Tempelhof Airport "Pioneer Fields" test design tactics that involve architects (and artifacts) embedded within a community, catalyzing processes for engagement, and initiating evolving form and programming. In addition to interactive art engagements (image 1-2), the authors have developed a teaching methodology that develops collective knowledge through workshop formats, allowing groups to act as an itinerant, engaged think tanks for short-term catalytic interventions (image 3-5). The classroom is re-situated into the commons. Its sites are modified by platforms for public engagement (an artifact), structures of a dialog with the public (a protocol), and the choreography of public gatherings (an event). Specifically, this paper puts forward a session in which conference participants "co-draw the continuous campus," using the 'campus' as subject for specific protocols of engagement, explored by participants through direct interaction. Attendees experience the potentials and limitations of this teaching practice as a contemporary learning environment, one that builds hands-on knowledge around public space production in public, with the public.

FRIDAY, SEPTEMBER 13, 2019

3:00pm – 3:45pm

The Need for Not-So-White-Papers: Architectural Education, Talk and Actions **Andrew Chin, Florida Agricultural and Mechanical University** **José Gámez, University of North Carolina at Charlotte**

In response to the 2019 ACSA Fall Conference Call to Action, we propose a discussion session that will include a series of Not-So-White Papers framing a collective conversation intended to address the changing demographics of the country, the profession and the academy.

For example Latin migration into Southern states represents a challenge to the structure of regional cultural politics rooted in a Black/White binary that has long characterized the southeastern US. By contrast, many southwestern and western regions have entered a post-minority, or minority-majority, era in which cultural, ethnic, and racial pluralism foreshadow trends that will soon to impact US urban centers generally. Case in point: in 2016, of the 104 largest metro areas in the US, whites were the largest group in 89, Hispanics in 11, blacks in 3, and Asians in 2. And, six of the 10 most diverse metro areas were in California and all were in the South or West. The US of 2060, however, will be radically different: according to the US Census Bureau, the white portion of the US population will fall from 61.3 percent to 43.6 percent, while Latin and Asian populations will increase significantly. And, by 2044, the overall US population is projected to become minority-majority. This diversity will be unmatched by other large and economically advanced countries. Ironically, this geo-demographic set of shifts are occurring in an era of presidential tweets equating social division with national security, when Black, Brown, and a wide range of lives seemingly don't matter, and our educational and professional environments fail to address the "complex nature of race relations in a post-civil rights era" in which bi-racial frameworks are "unable to grasp the patterns of conflict and accommodation among several increasingly large racial/ethnic groups"[1] This forum will provoke and inspire frank conversations about how architecture can become (the why and how) a vital voice as we transition (the now) to a minority-majority era. Specifically, we aim to address the fact that architecture schools struggle to attract, retain and graduate under-represented minorities, which (in turn) limits the academy's ability to energize an ailing profession.

[1] Michael Omi, "Out of the Melting Pot and Into the Fire: Race Relations Policy," in Policy Issues to the Year 2020: The State of Asian Pacific America—A Public Policy Report (Los Angeles: LEAP Asian Pacific American Public Policy Institute/UCLA Asian American Studies Center, 1993) 9.

Architectural Education in the Age of Online Learning **Mark Rukamathu, Boston Architectural College**

How we teach is changing, from a physical to digital classroom. With a computer, tablet or smartphone, students can log on and obtain their education -- no need to attend class at a specific time or place. Informal online learning ranges from individuals demonstrating personal interest and social media influencers teaching us about popular trends, to enthusiast and experts provided detailed tutorials on a myriad of subjects. Content delivered through websites like Youtube, Vimeo, Facebook, personal domains, etc. offers seemingly endless opportunities to learn. Education focused platforms such as LinkedIn Learning, formerly lynda.com, create and curate selected content within specific topics and editorial guidelines. Many traditional universities now offer online certificates and degree programs equivalent to attending brick-and-mortar institutions. Within this rapidly transforming educational landscape, how is architectural education keeping pace? To start we should ask, can architecture be taught online? Design is complex and does not lend itself towards clear singular multiple choice, fill-in-the-blank solutions. Traditionally, design education happens in a hands-on physical studio environment. Online learning, currently, tends toward skill-focused and subject-specific content. With this difference between architectural training versus general online education, how does teaching design translate from studio to an online platform? Many schools have already taken architectural education online. Institutions like the Boston Architectural College, Lawrence Technological University, Academy of Arts in San Francisco (to name a few) offer online certificates and degree programs in design and architecture. Courses take place through online management systems such as Blackboard, Moodle, Canvas, etc. Syllabi and project briefs get uploaded, lectures shared, videos streamed, students post their work, forums host discussions and live online meeting take place --learning occurs along both synchronous and asynchronous schedules. Missing from the online learning experience is the hands-on back-and-forth making dialog familiar in the conventional design studio setting. To address this, I am currently experimenting with an online 'fabrication' course. In the class, assignments and learning content happen online and digital fabrication is outsourced. The fabricated components are shipped; students assemble the received parts and post images of the results. Participants comment on their classmates' work through a

course forum and join for scheduled live online discussions. For this conference, I am proposing an online, hand-one, experiential, discussion session, intended to provide a sample experience from this course. It will bring the discussion of online education to the table through a digital/physical, hands-on and online/in-person experience.

Pro Active: Bridging Education and Practice to Serve Community Needs
Anna Koosmann, University of Arizona

Professional practice is a required course in all NAAB accredited architecture schools. Last year, NCARB and ACSA joined to survey current professional practice course curricula nationwide. The findings showed that 73% of the professors are male. This profile was illustrated as a cartoon of a white male wearing a black shirt and spectacles with a 6 'clock shadow, an image that closely reflects architects like superstar, Bjarke Ingals of BIG. This profile is common in the academy and the profession alike, and the notion of a singular, hero architect perpetuates the field. One way to shift this persona and culture to encourage diversity in architecture, can begin by restructuring the professional courses to empower students with the skills to step outside the classroom and become pro-active participants for real, social change.

This paper addresses bottom-up decision-making at the predesign phase that bridges architecture education with local organizations to drive change from the grassroots level. This approach is taught via the Ethics and Practice course at the University of Arizona. Modeled after an AIA volunteer program, student teams, under professional guidance, earn credit by preparing a predesign study and cost estimate for non-profit organizations in Tucson, Arizona. Clients were able to make use of the predesign documents prepared by architecture students for marketing and grant funding proposals. This semester-long project resulted in positive feedback from both the students and the non-profits. This paper demonstrates a model for change, where the classroom shifts from a lecture-style format to service learning methodologies. Throughout the semester, students address the AIA Core Values and the Code of Ethics, including equity, diversity, and inclusion. Students learn softer skills, like listening and ways to advocate for the client's needs and values. They shift into proactive learners that serve as an intermediary to non-profit organizations. Bridging architectural education and practice to serve community needs from the bottom-up, mutually benefits the client with professional expertise and the emerging practitioner utilizes democratic skills to serve the underserved sector of society.

Culture Jamming and Climate Change: A Method for Recovering an Operable Definition of Sustainability

Brent Sturlaugson, University of Kentucky

Treated with such frivolity and hubris as to be adopted by Shell, Exxon Mobil, Gazprom—and nearly every other corporation complicit in the climate crisis—sustainability has been robbed of its meaning to such an extent that recovery seems daunting. But if we are to heed the warnings of recent national and international climate change reports, recovery of a more earnest definition of sustainability is imperative. Rather than developing evermore detailed accounting methods for achieving certification, the problem of sustainability must be fundamentally reconceived. In what might be considered an allied spirit, Bruno Latour has recently proposed a realignment of the political spectrum to more effectively address climate change. In his recent book, *Down to Earth: Politics in the New Climatic Regime*, Latour calls for a “shift from an analysis focused on a system of production to an analysis focused on a system of engendering.” (82) Engendering, for Latour, is “based on the idea of cultivating attachments, operations that are all the more difficult because animate beings are not limited by frontiers and are constantly overlapping, embedding themselves within one another.” (83) In other words, a system of engendering seeks more mess, more variables, and more actors. By enrolling more, Latour argues that “we are going to be able to multiply the sources of revolt against injustice and, consequently, to increase considerably the gamut of potential allies in the struggles to come.” (88) Through a system of engendering, the collective grows and with it the momentum to tackle such intractable problems like climate change.

Through the practice of *détournement*, this paper proposes a concrete method that might help recover a more earnest definition of sustainability in architecture. Introduced by Guy Debord in the 1950s, the *détournement* was conceived as a way of subverting dominant narratives in popular culture. Often translated as ‘hijacking,’ the method has retained its critical edge and gained widespread popularity in what is commonly referred to as culture jamming. Using the products from several culture jamming workshops, this paper argues for a messier, more contingent notion of sustainability through the production of media that seeks to unsettle common assumptions about architectural materiality. Heeding Latour’s call for a system of engendering, participants in these workshops selected representations of everyday building materials from a range of trade publications and popular magazines and juxtaposed them with images that reveal the hidden costs of their production. At the conclusion of the workshops, participants presented their work to the group and explained the rationale of their compositions, often highlighting socially, politically, or

environmentally charged narratives. These collages were collected in an archive that will be used in future culture jamming activities that target professional organizations, all of which seeks to recover a more concerted effort toward achieving sustainability in design.

FRIDAY, SEPTEMBER 13, 2019

4:30pm – 5:15pm

False Prophets

Germane Barnes, University of Miami

Architecture education routinely manifests deity-like figures. They are placed on pedestals and their work, whether theoretical or actualized, acquires a holistic reverence. Rem Koolhaas, Michel Foucault, Jane Jacobs, etc. are architectural prophets that influence history, theory and practice. Explicitly or implicitly, their texts show clear bigotry and privilege. Jacobs states, “In some city areas—older public housing projects and streets with very high population turnover are often conspicuous examples—the keeping of public sidewalk law and order is left almost entirely to the police and special guards. Such places are jungles”.

The demographic that she is referring to largely identify as people of color. One should not read a book, that is recommended by the architectural zeitgeist as a critical text on urbanism, that is devoid of contextualization. There are societal reasons that require individuals to reside within public housing projects, those reasons are routinely removed from architecture education. The responsibility is circumvented and in the end, we indoctrinate future designers to view black and brown bodies as feral animals. In retrospect, young students of color are faced with the harsh realities of how architecture perceives their contributions to urbanity.

One could actually admire Jacobs’ consistent problematic lexicon. Rarely if ever does she discuss race in her seminal text, *The Death and Life of Great American Cities*. The nomenclature used for these racial groups are “strangers”, “extraneous” and “not nice”. When discussing the necessity of sidewalk usage for safety she mentions, “The second mode is to take refuge in vehicles. This is a technique practiced in the big wild-animal reservations of Africa where tourists are warned to leave their cars under no circumstances until they reach the lodge”. In casual conversation if one were to refer to black and brown bodies as sub-human in the presence of the aforementioned demographics, there would be violent retaliation at minimum, while a riot would be appropriate. However, this is consistent behavior for the disciples of architecture and it is disseminated as religion.

This is not to say that architecture must silence the voices of its iconic contributors, again context matters. It does however have a responsibility to include diverse authors who provide an alternative

lens of architectural interrogation. Black, brown and queer bodies inhabit the built environment and they sculpt urbanism with their presence. The access and inclusion of those stories is crucial to a contemporary understanding of pedagogy. Architecture education must evolve beyond the lazy tropes of old white people who do not understand the transgressions and exploitation of marginalized communities. The False Prophets session proposes a discussion amongst educators who will learn of the experiences of minority students with regards to their lack of exposure to minority authors. This will occur through the use of a manicured table, allowing attendees to exchange stories of privilege and experience the lack thereof. Individuals submitting to this session will be required to contribute one false prophet and two alternatives with the intention that a catalog of new critical theorists will emerge.

Design Research Methods – Applied Theory and Studio Practice?

Ole Fischer, University of Utah

Architecture is not a science, but a cultural practice. Yet there are certain scientific approaches to architectural questions and issues, which ask for a methodological understanding within the discipline. Traditionally, these have been grouped into two general categories: humanities with research in history, theory, sociology, anthropology, etc. on the one side, and natural sciences with physics, math, civil engineering, material sciences, fabrication, and computation on the others. Design (studio) is conventionally considered to be the arena where the diverge sub-fields converge, overlap, interchange, and integrate in a creative process – both in education as well as in the professional field. This presentation will discuss a different approach to contemporary architectural pedagogy: design research methods. This hybrid format crosses between a scientific method to design itself, since it catalogues, analyzes and theorizes different design approaches in a comparative manner. That is, it tries to gather general knowledge of the discipline by systematic research into the design process itself. And it is applied science, since it introduces these design methods back into the studio, puts them to test (for a specific design problem) and asks students as well as instructors to comparatively discuss their “performance” for a specific situation. Since the establishment of institutes within schools of architecture in the late 1960s and 70s (both history, theory and cultural studies as well as technological, engineering, computation), there have been concerns about the separation of the sub-fields of architecture from design (studio), creating academic silos, which result from the institutionalization, specialization and autonomization of these academic formats (such as specific master and PhD programs). Today, the difference between knowledge (or “understanding”,

in the language of NAAB) and application (or “ability”) is one of the biggest obstacles for design education. Both students as well as society at large ask for a rapprochement between the diverse subfields (“integrated architectural solutions” according to NAAB). Design research methods, and this is a hypothesis, could provide an opportunity for convergence and integration of diverse sets of knowledge into action. The presentation will discuss a set of model course for incoming graduate students (M-Arch) that combines a comparative design methods lecture, a discussion seminar (on the approaches presented) and a design studio. For the first half of the semester, the studio becomes a weekly theory guided laboratory for exploring the strengths and weaknesses of different design methods. The second half consists of a studio guided seminar that reflects upon the students’ individual research and design method to be developed into an in-class presentation and research method paper. Both components have been designed to empower students to critically reflect upon their own methods (which they have been exposed to previously or developed themselves) as well as turn knowledge into action (design), and tacit design practice back into self-reflected articulation, both in words and drawings. In addition, these courses will challenge students to transgress the selected existing design methods in favor of designing new ones, which integrate cultural, socio-economic, environmental and political issues and speculate about alternative social realities.

Shaking Off/Up Architecture Education’s Legacy

Erin Carraher, University of Utah

Why are we entrenched in historical pedagogical and curricular practices, especially when it could be argued that architecture education is one of the most highly integrated models for a liberal arts education?

In his description of the curriculum for MIT’s first architecture degree in 1866, founding director, William R. Ware, mentions two fundamental and unique challenges formalized architectural studies faced: that architecture education cannot, due to the nature of the discipline, cover the entire body of knowledge that students will need in order to practice, leaving “much of the ordinary detail of work” to be learned in architecture offices; and that the structural shift to a formalized model of higher education for architects continued the apprenticeship model’s less formal methodologies of conveying information based on personal experience.¹ The “legacy teaching approach” in architecture studios reinforces the “rich legacy of principles and personalities that creates a common bond among veterans and novices alike”² and at the same time contributes to an insular culture that results in the profession struggling to communicate its value to those who have not experienced it.

This is just one example that the questions currently being asked have been echoed since the first programs were formalized in North America 150 years ago. It follows then that the questions of what shape a contemporary architecture education takes should first begin with an examination of historical critiques of the prevailing models of our discipline in order to not repeat but instead learn from architecture education's rich, if imperfect, legacy.

This presentation will outline the roots of contemporary architecture education models as well as the challenges and critiques of such dating back as far as Vitruvius. This context will serve as a platform for presenting a new integrated curriculum currently completing its first year of implementation at [university]. The presentation will provide an overview of the 7-year long development process – from gaining faculty buy-in to working with university specialists in curriculum development to a series of national thought leaders brought in to facilitate discussion on central themes to course and learning objective development – as well as some initial findings from the first year of completed courses. By providing historical grounding for the critique of contemporary architecture education as well as one school's response, the intention is to generate conversation around this critical topic.

[1] William R. Ware, *An Outline of a Course for Architectural Instruction*, Boston: John Wiley & Sons. 1866. P. 6.

[1] Boyer, Ernest L. and Lee D. Mitgang, *Building Community: A New Future of Architecture Education and Practice* (Princeton: The Carnegie Foundation for the Advancement of Teaching, 1996). P. 3.

The Pedagogy of Creative Placemaking: A Field Begins to Come of Age
Victor Rubin, PolicyLink
Theresa Hwang, Design Futures Student Leadership Forum
Maria Jackson, Arizona State University

Creative placemaking has been evolving from a narrow definition of applying art and design ideas to community projects into a more expansive, equity-focused field of practice. As the funder consortium ArtPlace America describes it, "Creative placemaking happens when artists and arts organizations join their neighbors in shaping their community's future, working together on place-based community outcomes. It's not necessarily focused on making places more creative; it's about creatively addressing challenges and opportunities.... creative placemaking at its best is locally defined and informed and about the people who live, work, and play in a place." Many architects, given their training, roles, interests, and values, are working in the midst of this explosion of creativity and innovation. A recent analysis by a leading management firm concluded that "the creative

placemaking field in this country is 'moderately strong.' ...Over the last 7 years we have steadily developed a shared identity among a group of practitioners who would not have previously defined their work as being part of the same field; we have added both to a knowledge base and to standards of practice, and we have been able to identify, support, and engage leaders, practitioners, funders, and policy makers." As the field has expanded, so too has the need to develop a distinct and productive way of teaching it. The teachers of creative placemaking come from programs in architecture, urban planning, arts administration, fine arts, public policy, and nonprofit management. Sixty-five leading creators of the emerging pedagogy of creative placemaking were convened in early 2019 by a prominent university-based design institute to take stock of the state of their practice and set a course for its improvement. They were joined in this effort by grass-roots organizers, artists experienced in social and civic practice, and supporters in philanthropy. This unique meeting and its associated surveys of participants generated a deep well of findings and observations about what the pedagogy of creative placemaking will need to reach its potential. The exploration was initiated by these four sets of questions:

How do you define creative placemaking and how do you distinguish equitable creative - placemaking practices from those that do not lead to equitable outcomes in communities?

What are core competencies for this work?

What are ethical considerations particular to teaching and/or engaging in creative placemaking in communities?

In the context of teaching creative placemaking, what are some of the challenges you face inside and outside of the classroom? What are opportunities to advance the work?

The discussion was strengthened by the participants' critical analyses of power, race, the nature of design expertise, and the changing dynamics of neighborhoods and cities. This presentation for the ACSA 2019 Fall Conference will use the themes and findings of the convening and related information from its organizers and participants to document the state of the pedagogy of creative placemaking and the direction in which it could productively proceed. The result will be the start of a road map for stronger curricula and a cohort of better trained practitioners.

The Architectural History Survey and the Hashtag Equity Movements **Clifton Ellis, Texas Tech University**

This proposal is for a discussion that I would facilitate about the architectural history survey and how teachers can begin to address the absence of women and minorities in the current narratives of the

survey. This discussion is all the more urgent in light of what I term the “hashtag equity movements,” such as #BlackLivesMatter, #MeToo, and #TimesUp. My research in the architecture of slavery has provided me with compelling narratives for both women and African Americans. But my efforts are a slight contribution to a larger movement that could address equitable coverage of these narratives. In most schools, the survey of architectural history introduces the young mind to matters of equity within architecture. Current textbooks have expanded the euro-centric narrative by including the architecture of non-western cultures, thus making students more sensitive members of the global community. Yet, valuable as it is, the narrative of non-western architecture has often followed the model of studying the architecture of dominant groups within those cultures. In addition to considering how to better critique the architecture of the dominant cultures around the globe, we are now faced in the early 21st century with new challenges of weaving into the architectural narrative stories that better address class, gender, and race. Americans today struggle with forces that seek to divide and to deny the idealistic, but achievable, narrative of an inclusive American society. The Supreme Court confirmation hearings and the political campaigns of 2018 further exposed a threatening contempt toward women and minorities that continues to linger below the surface of America’s psyche. Some of our leaders have by word and deed normalized disrespect, contempt, and hate for women and minorities. Thankfully, the hashtag movements of #BlackLivesMatter, #MeToo, and #TimesUp have been very effective in exposing the misogyny, racism, and classism that still plague American society today. My profession calls me to teach the history of architecture, and I believe deeply that future generations will be more inclusive, thanks in part to teachers who incorporate into their course content the stories of women and minorities – stories not of victimhood but of agency and perseverance. We already have some well documented architects and architecture in the United States and Britain. Women and African American architects have been studied and written about, as has the architecture of slavery in antebellum American. There are some sources that teachers can draw upon to begin a balancing of the narrative. The challenge will be in re-writing the “canon” to include these important stories. So my question is, where do we find more architecture, global in nature, that tells these stories of women and minorities and how can we incorporate these stories into the narrative(s) of the architectural history survey? Or, are these stories better told in elective seminars that, while they give the subjects the time and depth they need and deserve, do not capture the wide audience that a survey can? Or, why not encourage covering these subjects in both survey and seminars?

SATURDAY, SEPTEMBER 14, 2019

9:00am – 9:45am

Full Circle

Emily Abruzzo, Yale University

Ashlee George, Impact Justice

This proposal is for a highly engaging event designed to explore two pressing and related questions: How can architecture advance a more just society? And how can explicitly restorative justice practices improve the teaching of architecture? A critic and practitioner, along with an expert in restorative justice at a Bay Area-based nonprofit, will lead an event in which all participants experience and grapple with the key concepts and pedagogical approaches under discussion.

This event builds on what was likely the first-ever architecture studio focused on restorative justice. In fall 2018, all second-year students at a School of Architecture designed a community justice center in one of three mid-size cities close to the University. The studio showed how architects can partner with people on the frontlines of justice reform locally to envision a new kind of space that functions as an antidote to mass criminalization and mass incarceration, serves historically marginalized communities, and helps revitalize city centers. Working with no clear architectural precedent, the students were challenged to meet the spatial needs of specific restorative justice practices (for people ranging from middle school students to adult victims of domestic violence), while also designing buildings and grounds that welcome and serve the entire community. That entailed negotiating the need for privacy and security as well as openness, thoughtful consideration of how the building “reads” to the public, and how people enter, relate to, and move through various spaces with different functions. The three sites themselves provided a variety of historic, architectural, and environmental considerations for the students to address.

This LESS TALK | MORE ACTION event will begin with a brief description of the studio process (e.g. site visits, a roundtable with community partners, firsthand experience of the restorative justice process, an immersive focus on daylighting and why), sharing of some of the resulting student designs, and suggesting how the subject matter affected both the students and their teachers beyond the bounds of the assignment (i.e. fundamentally changed their thinking about fairness, justice, and relationships). This will lead naturally into the second half of the event: a circle process involving all participants. The circle is a grounding metaphor and actual process that restorative justice

practitioners rely on as a highly effective way to foster genuine communication and build relationships, and as a transformative approach to addressing conflict and repairing harm. The focus of this particular circle is an issue highly relevant to architectural education: how common evaluation processes, especially juried reviews, can fuel negative power dynamics that leave students feeling as if they are “put on trial” or “disfavored,” rather than in an environment that supports their learning, creativity and overall well-being. Through the circle process, we’ll explore these power structures, which also negatively affect teachers, and how to change the dynamic. The insights generated will be transcribed and annotated for publication in a professional journal such as JAE.

What Did It Cost?

Ashley Bigham, The Ohio State University

Over drinks and horderves at the 107th Annual ACSA conference in Pittsburgh, an interesting conversation emerged among several young faculty members who teach at different public institutions. While reflecting on presentations of design projects each had seen earlier in the day, a common recurring question emerged: “What did it cost?” While each presentation had beautifully articulated the formal, aesthetic or material ambitions of its project, very few mentioned how much the projects had cost. Actually, none did. In professional practice, public building budgets are often disclosed as part of the architect selection process and private residential projects may be associated with a typical price/sq.ft. based on the quality of construction. By contrast, in the world of academia—research exhibitions, speculative projects, and design competitions—it is often less clear how small academic practices manage project budgets, pay for student labor, afford materials, and secure grants. As faculty on the forefront of preparing our students for the profession of architecture (often mentoring them against unpaid internships or helping to negotiate salaries), we are not always living up to our own advice. For this particularly relevant Call to Action, I will organize a discussion session for THE NOW which will focus on workshopping a series of actual budgets with architects who run small, academic-based practices. Through an act of radical transparency, this positive working session aims to produce tangible best practices and trade secrets on how, exactly, we manage the financial and logistical aspects of our work. Furthermore, the session will encourage file sharing of spreadsheet budgets, timesheets and other logistical documents as well as discussions on file organization, naming conventions, and office policies. As mundane as these tasks first appear, they are often the key to success in practices where frugality and efficiency are paramount to success. Secrecy is often a tool for exclusion. If there is a need for a Call to Action in architecture today, it is to

forgo the exclusive hierarchies of a previous generation and empower young architectural practices with the tools and methods currently only learned through years of trial and error. With the current desire for more transparency and disclosure around professional issues of hiring and equal pay, this panel will apply the same openness and positive conversation to many of the internal workings of faculty-led firms. To combat unpaid labor, class exclusion, and closed-door agreements in the profession (and in academia) it is imperative that we quite literally “open the books” of our firms. The session will include a frank discussion of both the successes and mistakes we have each made in order to develop more successful practices moving forward. As ACSA members, instructors, and practitioners we owe it to ourselves to stop hiding behind a needless sense of financial privacy and to form a productive, collective group of practitioners who model the community-building ambitions we teach to our students. Participants should bring a laptop and a spreadsheet to share!

Augmented and Humble: Spaces for Social Responsibility Learning in Architectural Education

Sara Khorshidifard, Drury University

The profession, hence and beforehand, the education of architecture is accountable for responsiveness towards real-time needs, including those of society. This paper examines this necessity, asserting a more rigorous and expansive application by better addressing Social Responsibility Learning in the education. Architecture professionals have advantaged positions as creative generators of built environments, hence, are socially responsible to serve the public good, empowering peoples and envisioning democratic places for all. The education is the starting place in transferring the essential learning principles, knowledge, and skills. Despite the import, social learning is still one of the least considered, most overlooked student performance criteria in architectural education. This is despite many contemporary mandate assertions in place/progress, for instance, by leading policies of professional organizations like AIA or educational credentialing bodies like NAAB.

Social learning is a key area that design studio pedagogy may also overlook more easily or fall short to house. Limitations in part can relate to the depth and breadth with which the learning is to be addressed or achieved based on requirements throughout a school cycle. Under conditions for program accreditation, to help programs prepare performance reports, the National Architectural Accrediting Board embraces “Community and Social Responsibility” as one of five Key Perspectives. The weight prompts pedagogical responsibility to educate for outcomes contributing to the well-

being of citizens. Programs must engage in research, practice, and education that encourage community building, social responsibility, and civic engagement at locally, regionally, and/or globally. Although this perspective is played out and distributed throughout NAAB's twenty-six required Student Performance Criteria, only one is explicitly framed in title: A.8. Cultural Diversity and Social Equity. Despite a relatively light necessity, some more-privileged programs possess resources with elaborate curriculums for formally including the social. Many are either joined with in-house community planning and design centers or already offer complementary certifications such as Public Interest Design. Other programs, conversely, can stay behind, with little to no curricular prospects for the learning's critical engagement.

Regarding The Now, where loftier curriculum revisions are not within reach in a program, what are some tangible opportunities opening rooms for civic goals? What are some further nuanced, subtle, or opportunistic approaches to address the social? How can the education teach with ways of staying loyal to its integrity and better conventions while humanizing its apprentices, enabled to work with others across difference, acquire civic identity, actively participate in society to address civic issues, and ultimately orient social change? Can these be learned or is it too much to ask? In light of these questions, the paper will engage both challenges and ways to help fit civic learning within bounds of existing, standard pedagogies of standards programs. As feasible remedies to amend and enhance the embedment of learning processes and outcomes, the paper investigates the tactical, often, smaller-in-scope, course-based modifications, which can occur, if nothing else, but, always, no matter what.

The Client

Liane Hancock, University of Louisiana - Lafayette

Kari Smith, University of Louisiana - Lafayette

Dan Burkett, University of Louisiana - Lafayette

Within the last several years, the ACSA and the AIA have increasingly focused on diversity, both in terms of the students we serve and the ways in which we practice. However, with few exceptions, the dated methods by which we pedagogically approach client interaction largely remains the same. Too often, the studio project prompt perpetuates the "master-student" mindset into an "architect-client" relationship to create the same top down, master-based approach that academies now question. From stakeholders within the community to a broader distributed network of users tied together by

specificity in area of need or service, the profession and academia must accept that clients are sophisticated in their desires and goals. As a teaching profession, we need not only to accommodate, but also to embrace differences in our increasingly diverse client base. We need to move beyond empathy and doing good to respect and service. Real clients need introduction at an earlier stage – down at foundation level. Using abstracted clients and projects in beginning design is simply an out of date method: designing something like a home for an artist or a collector serves only a tiny slice of the populace, and does not slake students’ thirst for agency within their community. By designing for someone other than self, or for an abstracted client, students can learn to both incorporate and filter minutiae to align with innovative design solutions, thereby obviating the pervasive concern that communication with clients will too quickly get down in the weeds and distract from broader design strategies delivered in foundation coursework. Instead, the studio induces students to translate clients’ aspirations into qualitative, programmatic, formal, and organizational decision making during design process. Fundamental to success is the timing and way in which the studio introduces clients, and the specific assignments that engage in productive interaction between the clients and the students. This paper serves as case study: it outlines changes to assignments in second year studio that aim to enhance student engagement, and traces results through student interview. The information presented is from a studio run successively over a two-year period. The studio utilized the same programmatic organization, the same site, and the same design process, but significantly altered its list of clients and the methods by which the students interacted with those clients. In lieu of clients foreign to the area, we drew upon locals who were directly accessible through interview. An additional change included diverging from a selection of clients that were of European descent, Caucasian, male, middle aged and able bodied to a range of ethnicities, genders, ages, and physical mobilities, which more closely mirror both our student body and the general populace. The paper describes the direct experience in the foundation studio, and documents how that experience affected students’ view of client in advanced studios.

Indigenous Ecologies, Collaborative Design, and the Agency of Architecture **Phoebe Crisman, University of Virginia**

Designing studio pedagogy need not be an either/or choice between engaging socially relevant issues and learning architectural knowledge and skills. This session will examine how architecture studios can be informed by theories of agency, community engagement, transdisciplinary collaboration, and feminist writings on co-authorship and storytelling as tools of empowerment. This pedagogy departs

from a normative approach that investigates a hypothetical problem or program without connection to people outside the studio. Instead, the realities of people and place are central. As a case study, we will discuss lessons learned from a recent collaborative design studio with Sisseton Wahpeton Oyate (SWO) tribal citizens to design a Cultural Center on their Lake Traverse Reservation in South Dakota. Co-taught by an architect and human geographer, the studio explored indigenous cultural and ecological paradigms in the built environment through space, form, material, and use. Most architects have difficulty imagining culturally relevant environments for indigenous communities, since these peoples and their architecture have been marginalized in design discourse and deliberately destroyed by US government policies. Poverty, poor education, unemployment, substance abuse, and youth suicide limit individual and tribal thriving. For instance, SWO citizens are still affected by the mass internment, forced relocation, and human rights atrocities since the Dakota War of 1862, with 40% of the tribe unemployed and over 60% in poverty. Amidst these challenges, the collaborative studio designed a place for the SWO to reclaim their culture, spirituality, and tribal sovereignty. During a four-day design workshop on the Reservation, many Dakotah expressed dismay with the rectangularity and blandness of their Bureau of Indian Affairs buildings and the larger Jeffersonian grid. Asserting autonomy from this cartesian condition, the studio designed a series of small, off-the-grid buildings woven into a restored tallgrass prairie. The project will support storytelling, music, and dance performances, traditional craft and new film and digital media practices, Dakotah language immersion, and archive and gallery spaces. Intertwined gardens and work courts will provide places to learn about medicinal plants, seed saving, and Native foods. Powered by wind and sun, the buildings will collect rainwater and harvest geothermal heat. Made of locally sourced wood and rammed earth, the buildings are designed to be built in phases by tribal builders and vocational students. The construction process itself will support the project's capacity-building and community-building intentions. The tribe reflected on their culture and place in new ways, while students explored alternatives to the normative studio process. Beyond designing a place for intergenerational cultural life, the pedagogy explored how architecture might help to undo colonial legacies, support collective cultural recovery, and advance economic and political sovereignty for indigenous communities. The participatory design process itself established a rich exchange between two diverse communities that each shared their knowledge and ways of being in the world. Session participants will share stories of their own experiments with collaborative design and the agency of architecture.

SATURDAY, SEPTEMBER 14, 2019

10:00am – 10:45am

MORE REAL (collecting studio culture confessions and successes)

Erika Lindsay, University of Detroit Mercy

Emily Kutil, University at Buffalo

As instructors, we design our studios. We set the tone, control the pace, and shape studio culture. But few studio professors have received formal training in teaching methods, and we often find ourselves replicating the flawed models we experienced when we were students. While we continuously discuss project structures and course content with our colleagues, we rarely consider how we teach: the social dynamics we foster in our studios and the relationships we construct with our students. This action aims to support a culture of honest and vulnerable dialogue about what is and isn't working in our studio environments. In this session, we specifically aim to: 1. Create a space of support for discussing vulnerability and failures openly, honestly, and without self-judgment. 2. Begin to "make sense" of the issues raised by these failures. 3. Compile strategies and best practices that address both the interpersonal scale (social dynamics, classroom power structures, communication techniques, teaching strategies) and the structural scale (curriculum organization, student schedules, workload, outside-of-class support systems, school culture). 4. Use this discussion as a jumping off point to generate a collection of best practices for creating positive studio environments where students feel ownership, agency, and support. Our proposal has two parts: Action Create a space for sharing both our moments of failure and our best practices in shaping positive studio culture. We will gather responses via an online platform leading up to the conference, and conference attendees will be encouraged to contribute via an anonymous confessional box in a central space during the conference. Organizing Meeting Host an interactive conversation to process the responses. Identify root causes, common strategies, and themes that emerge organically from the discussion. Create a visual index of this work. Discuss a strategy for sharing these confessions and best practices and growing the conversation beyond the conference.

Flipping the Script: Master-Student to Student-Masters **Gregory Spaw, American University of Sharjah**

This paper presents the particular challenges of teaching a North-American model of education outside the US. The challenges take place in a remarkably diverse institution where international students represent 84% of enrollees and women represent more than 80% of the Department of Architecture's students.

With such unique backgrounds and experiences, one would imagine our classrooms would inherently be engulfed with differing perspectives and opinions, but unfortunately this isn't the case.

Oftentimes, the prevalence of rote learning and previously established master-student dynamics in primary and secondary educations have hampered the students' propensity to speak freely and articulate critical thinking. The challenge, then, is to help them unlearn past habits while pushing our undergraduates to become masters of their own environment, education, and design language.

For students to become masters of their own environment, they must find their voice and have the confidence to use it. Within a western context, it is hard to imagine students not arriving with both qualities in spades, but due to the particulars of the region, one cannot take such things for granted.

As educators we must reinforce our students' willingness to participate by creating safe spaces for dialog as well as purposefully redirecting close-ended questions with open-ended prompts such as, "I don't know—what do you think?" An additional challenge within this unique educational environment is mediating gendered cultural expectations with the need for students to "lean in" in order to have success in future practice. While one needs to be conscious of unintentionally imposing American values/mannerisms, the challenges on the ground have on occasion dictated that I feign hearing loss in order to force students to speak up and engage their classmates with conviction.

To be masters of their own education, students must be willing to employ self-determination and agency in their pursuit of learning. For these traits to be developed, it often requires teachers to consciously hold back and allow students to drive discussions. Additionally it is important to regularly call on students to propose their own deliverables in order to actively engage them, which, in turn promotes accountability. Through the structure of courses and required presentations/demonstrations, we can facilitate opportunities for students to become educational curators, thus encouraging them to teach and learn from one another. Finally, for students to become masters of their own design language, we as academics must put our egos and self-interest aside. Their designs are not, nor should they be, about our personal agendas. We need to foster students by giving them both the space and time to discover, develop and articulate their own

interests and languages of design. An assortment of studio and seminar experiences will be presented with corresponding student work to demonstrate these challenges. The associated assessment evidence successes and failures of these evolving and adaptable pedagogical strategies. The aims of the presentation is to open up an active dialog with fellow colleagues to explore better ways of preparing the next generation of student-masters world wide.

Identifying Impostors in Architecture Education

Sarah Young, University of Louisiana – Lafayette

“I feel so emotionally drained, without any confidence in my ability.”

– Student response, Architects’ Journal’s 2016 Annual Student Survey

The impostor phenomenon (IP) is “a psychological pattern in which an individual doubts their accomplishments and has a persistent internalized fear of being exposed as a fraud.” Parkman’s comprehensive 2016 review of IP in higher education notes that the phenomenon is pervasive in students, staff, and faculty as well as detrimental to both individual and organizational health. Furthermore, while IP affects all, studies show that those in ethnic and/or gender minorities are at heightened risk. IP may arise when entering a new environment, encountering new challenges, and feeling like an outsider, making the issue especially relevant to the unique and challenging environment of architecture education.

While there has yet to be a study of IP’s prevalence in architecture education, IP triggers are prevalent: challenges confronted during the design process, frequent and public critiques and reviews, the competitive atmosphere, the overwhelming array of skills and knowledge to acquire, and the sheer workload. These conditions lead many students to frequently question their fitness to pursue a degree in architecture. Beginning design students are likely to interpret challenges during the design process (e.g. stuck-ness) to mean that they are not ‘talented’ enough and that they don’t belong. If they stick around, unaddressed impostor feelings can cloud objective critical thinking, foster self-doubt and unhealthy work habits, (e.g. all-nighters) and exacerbate mental health issues. Semester after semester as the stakes get higher, the mental and physical health impacts can become increasingly crushing and dire. As we strive to make the academy and the profession more humane and inclusive, it is imperative that IP issues be addressed early in architecture students’ education, before unhealthy habits and patterns of thought take hold. Talk IS action. The first rule of (overcoming) the impostor phenomenon is to talk about the impostor phenomenon. One of the most effective means of learning to cope is to hear peers and mentors discuss IP from their own

experience. I call upon faculty to promote transparency and resilience by explicitly discussing the challenges we have all faced while learning to design – not in a support program but, IN THE STUDIO. Having the conversation early and often can help students understand they are not impostors: they are beginners. By breaking taboo and discussing IP in class, otherwise isolated students can be empowered to seek support. The design studio experience is for learning how to design as both a creative process AND a healthy, sustainable practice – in academic and future professional life. The author will invite participants to share our own IP experiences, triggers, and coping methods, and to consider how these experiences can be used to teach our students, both through similar talks and through other actions

i The author will use the Clance Imposter Phenomenon Scale Test, regarded as the most effective tool for identifying IP, to measure IP's prevalence in XX University's architecture students. Results are forthcoming.

Playing the City: Towards an ANT-approach to the Urban Design studio

Kim Helmersen, ETH Zürich

In a philosophy of science perspective architectural ideals are typically characterized by concepts that include the individual idea and subjectivity. As a result, design teaching in the studio tends to simulate the traditional architecture competition, with students working individually on competing future visions for a specific site. This approach is challenged in this paper, presenting early findings from a comparative ethnographic research study of design teaching at different architecture schools in varying national contexts. In an urban design studio at the Royal Danish Academy of Fine Arts, School of Architecture it was experimented, how one could simulate real life influencers of the design process. In doing this, students in negotiation with the design teachers framed a given site as a board game bringing the factor of chance into play. Based on preliminary studies of the site – a harbour area of Køge south of Copenhagen, Denmark – a number of site-specific heterogeneous 'actants' were selected and formulated as players and built as material objects in a board game with specific characters and strategies, and represented by the students. In this way, the studio developed as an urban laboratory simulating the complexity of actual urban design processes where strategy, power and luck are active impacts. Substituting the individual design proposal with a number of heterogeneous 'actants' negotiating urban form, the board game approach breaks with the concept of the 'master mind' in urban design, shifting the focus from the designer to the design, which becomes something more than the sum of individual intentionalities. In this way, the approach breaks

with the traditional format of the design studio by encouraging multiple rather than singular authors, in a process that anticipates actor-network theoretical (ANT) approaches to urban design teaching. At the same time, the approach challenges the concept of the master plan in urban design. Subject to the inevitable factor of chance, the board game simulates urban growth, as it is – complex and unpredictable, comprising a multitude of heterogeneous ‘actants’, whose meetings and conflicts are essentially productive. Bridging the gap between the actual and virtual, the board game approach presents early steps towards an urban design methodology with potentials for further investigation and development.

SATURDAY, SEPTEMBER 14, 2019

11:00am – 11:45am

Achieving Educational Equity: Architecture Preparatory Programs as Transformative Models to Increase Inclusivity in University Admissions

Lauren Matchison, University of Southern California

The resulting study from an American Institute of Architects survey, titled, Diversity in the Profession of Architecture, conducted in 2015, identified factors impacting the representation of minorities, and also included strategies to address underrepresentation in the profession. One strategy recommended that university architecture programs increase outreach into high schools.[i] This finding is concurrent with a perceptible growing trend in the United States in which many institutions of higher education have begun to take a closer look at student enrollment in the realization that various degree programs, including architecture, have historically lacked representation from people of color. In retrospect, this strategy recommended by the AIA has already been acted upon in several schools of architecture that offer summer programs for high school students. These are clearly a step in the right direction, as recent research indicates that participation in college STEM summer bridge programs “double the odds that students plan to pursue a STEM career, compared with students without program exposure.”[ii] Importantly, researchers found this to hold true across a range of demographics and student backgrounds. Visionary leaders in three schools of architecture have begun to look beyond summer programs and to imagine a new type of experience, one that both realizes and amplifies the positive effects that STEM programs have on underrepresented young people. These Architecture Preparatory Programs incorporate college-level architecture curricula into a typical high school semester that engages both the students and their parents or guardians, since data also suggest that parental involvement is critical in encouraging students of all backgrounds to consider careers in STEM fields.[iii]

This paper considers the three Architecture Preparatory Programs currently underway or about to launch: The University of Michigan’s ArcPrep Program (2015), Princeton University’s ArcPrep Program (2018), and the University of Southern California’s A-LAB Program (2020). This paper will assess these programs in light of Sharon Sutton’s recommendations for achieving educational equity

as outlined in her book, *When Ivory Towers Were Black*, ultimately seeking to explore successful methods to attract, educate, and support historically underrepresented young people in the classroom and the profession.

[i] AIA, *Diversity in the Profession of Architecture*, Executive Summary (2016)

[ii] Joseph A. Kitchen, Philip Sadler, and Gerhard Sonnert, "The Impact of Summer Bridge Programs on College Students' STEM Career Aspirations," *Journal of College Student Development* 59, no. 6, (November-December 2018) DOI: <https://doi.org/10.1353/csd.2018.0066>

[iii] Christopher S. Rozek, Ryan C. Svoboda, Judith M. Harackiewicz, Chris S. Hulleman, and Janet S. Hyde, "Utility-value Intervention with Parents Increases Students' STEM Preparation and Career Pursuit," *Proceedings of the National Academy of Sciences* (Jan 2017)

DOI:10.1073/pnas.1607386114

POST : Inhabiting the Data Border

Stephen Mueller, Texas Tech University

Ersela Kripa, Texas Tech University

We plan to introduce the outlook and methods of a new impact-driven territorial design research initiative positioned on the US/Mexico border. POST (Project for Operative Spatial Technologies) is an experimental, investigative, territorial think-tank situated on the US/Mexico border, which leverages emerging spatial technologies to anticipate transformations in urbanization, land use, and resource depletion in binational desert territories. POST seeks to reconstitute the cross-border 'environment' as design context and the 'built environment' as design outcome, invigorating models for design research within this territorial field.

Desertification and Urbanization

The US/Mexico border region is defined by transnational geographies, shared cultural, ecological and environmental territories which cross political boundaries. Vast transnational deserts in the region are front lines of future urbanization, climate change, and resource conflict, yet are underserved by current geospatial analysis, representation, and design strategies. While the cities and citizens who share borderspace are bound by common interests and concerns, tools for visualizing urbanization patterns, assessing urban life, and enacting transformations across political borders are often limited in scope, method, and impact.

Data Borders

Just as borders enact jurisdictional boundaries, they also create gaps in the availability and interoperability of geospatial data, limiting the ability to forecast cross-border transformations. The geography of borderspace is defined by fragmented, proprietary datasets. Differences in methods, measurements, protocols, and languages leave blindspots for researchers, planners, and designers seeking impacts across a range of fields. Changing political climates and research agendas affect the availability of comprehensive cross-border environmental data. As one example, the US Geological Survey's binational environmental geospatial database, the Border Environmental Health Initiative, has recently been taken offline. Remote sensing and other approaches attempt to fill these gaps, relying on satellite data and other global datasets to document transnational transformations as they occur, but these methods provide only a high-level view and can obscure finer-grained realities 'on the ground.'

Leveraging a Binational Metroplex to Empower a Diverse Student Body

POST leverages its context within the El Paso/Ciudad Juarez region, a vibrant binational metroplex, a productive and dynamic testbed for novel technological, social, and spatial forms, and ideal site for applied research in emerging spatial technologies. The site is both discreet and territorial, remote and hyperconnected. POST's position will allow the center to educate a unique, bi-national, majority-Hispanic student body. The center will train students to identify, visualize, and respond to pressing environmental issues impacting binational desert cities, and prepare them for productive roles in the region and beyond.

RFP: Request for Pedagogy

Irene Hwang, University of Michigan

McKim would indicate to the draftsman where to draw lines and correct them: 'He looked at them for a long time and then said "Just take out that middle line and move it up a little...No, put it back where it was—perhaps a little lower"... it was quite a job to erase and remake the lines smeared in the process, and to repeat that sort of thing for hours on end was hard on the nerves of anyone.' [H. Van Buren Magonigle, 1934]

Though Magonigle describes an experience one hundred years old, such interactions remain widespread in the architecture discipline of today. This autocratic structure, otherwise instituted as

the Beaux-Arts model, was for generations an effective, highly competitive model to ensure the rise of the best work from a group of like-minded and similarly trained individuals.

Today, as architectural practice rapidly diversifies through globalization and technological advances, we face a critical demand for an entirely new mindset when it comes to architectural education. The agility to move between multiplying roles, changing responsibilities, and expanding opportunities is now at a scale far beyond the capacities of one person. The top-down Beaux-Arts mindset, which prioritizes efficiency and competition in the interest of the best answer (above all else) cannot support architectural education, nor architectural practice as we need them today. The meaning of success has radically changed: to inspire and motivate others is far more valuable than maximizing individual productivity (whether singular or aggregated, creative or analytic). What are the next generation of skills, expertise, and intellectual frameworks necessary to create this new mindset? While we should not rehaul the curriculum in its entirety, where we begin change is in how to evolve the teaching of professional practice in the academy.

“While other disciplines, particularly those in the liberal arts and natural sciences, have well-established doctoral-level coursework, the discipline of architecture in the past relied on professional practice as a means to developing disciplinary expertise.” - AIA, [The Architect’s Handbook of Professional Practice]

As the professional reality of architectural practice has radically transformed in the last decade, the teaching of professional practice as a core course has remained static for nearly four times as long. Even while current practice explodes into many different innovative models and methods, the teaching of professional practice has hardly budged. We must turn our focus to a new tertiary, the territory between the historical binary of the scholarly pursuit of the academy and the practical work of the profession. To that end, this paper presents a new mindset for teaching professional practice by unpacking piloted methods and concepts through five compact case studies: 1) First Day of Class: Setting the Tone for Engagement 2) Syllabus: The Importance of Transparency 3) Collaboration: Challenges of Reframing the Hated Group Project 4) Curricular Value: Why Credits Matter 5) RFP: Request for Pedagogy

Results Were Mixed: Improvisational Comedy in the Collaborative Studio

Sarah Hirschman, University of California, Berkeley

The joke has two-way communication built into it; it is a call that demands a response. The joke is a social as well as a creative act. While the joke response (laughter) might differ from the response an architect might be seeking (awe?), nevertheless conscious responsiveness is something that can be learned from the immediate feedback loop of comedy. The mechanics of collaboration in the academic design studio context are defined loosely, if at all. Working together is an expectation in the field, but very little time is spent choreographing collaborative moments of exchange or examining the assumptions that go into them. Business gurus tout the relative strengths of introverts and extroverts in a productive corporate culture, but rarely do organizational logics trickle down to the studio trenches. Instead, the design process is focused on the individual's experience of iteration and evaluation. But what happens when there's more than one person involved in producing a design (as is often the case)? How do we talk about the productive work of interaction and negotiation? Like representation techniques and tools, should modes of collaboration be something we explore with our students as fundamental to design? Architecture can learn from comedy, where well-worn formats of improvisational interaction are used to leverage the collective knowledge of a group above an individual. The first rule of improv is to say "Yes, and..." meaning that you accept the conditions provided to you and you build upon them, you work with what you've got. Your success as a player lies in your ability to pivot from one scenario to the next, to think laterally and to develop frameworks that are aware of the contingency of meaning. This is not unlike the work of an architect, who must reconcile competing stakeholder interests and demonstrate agility throughout the design and construction process. Improv is problem solving by shifting mental backdrops, by carefully tracking multiple potential meanings at once. A common misconception is that improv happens by accident, but the most enduring and popular formats are in fact hemmed in by clear boundaries. This submission engages with these clearly defined modes of collaboration as a pedagogical rubric and reports on techniques and practices as advanced through teaching done in 2017 and 2018 at two different universities. Specifics of improvisational formats like the Harold were explored alongside other techniques drawn from comedy as frameworks for engagement between students, modes of interacting within the studio. Students were expected to display an improv comic's agility as they explored new modes of documenting their findings, preoccupations, ideas, and processes. Results were mixed. The presentation of this paper will simulate a studio meeting in microcosm, including an exploratory improvisational exercise following discussion of findings from a studio taught in this

fashion during spring semester 2018. Overall pedagogy will be outlined, as will findings on relative success of assignments throughout the semester while a slideshow and videos of students engaged in improvisational exercises play in the background.

Design and Government

Cathi Ho Schar, University of Hawaii At Manoa

Among all of the services that governments provide—social, cultural, political, economic, and ecological expertise and analysis, for example—design thinking and design services are typically absent. Yet, there is an emerging movement in design-thinking practices toward government integration that presents lessons for architecture pedagogy and practice. Back in 2002, the Danish government established MindLab, an innovation unit within the ministries of Business and Growth, Employment, and Children and Education. In Singapore, the Prime Minister’s Public Service Division established the Design Thinking Unit, with the mission to involve users in redesigning policies and services. In the U.S., similar integration is reflected in governmental partnerships with design-based for-profit companies like IDEO, non-profits, like Bloomberg Philanthropies, and other government initiated innovation centers. This paper presentation will provide a typological and critical assessment of these government integrated practices to provide an overview of their governmental integration, structure, staffing, expertise, scope of services, types of projects, evolution over time (including shutting down), and the academic certificate and degree programs which have developed to support this emergent field. These findings pose important questions for architects: How can we rethink our role and agency as architects with respect to the needs of the government? How might we expand our application of design methodologies to include both goods and services? How can we partner with government to meet the demand for more citizen engagement, participatory democracy, innovative leadership practices, and organizational change? Grand challenge problems will require the design of policy, systems, networks, and new relationships. Architecture is uniquely situated between design disciplines and design scales to embrace the full spectrum of design services needed for these problems. Case in point: the University of Hawaii Community Design Center was established in 2016 as a multi-disciplinary intergovernmental research, planning, and design resource to work for and with the state government. The state legislature appropriated \$1.8M in 2017 to five state agencies to pilot this partnership. The first two years of work with state agencies reinforce this interest in design services that are systems-centric, and include design thinking and strategy services ahead of and in combination with conventional physical planning and design. This

discussion will offer two projects as case studies: one with the State Office of Planning and the other with the Department of Public Safety, both demanding systems redesign to rethink their agency norm. This discussion will reflect on the project scopes of work, team make-up, deliverables, and desired outcomes that vary greatly from conventional design projects. For example, these projects culminate in process frameworks, guidelines, manuals, and criteria that can be broadly applied to future projects and practices. This challenges us to rethink the content, deliverables, and outcomes of what we teach. How might we combine the design of systems (operational), services, and space to provide architecture students with a more complete toolkit for change? Because, given an opportunity to partner with the government on designing for change, we aren't designing what we used to.

SATURDAY, SEPTEMBER 14, 2019

2:00pm – 2:45pm

Finding Opportunity in Complexity: A Case for Tackling More, Not Less, in Beginning Design Studio

Brian Holland, University of Arkansas

Urban Transformations is an architectural design studio pedagogy developed to serve both pre-professional and non-design-major students from liberal arts colleges. The studio comprises a semester long student-driven design investigation tackling the strategic transformation of a complex urban project. Starting from the premise that in complexity lies myriad opportunities for discovery and transformation, the studio establishes a robust platform for beginning students to encounter the richness and expansiveness of the discipline, and to understand and explore architecture's capacities as an agent of positive change in the world. This proposal – part paper, part discussion session – aims to explore the effectiveness of this approach, while simultaneously identifying and evaluating promising opportunities for wider application. From the very beginning of the semester Urban Transformations takes the form of a targeted case study in which each student investigates a notable building or public urban space in New York City and explores its latent potential for transformation by design. Each student is assigned their own project, tailored to their particular background and interests, and in the first half of the semester they begin by researching their assigned site and developing an intimate understanding of its past and present conditions using maps, images, plans, models, and diagrams. From this research, they develop a historical narrative, a programmatic and spatial analysis, and an original proposition for its future transformation through design. During the second half of the semester, students then test this proposition through an iterative architectural design process. As case studies, the assigned projects serve a dual pedagogical role: they are both architectural design precedent and site of design intervention. They provide students with a rich context for both inquiry and action. They serve simultaneously as the social, cultural, and physical setting for student design work, and as rich historical precedent from which foundational lessons about architectural and urban design can be grasped. The case studies serve to ground students' explorations within a clearly defined context from the first day of studio, productively limiting the scope of their investigation, while the openness of the brief provides ample latitude for students from different backgrounds to leverage their own particular talents and interests toward unique and original ends. What a complex, urban project facilitates for beginning design students is a depth and

richness of engagement. Like a great work of literature, it asks students to wrestle all at once with its many layers—with its clarity and contradictions, its strengths and shortcomings—and to evaluate its evolving place in, and meaning to society (past, present, and future). Students come to recognize that to work with the built environment—especially in challenging urban environments—is to work with and within many contexts simultaneously. The task of the beginning design student is surely not to be comprehensive in this effort, but to find their own way to engage. Ultimately each student’s efforts to define their own approach reveal insights not only about the object of study, but also about themselves and their own nascent interests in design, architecture, and the built environment.

Noodle Soup

Stephanie Sang Delgado, The Ohio State University

As digital interfaces become more prevalent in our daily interactions and conversations, a common misconception is that interfaces are only digital and therefore new. In reality, architecture has always been an interface. This project, Noodle Soup, was conceived as an architectural scale interface to highlight this relationship between the user and the built environment. The result was an interactive playscape. Noodle Soup is composed of two main elements: the walls and the noodles. The walls and stage, made out of traditional wood framing, are the only fixed element in the composition. They were conceived as having been ‘peeled’ up from the ground on one side and sculpted into seating on the other. This contrast between natural and artificial is further articulated by having the concave side clad in a green shade of synthetic turf, blending it into the ground. The convex side is clad in a neon shade of turf so as to reinforce its artificial qualities. As the viewer makes their way around the composition, some walls recede into the greenery of the landscape, while others emerge to the foreground as geometric objects in a picturesque forest. The noodles are waterproof bean bags arranged throughout the composition in various lengths. They are made primarily of PVC coated polyester mesh fabric — which provides weatherproofing for extended exterior use — filled with recycled foam peanuts. Typically used for covering outdoor stage electronics, this fabric material is durable and lightweight. The fill is carefully customized so as to give the noodle enough weight to withstand wind, but light enough so individual users can reposition them as they wish. In the end, the soft elements can interact with the hard structures to serve functional purposes such as seating, but they can also act as oversized toys, freely configurable in a variety of ways. The user can loop, knot, stack, and rearrange the noodles to shape the environment for their own needs. The walls and stage acts as references and constants for the ever-changing landscape. Through this interface, Noodle

Soup empowers the individual's artistic agency and blends whimsey, playfulness, and interaction into a transformable constructed landscape with both predictable and unpredictable results. By emphasizing the ever-changing environment, the project hopes to entrust the user with control over their surroundings.

Potemkin Fabrications: Administrative gymnastics, messy boundaries, and the alternative facts that enable Design-Build Pedagogy

Michael Hughes, American University of Sharjah

Emily Baker, University of Arkansas

Mo Zell, University of Wisconsin-Milwaukee

Rick Sommerfeld, University of Colorado Denver

Celebrated as a mechanism for engaging 'real' projects much of the contemporary design-build literature foregrounds the action-learning embedded in the physical act of making a piece of architecture at full-scale. Participating students and faculty comments regularly highlight the direct encounter with the materials and method of construction as well as the collaborative, cross-disciplinary nature of community engagement. Brian Mackay-Lyons, founder of the Ghost Lab in Nova Scotia, argues that "Pragmatism is the best teacher" and "Technology is best learned by making" and he links design-build to, "The apprenticeship model of architectural education—its roots in the master-builder tradition of the Middle Ages." (Mackay-Lyons 2008, p 135 and p138) However, the conventional fixation on the construction process and final products obscures the complex, often unappetizing, 'behind the scenes' logistics necessary to implement, and sustain, new pedagogies.

This paper examines the unseen, generally unspoken compromises, contortions and ethical dilemmas confronting design-build faculty as they navigate the numerous, often mutually exclusive, structural gaps separating normative university culture and the culture of making. In addition to the obvious challenges associated with making the most insidious challenges reside in policy handbooks that establish standard teaching load formulas, accredited curricula requirements, grant guidelines and tenure processes. Extraordinary time commitments combined with legal concerns at the administrative level conspire against widespread implementation while liability concerns and academic calendars present additional obstacles. Simply put, design-build does not fit neatly within the Academy.

Beyond the Academy the myriad of preparatory negotiations related to funding, partnership agreements, legal considerations and infrastructural logistics associated with project acquisition and

preparation can take months to complete. The involvement of property owners, stakeholders, department administrators, university officials and lawyers, and municipalities suggests the extent to which external contingencies and extensive dialogue shape the projects. These preparations typically occur before students even enroll in the course. In the face of these challenges faculty may be forced to limit the project scope, employ external assistance and/or take on inappropriate liability to increase the likelihood of 'successful' project completion. In more extreme circumstances faculty may conspire, with or without the explicit approval from their Dept. Head or Dean, to manipulate course schedules, coerce participation outside regular class times, create skeleton syllabi to provide participants with additional credit hours or ignore safety concerns. Similarly, administrators have been known to redirect departmental resources, provide unofficial incentives, manipulate teaching loads and cover-up for inexperienced faculty to preserve the appearance of success. Exposing these hidden truths and discussing them openly can illuminate the real costs borne by participating faculty and programs while simultaneously enabling a safer, more transparent and ultimately sustainable academic structure that acknowledges the fundamental difference between traditional and experimental approaches.

Presented as a round table discussion/therapy session led by four experienced design-build faculty from different schools. Participants will unburden their collective conscience by sharing secrets accumulated over the course of more than twenty design-build projects that have been recognized with ten ACSA Awards and twelve AIA Awards.

Deconstructing and Improvising Racial Justice **Shawhin Roudbari, The University of Colorado Boulder**

The architecture of our urban spaces are complicit in racial injustices. While responding to the illegal violence against black Americans at the hands of the state, the Black Lives Matter movement (BLM) compels us to consider architecture's role in shaping segregated and surveilled neighborhoods and housing. BLM's demands compel us to ask what roles architects, design educators, and our students can play in social justice movements in general, and racial justice activism in particular. Fifty years ago, in his keynote presentation to the AIA, Civil Rights leader Whitney Young demanded our action. He implicated our field in racial injustices in the inner city and directed us to reflect the mandates of black liberation movements in our work and through our labor. We propose an experimental method

of engaging with architecture's role in racial justice by first using forensic architectural methods to deconstruct the role of urban and architectural space in cases of police violence against black citizens, and then by imagining architecture's role in mobilizing for racial justice through performative methods. The audience will be engaged in an experimental method of improvisational performance coupled with theory development. This method is being tested in the physical sciences, less in the social sciences, and perhaps not yet in architectural analyses of social problems. The work of *The Ellipses Condition* is an example of this method of co-producing knowledge. Building on the pioneering work of Eyal Weizman and Forensic Architecture, we conduct a spatial analysis of case study events of state violence against black citizens with architectural tools (e.g. digital models of architectural analysis at the scales of the body, space, and neighborhood). Second, we use this architectural analysis as the basis of an improvised interpretation, through movement (jazz dance), of the relationship between architecture, racialized state violence, and racial justice activism. Through engaging in performance of what is for some an overwhelming sense of spatial oppression and for others an invisible set of relationships between space and race, improvisational movement has the potential to make visceral what is otherwise theoretical or hypothetical. We argue that this method has the potential to assist architecture practitioners, students, and educators in imagining our discipline's role in racial justice. We propose an experimental action that involves a simultaneous display of: (a) an architectural analysis of actual cases of state violence against black citizens, (b) spoken word, and (c) improvised movement. Images from the architectural analysis will be projected on the walls of the space. Spoken word will be used to narrate experiences of racial injustice and ways architectural historians, theorists, and designers have written about this topic (e.g. Wilkins 2007, Mitchel 2003, Sutton 2017, and the author 2019). Improvisational movement will be performed by an improvisational jazz dance collective that works with social scientists to explore alternative forms of disseminating and constructing theoretical and performative knowledge. This experimental workshop experience will engage conference participants at their level of comfort (e.g. as spectators versus participants in the expression).

SATURDAY, SEPTEMBER 14, 2019

3:00pm – 3:45pm

Future Teaching in History and Theory Of Architecture. Digital Capriccio and Mobile App

Annarita Cornaro, American University in Dubai

Rubén García Rubio, Al Ghurair University

The courses of History of Architecture have nowadays the difficult challenge to engage students on topics related to the past, catch their attention among the digital devices they are distracted by and develop a critical approach and a global vision in order for them to have a deep understanding of the progress of architecture all along centuries and decades. The aim is not only to allow students to absorb the main concepts but also make them able to select and elaborate a strong visual/conceptual background to use in their personal creative process. In order to bring the teaching methodology of the History of Architecture to a farther step, able to combine the vision of the past with a critical thinking of the present, and a consequent creative expression for the future, the authors (both faculty at the American University in Dubai and instructor of history courses, and design studio), introduced the tool of the digital Capriccio. The term capriccio (pl. capricci) appears for the first time in the Vocabolario della Crusca (1612) as a “fantasy, thought, whim or invention. Its pictorial origin has the root in Francesco Colonna’s book *Hypnerotomachia Poliphili* (1499). During the XVIII century, Capriccio becomes an artistic genre of painting. This visual composition, based on fragments, have demonstrated the ability to adapt to more recent scenarios as in the case of Avant-garde architecture (Archigram) and contemporary design (EMBT Miralles Tagliabue). The method demonstrates also a flexible adaptivity to ITC. In fact, starting from the traditional manual representation methods, Capriccio is able to move to digital computer tools and quickly adapt to the use of mobile device apps. The paper intends to describe the teaching experience in Theory and History of Architecture Courses, where students, use software packages and mobile devices apps, in order to give an instantaneous response to architecture concepts through digital capricci. They are requested to produce their own capricci creating a digital composition of simulated spaces that can be obtained by combining fragments of renowned buildings or composing together more abstract forms, with the aim of expressing the concept behind an architect, a style or a movement. The experiment follows the theory by Walter Benjamin of the “art in the age of mechanical reproduction” bringing architecture to the same concept of being a simulacrum of the original source. The paper

would like to open a discussion, during the conference, in order to understand future teaching in history and theory of architecture, it will start from the digital Capriccio, a tool that demonstrates an effective and stimulating bridging between past and present. An experimental session, simulating the class environment, will be held during the presentation of the paper, with the production, by the audience, of a digital capriccio through the use of mobile apps such as PhotoshopMix and Instagram.

The PhD Project: How a collaboration between the academy and industry changed business schools (and what can we learn)

Mo Zell, University of Wisconsin-Milwaukee

I presented alongside Walter Wilson, FAIA and Godwin Amegashie City of Madison policy advisor at an AIA Emerging Professionals Leadership workshop. During the discussion regarding equity, diversity and inclusion we considered the number of licensed African American architects in Wisconsin. Sadly, you could count them on your hands – under 10. And women licensed African American Architects is even less – just one in the entire state of Wisconsin. A week later during an event with architecture students, a minority, female student asked me – “I’m glad you run a Women in Design organization, but I see mostly white women involved. Who is going to understand what it’s like to be a minority woman student? Who is going to mentor me?” This solidified my resolve that I need to act now. I can no longer wait for others to step up. Perhaps architecture can appropriate a solution from another field. In 1994 there were 294 minority business school professors (less than 2%), today there are over 1500. To solve the pipeline problem of getting more workplace diversity, the PhD Project focused on increasing the diversity of business school faculty. In 25 years, the PhD Project made significant progress through three initiatives: marketing, conferences, and targeted mentoring (through a series of committee associations of Minority Doctoral Students). The PhD Project formed as a partnership between business firm leadership (KPMG served as the founding sponsor) and business schools. Currently, over 300 minority doctoral students are receiving support through the PhD Project. Imagine if architecture schools partnered with firms and industry to create our own PhD/Masters Project program.

In 2015, according to the ACSA atlas data, full time faculty of color are less than 20% while students of color hover between 30-35%. Of the 20% faculty of color less than 5% are black and less than 1% are native American. The lack of gender and racial diversity in architecture needs to be addressed by a consortium of committed individuals from academia, industry, and the profession (and all of their

complementary organizations AIA, ACSA, NOMA, WIA, WID, etc.). Investment from all of these groups in both time and resources need to be committed to tackle the problem. Many if not all of these groups have been working on the problem of diversity but often in a localized setting (ie, NOMA's Project Pipeline) and with limited resources. However, this session will detail a proposal to unite architecture schools, professionals and industry partners to support more minority faculty in the academy that in turn supports workplace diversity. A summary of the business school PhD Project will be shared and then participants will divide into breakout groups to contemplate how to translate this into the architecture discipline and profession. Who will fund this? The largest US firms: Gensler, Perkins + Will, SOM, HDR, HOK, AECOM? Does the Carl D. Perkins Career and Technical Education (CTE) Act passed by Congress that supports expanded outreach to underrepresented students in K-12 education offer additional funding opportunities?

Inclusive Design Studios: Identifying Road Blocks and Developing Best Practices

Stephanie Pilat, University of Oklahoma

Hans Butzer, University of Oklahoma

In 1991, Sharon Sutton identified the studio culture of architecture schools as one of the road blocks to diversifying the profession.[1] Sutton argued that the central emphasis on aesthetics and celebration of the Howard Roark model of genius, disenfranchised students with broader interests. As she explained, "An exclusionary definition leaves the choice to become an architect to those few people who wish to practice a 'gentlemanly' art..."[2] While architectural curricula have evolved in the intervening decades, the culture of the design studio teaching methods and role models remain far too similar to the one described by Sutton nearly three decades ago. Drawing on recent research on the cultivation of expertise, student motivation, and stereotype threat, this collaborative session considers how we might reinvent studio pedagogy. Participants will be invited to draw on their own experiences, identify road blocks and collectively develop evidence-based strategies for creating a more inclusive design studio culture. This session will be organized into 10-minute overviews of recent research followed by 20-minute small group discussion periods. First, Anders Ericsson's research on the cultivation of expertise upends the popular belief that some people are innately good at things like music or art. He contends that most people can cultivate expertise through what he calls deliberate practice.[3] How might this research challenge the idea that faculty should be responsible for identifying talented students and weeding out others? Does it suggest that studio faculty have a responsibility for cultivating expertise through deliberate practice methods? Second, faculty often

believe fear of public criticism and shaming motivates students. Yet research on learning suggests three factors are critical determinants of student motivation: supportive learning environments, student efficacy, and student perceptions of the value of assignments.[4] How might this research prompt reconsideration of teaching strategies, assignment briefs and learning environments? Finally, Claude Steele's research on stereotype threat demonstrates that the messages faculty convey affect students' performance in different ways depending on existing stereotypes.[5] A negative message before a math exam, for example, may cause girls to underperform relative to their abilities because of the influence of the stereotype that girls are bad at math. How might we best work to overcome the influence of stereotypes that plague the profession of architecture? By the end of the session, participants will have collectively developed recommendations for overcoming road blocks to change and using evidence-based strategies to develop a more inclusive design studio culture.

[1] Sharon E. Sutton, "Power, Knowledge, and the Art of Leadership," *Progressive Architecture* 73, no. 5 (1992): 65–68.

[2] Sutton, 67.

[3] Anders Ericsson and Robert Pool, *Peak: Secrets from the New Science of Expertise*, 1 edition (Boston: Eamon Dolan/Houghton Mifflin Harcourt, 2016).

[4] Susan A. Ambrose et al., *How Learning Works: Seven Research-Based Principles for Smart Teaching*, 1 edition (San Francisco, CA: Jossey-Bass, 2010), 66-90.

[5] Claude M. Steele, *Whistling Vivaldi: And Other Clues to How Stereotypes Affect Us*, (New York: W. W. Norton & Company, 2010).

How to teach history and theory of architecture differently?

Pari Riahi, University of Massachusetts, Amherst

This project is based on experimentation with pedagogical methods to teach architectural history and theory of the recent past (primarily 20th century) as a critical and productive tool that can nurture one's appreciation and understanding of the different facets of the design process. Based on the firm belief that architectural theory is the basis for the praxis as it unfolds and takes many forms, the process described in this paper departs from a deep belief in making history and theory palpable by situating them within each student's field of investigation. The course was structured around five major themes: 1) Looking Back To Look Forward: Cultural And Historical Origins 2) Processes Of Control And Design Processes: Control/ Agency/ Mediations 3) Beauty: Form-Centric/ Process-

Oriented/ Cultural 4) Performance: Embodied Experience/ Simulated Environments/ Participatory Events 5) New Territories: Explorations. The themes covered a range of thematic topics one can gravitate around to cover the breath and depth of architectural endeavors of the past years. Each student was encouraged to commit to a theme, and became one of two or three advocates of their designated subject matter throughout the semester. The semester, which started with presentations based on designated readings, culminated in a series of debates between the members of each group in form of a public forum to be attended by everyone. In creating themes around: origins, process, beauty, performance, and new territories, the structure asked the students to focus their attention to areas that might be of interest to them, encouraging them to start thinking about their Master's thesis way in advance and identify possible avenues of research and inquiry in anticipation of their future projects. After selecting a theme, each student initiated the process of reading around, about and above the subject matter through two very clear threads: On the one hand a series of written theoretical texts should be explored, analyzed, and presented to class. On the other hand, one or more projects, were thoroughly investigated, analyzed, taken apart and put back together to demonstrate how the students have deepened their understanding of the subject. The necessity of presenting a project, not as an anecdotal precedent, but as a deeply understood project through investigating drawings, images and films, became a vehicle for students to express their interpretations of an architect work. These exercises aimed to break away from a distanced and passive way of studying history and theory. Instead, the students were asked to carefully look, contextualize and internalize processes of thinking and making architecture. The most surprising outcome of teaching a history and theory seminar in this format was the final debate, in which students had constructed arguments and rehearsed their oppositions and agreements by integrating their convictions with those of the work they had studied. The arguments, though not always fully articulated, promised of a new and invigorating energy invested in understanding the works of the recent past otherwise.

Surveying the Contribution of Women within Architectural History Macarena de la Vega de Leon, The University of Queensland

Today, we are bombarded not only by academic discussions on what global may mean for architectural education, but also by what social movements like #MeToo and #TimesUp may mean for current architectural culture. Since 2004, all accredited architecture programs in the United States have been altered to increase the standard of comprehension of non-western architecture

resulting in an urge to reconfigure survey courses. Still today, however, a majority of architects are awarded their degrees after studying programs characterized by a lack of acknowledgement of under-represented minorities. Recently, Mark Jarzombek argued that to achieve global we first need to accept that it is still a promise to be fulfilled, we first need to see its absence; and for the longest time half of the human race was absent from the surveys of architectural history. Kathleen James-Chakraborty is not the first female scholar to write a global survey of architecture, contrary to what Murray Fraser posits in his review of her book *Architecture Since 1400* (2014). As is the case with many scholars, James-Chakraborty experienced difficulties finding a suitably inclusive book for her survey courses on architectural/art history –even after the early 2000s shift towards global. During the course of our communication, she shared the reasons that prompted her to write the book: she did it “furious about the coverage (or lack thereof) of work by women in all these books and manuscripts” she was being asked by publishers to use or to review. *Architecture Since 1400* is intelligible and readable; it has even been considered a joy to read, and it synthesizes previous scholarship, as is the case with any survey. It is not, however, a comprehensive overview of the global development of architecture, of its modernization, during six hundred years. Rather, James-Chakraborty’s approach redefines what modernization even means from a global, not Eurocentric-Enlightenment, perspective. In spite of its limitations and absences, James-Chakraborty’s narrative is built in terms of architectural transfers and cultural exchanges, and emphasizes, as Rixt Hoekstra has put it, the role of all “agents of the built environment,” including important women patrons of the arts as well as women architects –rather than “genius-architects.” This poses a redefinition of architecture itself. This paper aims to demonstrate that by taking a globally inclusive perspective, James-Chakraborty’s contribution goes beyond the mere revitalization of the survey, and redefines it. Current academic conversations and literature on global revolve around the study of transnational exchanges causing what Jarzombek has referred to as “the explosion of the discipline,” while the reconfiguration of survey courses seems to be falling behind. In his review, Fraser considers *Architecture Since 1400* “the First Year survey course we wish we had been given.” This prompts the question: with more inclusive literature now available, are existing approaches to survey courses being effectively updated?

THE HOW // Material Selection in Beginning Design Supports Diversity in Studio Culture

Kristopher Palagi, Louisiana State University

Engaging beginning design pedagogy as a catalyst for nurturing diversity within architectural education, this paper positions an argument for an ad-hoc selection of the modeling materials and drawing mediums utilized in first-semester, first-year assignments. A survey of three legacy pedagogies -- Paul Klee and Wassily Kandinsky's writing's on Point, Line, and Plane, Steven Holl's graduate-level beginning design coursework at Columbia University, and John Hejduk's 9-square grid assignment at the Cooper Union -- identifies a common reductive approach to the modeling materials and drawing mediums assigned. It is the author's position that these reductive approaches actively narrow the field of ideas, viewpoints, and therefore cultural diversity of the studio. By filtering key lessons imbued from the reductive contrivances assigned, this paper presents a series of projects and exercises that support the development of self-critique, empathy, and exhaustive design investigation through an exploration of an inclusive collection of student selected materials. Developed over four years of instruction, the assignment briefs, lecture notes, selected student evaluations, and work collected from over 300 students highlight the unique, individual-driven inquiry of the approach.

Sources:

1. Dreamer, Peggy. First Year: The Fictions of Studio Design Perspecta 36
2. Hejduk, John, Henderson, Richard., Diller, Elizabeth., Irwin S.Chanin School of Architecture., Education of an Architect. New York: Rizzoli, 1988. Print.
3. Johnson, Daniel Stephen, "Columbia University's Introductory Pedagogy (1986 - 1991)" (2013). Electronic Theses and Dissertations. Paper 1110.
4. Jencks, Charles, and Nathan Silver. Adhocism: The Case for Improvisation. updated. Cambridge, Massachusetts: The MIT Press, 2013. Print.
5. Kandinsky, Wassily, Howard Dearstyne, and Hilla Rebay. Point and Line to Plane: Contribution to the Analysis of the Pictorial Elements. New York: Pub. by the Solomon R. Guggenheim Foundation for the Museum of Non-Objective Painting, 1947. Print.
6. Klee, Paul. Pedagogical Sketchbook. London: Faber and Faber, 1968. Print. Faber Paper Covered Editions.
7. Ockman, Joan, and Rebecca Williamson. Architecture School: Three Centuries of Educating Architects in North America. Cambridge, Mass.: MIT Press; Washington, D.C., 2012. Print.

8. Poling, Clark V. *Kandinsky's Teaching at the Bauhaus: Color Theory and Analytical Drawing*. New York: Rizzoli, 1986. Print.

SUNDAY, SEPTEMBER 15, 2019

9:00am – 9:45am

Upcycling Embedded Intelligence: Purpose, Process, and [Immediate] Results Edward Becker, Virginia Tech

How can distributed manufacturing and the innate intelligence of everyday materials be aligned to transform our built environments? How can increasingly accessible open-source communities and affordable digital manufacturing tools help facilitate such a change [and fast!]? This abstract posits that while accessible digital manufacturing technologies already allow consumers to become prosumers, albeit rarely taking prosumption beyond the scale and complexity of a tea cup or small toy, a powerful, potentially game-changing avenue for the discipline exists in the prosumption of high-performance building products or assemblies by the everyday citizen designer or citizen builder. Such prosumption can be facilitated through the upcycling of intelligence embedded in open-source data - meaning that expert-level design knowledge can be optimized and packaged for widespread amateur production through open-source networks. Such a distributed, grass-roots application of higher-order thinking can create large scale change in a bottom-up manner, a significant benefit of open-source systems. The upcycling of embedded intelligence holds the potential to immediately impact how we practice and teach, but also how we collectively frame the role and agency of the architect in twenty-first century open-source economies. The author proposes to demonstrate how such an upcycling of embedded intelligence can occur in terms of architectural purpose, process, and results/impact through the exhibition of a series of engaging, well-articulated architectural drawings and 1:1 fabricated components. The research project to be exhibited - a Timber SmartWall designed by the author - will provide a roadmap for how one can design and package expert knowledge for amateur production. It will also speculate on the risks and potential disciplinary/pedagogical impacts of such a process. The Timber SmartWall project uses readily available digital manufacturing tools to strategically manipulate wood for enhanced indoor comfort levels and reduced energy use. The project uses a locally-optimized, CNC wood slicing technique to maximize the wood's latent heat sorption and related hygrothermal performance metrics, thereby using expert wood science knowledge to turn simple timber elements into high-performance indoor architectural products. Such a project demonstrates how high-level knowledge may be translated for distributed manufacturing and how embedding intelligence for amateur production can allow architects to tap into wider swaths of the general population than our discipline typically engages (e.g., if the

SmartWall is fabricated at home on one's <\$1,000 Maslow CNC, the SmartWall panels could be installed in the home by a layman for immediate aesthetic and energy-related benefits). If "more action" is "urgently" needed per the conference brief, architects would be wise to explore alternate models of practice and teaching that can allow for rapid, progressive, large-scale impact to occur. Upcycling embedded intelligence through open-source networks and distributed manufacturing outlets holds the potential to be such an avenue for change.

Pilgrimage as a Pedagogic Practice to Advance Social Justice, Tolerance, Individual Emancipation, and Compassion

Julio Bermudez, Catholic University of America

Contemplative practices seek to instill a non-self centered, equanimous, just, and attentive engagement of reality. Given our usually distracted, self-obsessed, and socio-culturally distorted minds, a contemplative attitude depends on effecting a fundamental change in perspective. While a variety of methods have been developed through the ages, the most well-known ones resort to internally-induced techniques (e.g., breath, mantra, prayer). However good, these practices depend on first-person or subjective processes and contents and, therefore, prove limiting for addressing communal or interpersonal matters directly. In order to advance the second-person dimension of our humanity, our social, embodied, and behavioral relationships must be engaged. This realization led most contemplative traditions to develop methods based on external and interpersonal interactions. One of them, the practice of pilgrimage, is particularly relevant for those in Higher Education interested in the cause of social justice, tolerance, individual emancipation, and compassionate relationships for several reasons.

First, pilgrimage is intended for lay people and therefore matches the conditions of students, staff and faculty, therefore facilitating its potential adaptation. Second, fundamental to the practice is the (social, cultural, ethnic, economical, language) displacement that the traveler must consciously, patiently, kindly, and non-judgmentally undergo in order to perform their duties. The result is the suspension of many of the pilgrim's cognitive, emotional, and behavioral patterns, de-facto causing a realization of their own intrinsic biases and opening new ways of approaching the world — a positioning that is contemplative. Successful pilgrimages often occasion profound and lasting alterations in the itinerant's beliefs, attitudes, and behaviors. Third, the practice of pilgrimage finds particular traction in today's age of massive (ethnic, economic, religious, etc.) migrations, escalating (racial, class, gender, etc.) disparities between social margins and centers (to use bell hooks'

metaphors), and the economic, political, and cultural forces driving globalization and its growing counterpart, nationalism. Although pilgrimage may involve the visit to a foreign land, it may be more easily and effectively accomplished by a short drive to a different part of town if we prepare ourselves properly. One of the wonders (and challenges) of contemporary civilization is precisely the remarkable diversity in which we live and, too often, are oblivious to (or avoid altogether). My presentation will start with a 5 minute introduction of the topic and continue with a guided dialogue with the audience. We will critically examine existing examples that either operate or may be easily turned into a pedagogy of pilgrimage in architectural education. Starting with (1) foreign programs of various types, we will move into (2) Guy Debord's "dérive" suitable to address urban social, economic, political, and racial struggles, (3) the practice of 'aesthetic distancing' that challenges instrumental reason (e.g., Karsten Harries) and enables glimpses of the just (e.g., Elaine Scarry), and (4) collaborative or community-based research, planning, design, and action (e.g., Matthew Chinman). The goal is for participants to debate the potential merits of pilgrimage as a pedagogy and practice of compassion and emancipation vis-à-vis their educational views and experiences.

3D Exquisite Corpse

Javier Francisco Raposo, Universidad Politécnica de Madrid

María Asunción Salgado, Universidad Politécnica de Madrid

Belén Butragueño, Universidad Politécnica de Madrid

THE WHY //

Traditionally, analog drawing has played a fundamental role in Architecture. It is an essential tool of expression, creation, and architectural criticism, that substantiates the architectural pedagogy. However, in recent decades, it is disappearing from the curriculum of most Schools of Architecture around the world. We understand (and celebrate) that the contemporary practice of architecture is, essentially, an interdisciplinary endeavor, where audio-visual media and digital technologies play a crucial role in the creation of spatial experiences. But we consider that the restriction to computerized technologies, does not contribute to internalize the spatial and human conditions of architecture, especially in the early stages of the degree. The smart and controlled combination of the different techniques, generate an exponential improvement of architectural education and creates the necessary link between means and production. Our project pretends to show the importance of drawing as a thinking tool, with an extraordinary transformative ability.

THE HOW //

We are proposing to create a performative experience with the collaboration of the audience. We will try to prove the transformative character of drawing by creating an “Exquisite Corpse” with the drawings generated by the audience during the performance. Triggering images will be displayed on the big screen. We will rely on the European Avantgarde Movements (Twentieth Century), that meant a breakthrough in art and architecture history and a break with the past conception of art. Those movements emerged as a clear response to a convulse political, and socio-cultural moment, strictly related to the post-industrial revolution era and the major technological improvements. The main principle is the understanding of art as a “tool to transform reality”, exploring the relationship between art and life. They meant a radical renewal on the form and the content of art, seeking for innovation and experimentation in the artistic production. The resulting drawings will be transformed into three-dimensional pieces, with just a few guidelines and, altogether they will become part of a huge collage generated by the addition of all of them. We will try to generate an architectural narration following the standards of the “Exquisite Corpse”. The intended action requires a big white wall to tape the production developed by the audience during the performance. Regarding materials, we might need drawing paper, pastels, watercolor pencils, cutters and color markers for the audience.

THE NOW //

This performance will give us the chance to engage with the audience through a transformative and collaborative experience and simultaneously, transmit the importance of architectural drawing nowadays.

How to Build a More Collaborative Practice

Erin Carraher, University of Utah

“The present generation is inclined to think of [the Bauhaus model] as a rigid stylistic dogma of yesterday whose usefulness has come to an end because its ideological and technical premises are now outdated. This view confuses a method of approach with the practical results obtained by it at a particular period of its application. The Bauhaus was not concerned with the formulation of timebound, stylistic concepts, and its technical methods were not ends in themselves. It was created to show how a multitude of individuals, willing to work concertedly but without losing their identity, could evolve a kinship of expression in their response to the challenges of the day.”[1]

Like Gropius, leaders from the academy and profession have cited a disconnect between the critical skills necessary for achieving the promises of contemporary practice and the way we educate future practitioners. Despite (and likely because of) the pace of technological progress over the same period of time, the social and interpersonal abilities—or “soft skills”—that support one of these central abilities, collaboration, have been marginalized for the sake of the ever-expanding technical skill set. The skills of collaborative practice were not seen as teachable in the same way as more quantifiable subjects like structures or history. The rise of “starchitects” in the late 1990s and early 2000s further reinforced the false notion that one person’s creative vision is all that is required to drive the success of an architectural project with studios reinforcing this approach through individual design projects. If the need for collaboration skills is clear in all domains of architecture education and practice, why has the process of developing them not been incorporated in the curriculum or become the focus of continuing education for professionals? Because, as Gropius identified in the opening quote, most current models of education and practice are object-driven and process-focused with little regard to the interpersonal and communication skills that are required to develop, design, and construct buildings in response to client and community needs. This disconnect of the “hard” and “soft” skills is further reinforced by the siloed nature of subject-matter divisions in architecture curricula and the distinct separation between the phases of an architect’s professional development – education, internship, licensure, and practice. With such deeply rooted practices seeming to work against the discipline’s best interests, it is no wonder that it hasn’t been until recently that architects have begun developing a discipline-specific understanding of what collaboration means, how to value it, and how to achieve it. This paper will present the need for architectural collaboration – the skillset of developing, synthesizing, and communicating the interconnected network of social, cultural, material, intellectual, environmental, and technical forces that shape the process of developing designs for an architectural project – to be integrated as part of emerging models of curricula and pedagogy intended to address our contemporary context.

[1] Gropius, Walter, “The Role of the Architect in Modern Society,” address given upon receiving the degree of Doctor of Humane Letters from Columbia University, March, 1961.

Digital aMUSEments: Playing with Case Studies
Michelle Pannone, Marywood University
Margaret McManus, Marywood University

What happens when you require students to engage one architect for the duration of a semester? This case study looks at a digital media course that asks students to do just that. As architectural educators, we often see students use the “precedent building study” as a one-off idea that is meant to inspire via direct influences such as form, materiality, details, etc. Yet, arguably, in all cases, there is a chronicle of other ingredients that make up the recipes of an architect’s work. Encouraging the investigation of such ingredients, this fifteen-week-long case study cultivated a more accurate example of how precedent studies are linked to a greater sequence in an architect’s development. And largely, it gave early design students time to discover such components. The digital media students were in their first year of design, and many of them had not yet been made aware of celebrated (st)architects. Each chose their own, separate ‘muse’ in which to bond with, and the entirety of the class was ultimately introduced to thirty-six noteworthy designers. The course was structured in such a way that parameters were set up through weekly assignments that allowed young design students the freedom to make choices related to both the confines of the task and the breadth of their architect’s work. All the while, the course objectives were related to discovering, learning, and visually communicating through digital software. Yet, there was also an undisclosed, alternate agenda that focused on whether a fifteen-week engagement would enrich the students’ understanding of architectural processes, methods, and precedents that move beyond representational media. Through the weekly digital media assignments, the design students began to establish relationships with, and opinions of their architect; learning where they are from, where they build, their education, their mentors, and their sensitivities as designers. In addition to this exploration, the students were given opportunities to use their architect’s already-authored designs—be it through section, plan, photograph or even sketch—to mimic them, to alter them, to relocate them, to re-envision them: to play with them through digital software. While imposing play in this extended student-architect relationship, it provoked (and continues to provoke) pedagogical questions such as: Are design styles, methods, or techniques passed on from architect to student throughout the course? [How] can we infuse architectural insights through both play and digital media courses that transcend software techniques and representational skills? And is this semester-long engagement beneficial to the students? This semester-long case study results in both quantitative and qualitative assessment of what transpires when students absorb the work of one architect through the lens of a digital media course.

Soft Boundary [4x4]: A Critical Look at Research in Architectural Education

Elizabeth Martin-Malikian, Ana Giron, Caleb Lawrence, Marysia LaRosa, Devon Sams, Breck Small, Jared Triemer, Kennesaw State U.

Architectural research is a broad term with a long history. In the 1960s, architectural research referred to the study of design itself, its purpose and processes. This is still how the term is often used in academia today. This paper takes a step toward characterizing architectural research, where the interaction between Theorem and Practicum is used not only as a guiding principle in the critical thinking process but also is a springboard for constructive practices in the built realm. It is an inquiry into the nature of this interaction and how it may be understood through differential modes of cross-pollination occurring within various aspects of architectural discourse and practice. Specifically, the paper examines the potentialities of architectural research in the first professional degree, or Bachelor of Architecture (B.Arch) program, which traditionally is designed to prepare undergraduate students for practice and licensure.

Using a curatorial process to not only confront the conference theme of 'less talk, more action,' but also create an active dialogue between the master and the student, 16 architects were asked by students to examine and explore the concept of the soft boundary between a theorem and practicum. This collaborative project shifts the structure where the student sets up the premise and the master-architect responds by making. This curatorial investigation is explored in four perspectives, labeled 'about', 'within', 'explore' and 'expand' that are categorized according to their relationship to the soft boundary between Theorem and Practicum. Furthermore, these four attributes permeate and connect the diverse areas of research explored, which in combination provides an argument that rather than questioning: "is doing architecture doing research" as articulated by Jeremy Till, instead asks: "is doing research doing architecture". Our aim is to expand the pedagogical field where the interaction of Theorem and Practicum is not an isolated act, but one of making.

SUNDAY, SEPTEMBER 15, 2019

10:00am – 10:45am

Cultivating a 'New Normal': An experiment in an Ethical Approach to Architectural Education at the University of Johannesburg

Absalom Makhubu, University of Johannesburg

Tariq Toffah, University of Johannesburg

Architectural discourse in both academia and practice is often dominated by architectural imagery and representation—and typically on western standards, of digital production and perceptions of what is beautiful and valuable. Moreover, this often constitutes the primary counterpoint to the core technical disciplinary competences. Within such a framework of disciplinary valuation, production and reproduction, is an ulterior ethic and ethics even possible, or are these resigned to designated 'alternative' modes and sites of practice while a discredited norm remains the normative operating paradigm? How might we change this? How ought we to reevaluate and reorganize the existing knowledge areas within the discipline, and what should be introduced anew into it? How do we understand issues of "context"? And ultimately for whom and for what is design for? These towering challenges represent some of the questions that drove a radically experimental architecture studio at the University of Johannesburg in 2017. It was made possible only against the background of the nationwide protests across higher education campuses in South Africa in 2015 and 2016 (by protesting students, supported by many non-protesting students and staff), which profoundly challenged the conditions of injustice that underpin the current education project and its associated institutional culture, and which provided a wellspring of inspiration and courage for undertaking such a trajectory of disciplinary and ethical critique. Thus in 2017 the authors tested an ulterior pedagogy, methodology and ethic in a design studio, in order to open up a space for developing ulterior ethical and critical architectural concepts. The approach unfolded from engaging both social contexts (such as the theories of social change as articulated in collective protest action), as well as engaging personal/experiential contexts (such as opening spaces for voices, ontologies, values and ethics of both students and tutors from their own positionality and lived experiences). The approach also entailed exploring non-conventional and strategic roles of 'site', such as offering catalytic templates and opportunities for surfacing 'other' values, world-views and forms of socio-spatial organization. Intra-disciplinarily—between architectural and urban design, between technical and discursive foci, and between Design and Theory course modules—as far as possible also made full use of the breadth

of knowledge areas available within the discipline to undertake a project of such complexity. The paper will expand and reflect on this approach and discuss selected student projects as case studies.

Rapid-prototyping fundamental concepts in a studio environment

Robert Gillig, Boston Architectural College

The Boston Architectural College (BAC) is an open-admission school of architecture offering fully accredited Bachelor of Architecture and Master of Architecture degrees. The BAC implements a concurrent-practice model: simultaneous with their academics, students are expected to be engaged in full-time professional practice, with predefined total practice hours and a minimum assessed practice skill level required for graduation. The open admission policy means that students matriculate at the BAC with an extreme range of backgrounds and skills; the concurrent practice model means that students have a relatively small amount of time available for their academics during the academic year. This presents a fundamental challenge to academic instruction at the BAC: the need to deliver rigorous, comprehensive content in a compressed timeframe, necessitating innovative methodologies that condense and reinforce fundamental concepts at all levels without overwhelming students with work. One approach in current development for the BAC's Comprehensive Architectural studio, at both the Bachelor's and Master's levels, is to begin each studio session with a 15-20 minute 'conceptual wind-sprint': think-fast exercises that favor intuitive/felt responses over hyper-rationalized ones. These exercises preference seeing over looking, abstraction over representation, and multiple quick iterations over fewer, more time-consuming ones. A fundamental tenant of this form of training is that as curriculum asks students to develop new and better tools of analysis and understanding while providing less time to use them, the only tools that students are likely to use consistently are those that provide quick, clarifying results- this process introduces and reinforces a form of conceptual 'rapid-prototyping'. We project that consistent, guided use of these types of exercises will introduce into the classroom setting multiple NEAR-TERM and LONG-TERM benefits.

NEAR-TERM:

Students are more likely to arrive on time or early: each exercise commences exactly at the scheduled beginning of class;

Students learn to trust and refine their own intuitions/explorations rather than looking to peers or Instructors for validation of ideas;

Students are typically more engaged during class: follow up discussions tend to be primarily student-led and student-to-student;

Students and Instructors have fun, and classes begin on a positive, energized note;

LONG-TERM:

Structured Intuition: These exercises are projected to help students develop potent tools for rapid problem-solving, building a form of cognitive muscle-memory: repetition reinforces fundamental concepts and the ‘think-quick’ environment forces students to make qualitative determinations that ‘feel right’. Follow up discussion foregrounds reasoned argumentation as a form of conceptual post-mortem: a means of testing and modifying/refining each student’s intuitive responses.

Accelerated Progress: When these exercises are purposefully constructed to directly overlay course-specific processes and deliverables, they serve as a form of accelerator for overall course goals, and tend to cut student’s out-of-class workload. Additionally, these benefits are projected to be cumulatively accelerative. Prototyped versions of these exercises include:

- 30-second diagramming
- 5-line diagramming
- Section flip-books
- Experiential storyboarding
- Verbal diagramming
- 5-minute perspectival collaging
- 3D diagramming

I propose delivering one of these exercises at the conference, followed by a group pin-up + discussion of the results and potentials of this methodology.

Strategic Sites: Latent Ideas

Marleen Davis, University of Tennessee-Knoxville

The hypothetical nature of design studio coursework creates an ideal laboratory testing new ideas for local communities. How can students learn from the actual challenges facing our cities? How can students’ ideas be of benefit to others? In an urban context, this presentation outlines a strategy for leveraging studio engagement in the realm of ideas, as a contribution to community conversations.

Speculation, long-term vision, public space, and future potentials contribute to a public process and citizen voice in decisions affecting cities, communities, and neighborhoods. Perceived as lacking a hidden agenda, student work disarms preconceptions and initiates consideration of new possibilities. Thus, design studio ideas can lay the ground work for long term change. Designers must seek to understand, and respect, challenges confronting a community, including parameters related to citizen concerns, property owners, investors, political nuances, and even costs. This is not capitulation to the reality of status quo banality, nor a bottom-line mentality. Conceived within this respect for complexity, new ideas can provide a vision that motivates reciprocal action. How can design studios, architecture faculty, and students gain credibility for these kinds of conversations? Show up. Be respectful. Communicate carefully: listen and use a common language. Identify challenges, parameters, and ideas. Instead of expounding a “critical” perspective, welcome criticism as well. Consider compromise as the territory between idealism and reality. Entering that territory is not a sacrifice of ideals, but can provide a basis for real action informed by ideas and ideals. The studio critic frames the terms of engagement, through the identification of a strategic site. As a form of pedagogy, the strategic site, might have the following characteristics:

- Is currently undervalued or underutilized
 - Might suffer from conventional assumptions
 - Has the potential for future change, transforming its surroundings
 - Has latent ideas which can spark new ideas related to future change
 - Analysis and design are complementary strategies for creative thought in design thinking.
- Creative analysis of a strategic site, in the context of community concerns, can reveal latent design ideas which students explore in design propositions. Visualized in drawings, sharing design ideas with a broader community can engage the interest and enthusiasm of a broader constituency. This a first step in motivating action.

The studio critic can also seek strategic partners who lay the groundwork for influential community partnerships. Strategic partners might be influential leaders from citizen groups, the private sector, the city staff, and/or elected officials. Too often, community engagement in architecture programs is assumed to be some type of beneficial design-build action. This presentation looks at ideas for strategic sites, as a practice for future action. This presentation represents design work in a medium sized city, of value to other medium sized cities. Over the last 15 years, the presenter has built up local credibility with community engagement. Furthermore, the presenter ran for elected office at

the county level. Even in this cynical, partisan political context, design ideas for a better future finds resonance with citizens.

Narrative, Self and Engagement: An Immersive T(r)ropical Experience

Michael Mossman, University of Sydney

Anna Ewald-Rice, University of Sydney

'The Declaration on the Rights of Indigenous Peoples affirms the minimum standards for the survival, dignity, security and well-being of Indigenous peoples worldwide and enshrines Indigenous peoples' right to be different'. (<https://declaration.humanrights.gov.au/>)

The WHY:

Architectural education is empowered with agency and a capacity to critique socially inequitable issues, yet rarely rises to the challenge. Indigenous Australian community ways of being, knowing and doing are influenced by traditional and historical narratives, and spaces of engagement on the periphery of a settler-colonizing framework. Settler-colonial societies such as Australia are steeped in Indigenous narratives of invasion, dispossession, oppression, and ongoing discrimination. Moreover, the acts of engagement between Indigenous and non-Indigenous has occurred consistently across time to inform changes and allow new ontologies, epistemologies and axiologies to emerge. This workshop provides opportunities to engage with new audiences to acknowledge and appreciate new dialogues. While these narratives and engagements are both mourned and celebrated and everything in-between, immersive and experiential inquiries that center this dialogue still have little or no visibility in architectural education environments. As architects, a critical duty of care in contributing to community and cultural well being is inclusion rather than exclusion. Consciousness of rights of Indigenous peoples requires sustained and innovative approaches to include and empower these peripheral voices in architectural learning, teaching, research and practice. Narrative and investigation of self, engaging with interstitial spaces and the power of immersive environments provide 'the how' and the 'the now' to substantiate 'the Why'.

The HOW: Narratives of the self and 'spaces of engagement'

Students reflecting upon their own stories within the spaces of engagement helps to facilitate a reciprocal cultural exchange and a heightens awareness of cultural difference. Reconstructing contextualized cultural narratives into architectural education requires an emotional leap of faith to

enable rich, previously unknown expressions. A case study studio in collaboration with an Indigenous Australian community demonstrated that students drawing their own stories encouraged exploration of qualitative spatial implications, unpacking the connection between the narrative of self and how one engages with the spaces of others. This experience will contest binary norms of society to enable the emergence of new and authentic dialogue and inquiry.

The NOW: Immersive Environment

The workshop will be set within a freespace, a removed context defined by a curtained circular shaped 'core' which allows highly controlled light and atmospheric experiences. Through audio and projected visuals, participants will be immersed in a contextualized setting. They will engage in deep listening to hear its stories and observe Country. This immersion acts as a catalyst, initiating reflections on self and participants own stories that can then create dialogue in the space of engagement, culminating as culturally responsive design practice. Taught in the method of the participatory pedagogy, a hands-on workshop provides participants a first-hand experience of coming to understand how architecture can advocate the cultural needs of Indigenous Australian communities. The creation of active culturally responsive environments is important where Country, community and performative acts all have a presence.

FORM AND FORMLESS

Tamar Zinguer, The Cooper Union

May 13, 1847

Dear Fatherly Friend,

Yesterday... an idea struck me, which I feel prompted to communicate to you. I thought, might not a plane of sand be made a useful and entertaining game? By a plane of sand I mean a low, shallow box of wood filled with pure sand. It would be a Kindergarten in miniature... Sand is a material adaptable to any use. A few drops of water mixed with it would enable the child to form mountains and valleys in it, and so on.”[1]

A former student in Friedrich Froebel's kindergarten, Hermann von Arswald started a school of his own, and shared with his master these pedagogical thoughts. Friedrich Froebel, inventor of the

Kindergarten and the famous “Gifts”—a structured series of wooden building blocks that gradually decomposed solids into planes, lines and points—assimilated the sandbox within his practices but did not develop the idea further. Tracing the mention of ‘sandbox’ in the writings of Froebel’s disciples, it became clear that the idea found a receptive ground, literally and metaphorically, with the female kindergarten teachers, his students, who had advanced his principles. The sandbox, although first conceived in Germany, took root in America following the work of early childhood education pioneers, most especially Emma Marwedel who settled in California and established the first American public, free Kindergarten in Berkeley, employing Froebel’s Gifts and a large sandbox. Her book “Conscious Motherhood” included a chapter on ‘Sand Work’, which greatly influenced the later generation of educators in the United States. Many of those were single women, who chose to dedicate themselves to their career. The Sandbox became the actual brainchild of these pioneers, attempting to redefine in a new land what education might be. Opposed to the geometrically structured Gifts, sand work allowed for fluid and temporary formations that were reminiscent of other 19th Century investigations, such as the experiments with ‘planes of sand’ made by the German physicist Ernst Chladni (1756-1829), demonstrating different acoustical vibrations. While Froebel’s Gifts were meant to provide the young player with knowledge of the solid world, play with sand promised to impart the young player a sense of nature’s less tangible logics.

During this ACSA Conference session, architects and educators most likely versed with ‘form’, will play with Froebel Gifts as well as with sand, and will be asked to reflect about the formless in education. Each of these pedagogical practices has had decisive influences on a variety of scales, from the grain to the city. And while the shifting character of works of sand naturally ascribes them to the ‘formless’, could sand simultaneously present a different, structured nature? Together, we will follow the qualities of this play-scape and look at the sandbox beyond its origins to understand its cultural meanings. The sandbox is a space in flux, mediating between the individual and the city, between the artist and the child.

[1] Friedrich Froebel, *Froebel Letters*, edited by Arnold H. Heinemann, Boston: Lee and Shepard Publishers, 1893.

Working Group: Fostering Inclusivity in Architectural Education

Erika Lindsay, University of Detroit Mercy

Emily Kutil, University at Buffalo

Architectural education is broken. As the profession fights to remain culturally relevant, academia continues to celebrate a homogenous canon of architecture that is male, white, wealthy, and western. Architectural pedagogy continues to propagate an outdated model, demanding students give themselves over entirely to the pursuit of an unreasonable workload, spreading students thin in the process and necessitating an inhumane amount of all-nighters. This model limits access to non-traditional college students, including underprepared students, single parents, caregivers, and those who may need to work while attending school. As faculty, we have become complicit in this form of hazing which does not acknowledge healthy boundaries and prioritizes architectural education above all else. While this may have been the possibility for the vast amount of university attendees in the past, today that remains possible for only a small percentage of wealthy students who can afford to attend school, live on campus and are not expected to work while doing so. In this session, we will examine the pedagogical structure of architectural education to understand how it affects underrepresented groups and threatens the diversity of architectural programs and the profession at large. Participants, acting as co-conspirators, will work collectively to identify covert and overt barriers that stand in the way of licensure and the groups most affected by these barriers. Upon identification of the obstacles, participants will collectively ideate strategies for dismantling barriers and discuss tactics in-progress that work to foster a more inclusive environment. This working group intends to address a variety of strategies/tactics that are relevant to teaching and research institutions. Specifically, this session seeks to: 1. Identify covert and overt barriers to access. 2. Identify groups most affected by these barriers. 3. Brainstorm possible strategies to help dismantle these barriers. 4. Discuss tactics in-progress that foster a more inclusive environment. 5. Compare similarities and differences between teaching and research institutions. 6. Continue working toward the identification of practices that can be shared across programs.

Exchanging Projects: Matchmaking in the Architecture Studio

Mike Christenson, University of Minnesota

This conference's Call to Action asks authors to include a specific statement of intention for engaging conference attendees. For the work described in this abstract, the author proposes an experience for attendees to test, in real time, the author's instructional model for architectural studios in

professional degree programs. Briefly, the instructional model depends on the exchange of projects at one or more points during the term. The author has informally tested the instructional model at two different institutions, at undergraduate and graduate levels; the conference experience will relate and build upon lessons learned from the most recent iteration, a seven-week studio addressing NAAB criteria for integrated design. In the studio as taught, on fixed days throughout the term (e. g., every three weeks), each student in the studio effectively transfers individual ownership of their project to another student in the studio. The mechanism of exchange can vary: in expectation of an upcoming exchange, students may strategize with each other to determine optimal trades, or they may elect to abandon themselves to the possibilities of engaging a new project selected at random. Once ownership is transferred, the student who originated a project moves on to new responsibilities, although they may elect to remain involved in the project's future development (e. g., by participating in small-group critiques with the new owner of their old project). The new owner of a project becomes responsible for its development: if challenged to explain or justify a design move taken by their predecessor, they may elect to defend it, or to alter the project in response, but they cannot avoid the responsibility that comes with ownership.

The exchange has spatial as well as temporal implications for the studio. In place of a traditional juried review, wherein each student takes a turn presenting their work to a panel of experts, the exchange studio relies on the review as a working session, in which the invited experts are obligated to provide practical advice to students concerning the strategic and tactical advantages and liabilities inherent in the act of exchanging projects. In this way, the review operates something like a matchmaking session in which a student may choose a project based on its apparent comfort and familiarity, or perhaps based on a tactical assessment of risk and perceived reward. Conference participants will be asked to engage in a two-part, rapid, paper-based design exercise. Participants will exchange their work with each other using various operational modes as assigned by the instructor, meant to simulate (on a much-reduced scale) the process at play in the studio. For example, the instructor may assign in advance a pair of participants to exchange work with each other, while another group of (say) three or four participants may have their work randomly allocated to each other after its completion. The exchange is followed by a short charette, and the experience will conclude with participants briefly sharing their experiences, criticisms, and suggestions.

SUNDAY, SEPTEMBER 15, 2019

11:00am – 11:45am

The New SPC: Speculative Pedagogical Charrette

Marc Maxey, University of Nebraska–Lincoln

Ellen Donnelly, University of Nebraska–Lincoln

This interactive working session will be a curriculum charrette - for an institutionally unencumbered new school of architecture. Unlike recent experiments in design education including the Free School of Architecture or the University of the Underground, this session will draft a curriculum for an architectural program that is not post-professional, but professionally inclined. Here, “professionally inclined” actively reconsiders what it means to practice architecture, and seeks to position the academic and the professional on a friendly spectrum of practice. To set the stage for the curriculum charrette, participants will receive a brief history (via a visual timeline) unpacking the institutional tightening of architecture practice and architectural education, including the various evolutions of the AIA, ACSA, NCARB, and NAAB. Similarly, a selection of 20th century experimental pedagogies/institutions including Escuela e Instituto de Arquitectura PUCV (Valparasio, Chile) and SCI-Arc, and experimental studios like Venturi and Scott-Brown’s Learning from Las Vegas (which encapsulated an entire semester’s credit hours into the studio structure) will provide precedent and inspiration. The curriculum charrette will ask the following questions, and more: if architectural pedagogy is temporarily liberated from the degree requirements of universities, the onerous requirements of NAAB, and the expectations of the AIA, what do we prioritize in architectural education? And how do we structure teaching to convey these priorities? What should be taught in terms of skill and technique? How do we prioritize design over the design of narrative? Should architectural education be more (or less) integrated between the studio and supporting courses? What should the duration of an architectural education be? The charrette seeks participants who have an itch to change the status quo, to question our institutions, our relationship to and with them. The charrette seeks participants who recognize that true change can not happen within our current institutions of higher learning, and desire a dialogue fostering diversity of voices, multiplicity of perspectives and the celebration of individual thought to create a more collaborative and cooperative way towards pedagogical change.

Co-Creation: Collaborative Design Practice as Pedagogy

Ann Yoachim, Tulane University

Ceara O'Leary, University of Detroit Mercy

Collaborative design practice provides opportunities for architectural education to disavow the trope of the hero architect, flip the power dynamic of client and designer, and engage with complex social and ecological challenges. At the same time, questions of impact, relevance, equity, design quality, and efficacy abound when considering these models. Focused on the "why", but grounded in both the "how" and "now", this workshop will explore the complexity of community driven collaborative design practice with a bias towards action. Participants will reflect on existing efforts and identify new ways for collaborative design practice to serve as a critical component of architectural education at their respective institutions. The workshop will be facilitated by leaders from two university based community design centers with collaborative design practice at the core of their respective missions. The keywords which shape the facilitators and their respective center's practice and pedagogy also frame this workshop: co-creation, collaboration, critical reflection, and coalition and capacity building. As envisioned, the workshop will respond to the needs of those who attend; offering value to both those who are actively engaged in collaborative design practice as well as those participants who are only beginning to consider what this may mean for their curriculum or individual courses. Collective lessons learned, burning questions, current challenges and existing models may serve as jumping off points. Participants will have the opportunity to reflect and raise individual topics, work in pairs and small groups, and engage with the entire group on collective concerns. The hope of the facilitators is that participants not only come away with answers, but also more questions and the workshop serves as impetus for faculty collaboration and knowledge transfer across institutions, expansion of evaluation and assessment of collaborative design practice as pedagogy and development of new directions and models.

1x1 in REAL TIME

Paola Zellner-Bassett, Virginia Tech

Sharone Tomer, Virginia Tech

Donna Dunay, Virginia Tech

This session seeks to bring to life the interactive learning experience of collecting and working in an architectural archive. More specifically, this session will create an experiential expansion and discussion of a growing international archive of women in architecture. The archive was founded to

pursue the mission of challenging the imagination by collecting and preserving the work of women in architecture and design related fields, and making the work available for research. As a result, after 34 years, the archive has acquired more than 400 collections of the work of pioneering women and women's organizations. Through various initiatives, the archive is expanding and fostering the writing of new history, filling significant gaps in the history of the disciplines. While written history is the basis of the traditional ways of learning, we propose to use this session to present an additional education method through the direct encounter with original work. We propose an Action consisting of an exhibition, set up for the entirety of the conference, where elements of the archive's 1x1 initiative* will be collected and displayed on site, with a session devoted to discussing the collection and resultant experience. By offering an alternative to discussing published work, the session will bring to life the intimate engagement that can occur with artifacts, prior to their history being interpreted, processed, and written. The session seeks to share the multilayered opportunities students are afforded in engaging with original artifacts in the archive, simultaneously learning about the particularities and diversity of forms of practice. The importance of the role model is expanded: in such an archive, students may easily project themselves into these women's practices and processes, sharing questions, recognizing doubts, ideas, impulses, interests, within a history not yet written. The aim of this session underlines layers of learning and information available by engaging not-yet-processed, original work that can foster curiosity in all its arising unanswered questions. While knowledge gained from direct experience does not replace written history, the impact of these experiences can be consequential and transformative. To capture the experience of building an archive in real time, women architects and designers attending the ACSA Fall Conference will be invited ahead-of-time to contribute one original flat work, accompanied by a CV, and a handwritten paragraph noting the work's significance, describing how this piece sparked a breakthrough in their education or practice. Participants will also be invited to contribute an original work by other women. Flatwork may include sketches, drawings, diagrams, collages, prints, screen prints, photographs, outlines or synopses of written work, among others, artifacts of a revelatory moment. We look forward to this experiential session to propel knowledge of under-represented groups and frequently hidden methods in architecture. * 1x1 initiative seeks to collect one important piece of work from every single woman in architecture and design.

Towards Focusing Aided Architectural Design (FAAD) - Introduction Workshop
Meni Rosenberg, Technion, Israel Institute of Technology
David Behar, Technion, Israel Institute of Technology

We propose a practical introduction workshop to Focusing Aided Architectural Design (FAAD, like CAAD). This workshop is based on our ongoing research, which has been investigating case studies of architects who integrate Focusing in their practice. Two to three hours long, it will be an opportunity to learn about this emerging field, and mostly to experience and experiment with a practical toolset we would like to offer as capable of expanding and upgrading how we actually practice as architects, and thus how we educate and initiate becoming architects. Focusing is an easy to learn technique developed in the 1970s by American philosopher and psychologist Eugene Gendlin. Essentially a flexible and iterative protocol of meaningful conversation, it effectively enables the moving back and forth between the pre-reflective order of felt embodied experiencing and the conceptual, rational order of our ordinary mode of operation. Used and researched initially in Psychotherapy, it has since been applied and its integration researched in various disciplines, such as Education, Creative Arts, Management, and Organisational Psychology.

Our research is indeed the first to explore the integration of Focusing in architectural practice. We are excited to find that such integrated practice cultivates a palate of felt spatial flavors and patterns, not merely cerebral, as well as the language and ability to communicate it. Our findings also suggest that Focusing Aided Architectural Design systematically improves the architect's ability to break loose from the automatically ordinary, to confidently and patiently dwell in the murky edges of uncertainty inherent to the process, to better recognize and engage with new patterns and possibilities, and to find fresh, meaningful, effective, and often surprising ways to act. It appears that a capacity for radical listening is developed, which cultivates genuine curiosity and empathy and leads to a practice in 'higher resolution' and in a continuous and ever richer dialogue and relation with the heart of a project, clients and users - as whole human beings, place and its spirit, and the unfolding design. Furthermore, an enhanced sense of meaning seems to develop, as well as of well-being and vitality. Our research suggests Focusing Aided Architectural Design may offer a significant human upgrade to the 'operating system' of the 'black box' of architectural practice. The things architects do remain: discussing, sketching, CAADing, modelling, writing etc. Yet, with FAAD, they do them with an expanded mindset - more present and conscious, more sensing, more empathic, more confident and more vital, and with the capacity to consider every aspect in any phase of a project in relation to its embodied felt sense vis a vis communicating and working with this felt sense on the ordinary level of objective thinking, with other people. For the Fall Conference in Stanford, we wish to offer an

opportunity to learn about Focusing Aided Architectural Design, and mostly to experience and experiment with a practical toolset we are developing for practicing and becoming architects, which does not require previous training or reading in the theory of Focusing. Thanks for the resonating Call to Action.

Do Not Try to Remember: Bruce Goff and the American School of Architecture

Stephanie Pilat, University of Oklahoma

Angela Person, University of Oklahoma

“A new school, probably the only indigenous one in the United States”[1] is how Donald MacDonald characterized the School of Architecture that developed at the University of Oklahoma (OU) in the postwar years. At the time, schools in the United States followed either the French Beaux Arts model centered on the classical tradition or the German Bauhaus model centered on abstraction and materiality. The University of Oklahoma stood apart from these two trends and developed an original and American approach to design. Under the leadership of Bruce Goff (1904-82), Herb Greene (b. 1929), Mendel Glickman (1895-1967), and others, OU faculty developed a curriculum that emphasized individual creativity. Students were taught to look to sources beyond the accepted canon of western architecture and to find inspiration in everyday objects, the natural landscape, and non-western cultures such as the designs of Native American tribes. As MacDonald described, at OU there emerged “a truly American ethic, which is being formulated without the usual influence of the European or Asian architectural forms and methodologies common on the East and West coasts of the United States.” While OU students developed a keen awareness of global architectural history, when they arrived in the design studio, they were instructed: “Do not try to remember.”[2] They were advised not to use classical details and proportional systems nor modernist pilotis and grids. They were not to copy the work of their instructors. Instead they were advised to design in response to “people, place, materials, time and spirit.”[3] They were challenged to earnestly respond to the natural context and sincerely consider the needs and desires of the client. Most importantly, they were to trust their own creative instincts. This paper revisits the pedagogy and legacy of the American School and asks: what lessons might we draw from this outlier today?

The results of this pedagogical experiment—the fantastic environments imagined on paper and through built works—are characterized by complex geometries, attention to context, and resourcefulness. In the post-colonial intellectual context of the US, however, many leaders of the Architectural Establishment were suspicious of anything indigenous. As Susan King explained, “In the

minds of the Ivy Leaguers and big city critics the jump was from Beaux Art to Bauhaus because it allowed them to retain their umbilical cord to Europe. The American School cut that umbilical cord.” Nevertheless, traces of the intellectual legacy of the American School may be found today in the proliferation of complex geometries of space, design-build programs, sustainable strategies to human settlement, landscape, materials and place, and participatory design methodologies that are now commonplace to academics and practitioners. This presentation will share many never-before seen images of the work produced by the American School architects and challenge us to reconsider how pedagogical models best foster individual creativity,

[1] Donald MacDonald, “Preface: American School of Architecture.,” A+U 1981, 17.

[2] Bruce Goff, “The School of Architecture at the University of Oklahoma, 1947-56,” A+U, 1981, 13.

[3] “Letters to the Editor,” House Beautiful 97 (June 1953): 251.

Contextualizing Study Abroad: Teaching cultural empathy through architectural ethnography

Aki Ishida, Virginia Tech

How could study abroad programs for architects be opportunities to teach cultural empathy? The experience of leading recent study trips in Asia and Europe have shown that there are alternatives to the conventional travel tours, or post-disaster reconstruction projects, to study the cultural dimensions of architecture. Drawing from on-site observation of buildings in use raises cultural, social questions that are critical to understanding the forces that shape architecture. For example, students may wonder about residential kitchens that directly face the road in Tokyo, or the wood lattices that conceal a Kyoto machiya storefront instead of revealing the interior with an expansive window. These inquiries in turn inform why contemporary Japanese architecture might take on forms different from the western counterparts. This paper argues that architectural ethnography can be a way by which cultural empathy is learned.

Ethnography is defined as “the recording and analysis of a culture or society, usually based on participant-observation.” Whereas the studies are generally recorded in writing in the social sciences, architects can also use drawings as a tool to observe and record architecture’s cultural context on site. Through a student-centered activity of drawing from observations—under faculty guidance but not based upon a master-student model—the students learn to ask questions that link social behaviors to form. Ethnographic drawings have been used by Japanese architect Kon Wajiro, who is known for his line drawings documenting the artifacts of daily life in Tokyo following the 1923 Great

Kanto Earthquake. Kon's work has influenced the work of Atelier Bow Wow, whose partner Momoyo Kaijima co-curated the exhibit "Architectural Ethnography" at the 2018 Venice Biennale Japan Pavilion. Their books *Made in Tokyo* and *Pet Architecture Guide Book* explore ways of observing and drawing architecture and urban spaces from the perspective of those who use them, rather than the designers and planners. The drawings capture urban artifacts such as vending machines, recycling bins, merchandise display racks, and traffic lights that suggest a sense of daily use and cultural rituals that may feel unfamiliar to non-Japanese; they often starkly contrast photographs that are taken for architectural monographs which precisely remove these artifacts from their picture frame. Non-Eurocentric destinations are particularly potent for architectural ethnography studies, coupled with an agenda that contrasts the traditional grand tour of canonical buildings, which have generally focused on form. Western cultural contexts are often assumed to be understood because they are more familiar to Americans. Additionally, study abroad is a way for international (non-US) students to be equally or more acquainted with the destination culture as the American students. In contrast to the generally Eurocentric education in the US that can marginalize prior knowledge of international students, study abroad equalizes opportunities for all participants to contribute; outside of an environment that favors American ways, knowledge from their native country can shorten and deepen their access to another architecture culture and diversify architects' voices.

SUNDAY, SEPTEMBER 15, 2019

2:00pm – 2:45pm

Design as Intention: Bringing Problem-solving for Action into Studio Education

Gioia Connell, Yale University

Alicia Imperiale, Yale University

"We can't solve problems by using the same kind of thinking we used when we created them."

- Albert Einstein

This workshop seeks to use interdisciplinary methodologies to investigate both barriers and tools for positive change in architectural education. The inspiration for this workshop arose in a current discussion between a graduate student and studio critic in which the student, a dual-degree candidate, brought the practice of “participatory design” from an allied field to bear upon the design problem in studio. This radically opened up the topic to a much larger discussion between us and within the larger studio setting. The workshop will be facilitated by this student and studio critic in a non-hierarchical manner, recognizing the multivalent quality of learning in studio. Our intention is to emulate such a discussion in a workshop at the ACSA conference to experiment with problem-solving as a catalyst for action in studio education. We will begin with a brief introduction to methodologies and then establish a set of activities and goals for the workshop, allowing for group self-assessment and collective discussion at the conclusion of the workshop. Participatory design, once shunned in architectural education, is fast becoming a staple in other academic settings—particularly those focused on cultivating change makers. Pedagogies, methodologies, and matrices have been developed across disciplines from economics to environmental science in order to tackle what design theorist Horst Rittel dubbed “wicked problems”—those that constitute the openness of questions regarding design. Building on the theories of Rittel and Umberto Eco, we look to use frameworks that capture broader issues at hand in architectural education in order to identify creative approaches to first identify problems and then ideate their solutions. Recognizing the need for change is the instigator. Commitment to change is the refiner. Empowerment is the goal. Problem and resource identification are key in these arenas. If our problems are lack of work and life balance, stress, competitiveness, misogyny, and lack of diversity, we ask—how do these issues present themselves,

how are they generated, and what systems perpetuate them? Is it education, practice, or the political economy at large? What defines these environments? We look to investigate together with workshop participants how problematic practices are established, how they function, and what it means to break them. Returning to the facilitative tradition of architecture in school gives value to this aspect of work as well as improves how it is practiced. We advocate for including relationship building as part of creative problem solving at the outset, specifically as a means to create change and begin to address issues of inclusion, equity, and diversity in our collective learning environment. The focus will be on using both conceptual and physical tools for working through problem definition and problem solving with the goal of returning to our classrooms empowered with a new toolset toward a conscious approach to shift the future of architecture.

Our Cities, Our Selves

Tom Marble, Tom Marble Architecture

Our Cities, Our Selves is a model class, a combination seminar + studio course that explores new methodologies for addressing seemingly intractable problems plaguing cities.

THE PREMISE

The class is based on the observation that cities change not in a series of large movements but building by building, the product of a specific interaction of particular individuals. Each interaction leads to another; it addresses one imbalance but produces new one, which begets a new interaction, and so on. Fueled by persistent imbalance, equilibrium is never achieved. The city unfolds, interaction by interaction, a process whose byproducts are individual buildings.

Through the course of these interactions, it might be worth stepping back to ask ourselves: what sort of city are we making? What is it becoming? And, perhaps more crucially, what are we becoming?

THE COURSE

Twice-taught twice at a school with an immersive “block” system (students are dedicated to a single course over three and a half weeks), Our Cities, Our Selves is divided into two parts:

THE SEMINAR

For the first week, mornings are spent discussing readings ranging from theoretical physicist Carlo Rovelli's "Reality Is Not What It Seems" to digital thinker Kevin Kelly's, "What Technology Wants." The readings are selected to highlight the role of interaction occurring in a variety of fields -- physics, chemistry, biology, anthropology, psychology, sociology, technology, and cosmology. The students will be required to write a short paper in which they are encouraged to explore their own ideas, drawing from the readings.

THE STUDIO

Afternoons are spent making things. The first week introduces the students to spatial problems of increasingly complexity. In the second week, the students are introduced to the site and tasked with building a physical model of it together as a class. Then they are divided into groups and instructed to interact with people – to connect – with store owners, local residents and workers, the homeless, as well as developers, local non-profits, city leaders, etc., to determine which issues they would like to focus on and where the project might fit best. The groups formulate their own design programs, which are further articulated in a series of group and class critiques.

THE PRESENTATION

The groups develop their designs using virtual and physical models. Mid-reviews are conducted with local architects and urban designers as well as other stakeholders invited by the individual groups. The final projects are presented to the City Council with interested stakeholders taking part in the discussion.

THE UPSHOT

The success of the class has been demonstrated in two specific ways. First, following the presentations to the City Council, several of the ideas were deemed worthy of further exploration – two actually implemented. Second, half the students changed majors, choosing to enroll in the nascent architecture program, with this class as one its core courses.

THE NOW

The paper, *Our Cities, Our Selves*, will be presented through direct and indirect interaction with the audience to demonstrate its central premise. No special accommodations are required.

Theater of Bodies: Cadaver as Pedagogy

Blair Satterfield, University of British Columbia

Daniel Friedman, University of Hawaii At Manoa

Marc Swackhamer, University of Minnesota

This paper contemplates the contemporary design studio as an anatomical theater. For example, at the heart of the beginning design curriculum, we imagine a “cadaver”—a teaching corpse, star of the show. The word “cadaver” derives from the Latin *cadere*, “to fall.” Falling immediately implicates its opposite condition, standing, which abides as the ruling assumption of all regulated construction and building; each term is likewise freighted with moral and ethical connotations, e.g. “stand-up fellow,” “fall from grace,” “upstanding citizen,” “member in good standing.” Our approach therefore shifts the analogy of buildings and bodies from uprightness to recumbency, and from composition to decomposition. Terms like “cradle to cradle” and “building life cycle” envision all scales of design and construction as analogous to living (as distinct from necrotic) tissue—healthy bodies, healthy metabolisms, healthy ecologies, all capable of biomimetic regeneration. Alternatively, our paper aims to explore the role death plays in both the empirical and the analogical reasoning that drives conventional building production and performance. We expressly address the question of how to teach standing through falling, life through death, and desire through decay, which also describes the role of the cadaver in medical education. With rare exceptions, the professional curriculum in architecture has no such tradition or integrated practice, nor has the literature on architectural pedagogy adequately explored the unique material benefits of the cadaver in medical school. The word “dissection,” given the privileges typically assigned to wall sections in studio and construction science, is in itself a sufficient locus of inquiry. Similarly, the words “anatomy” and “detail” both come from root words meaning “cut,” respectively “cutting up” and “cutting into pieces.” Our paper issues in three parts. Part One explores the history of the cadaver from its adoption as a critical component of medical education to the present day, when synthetic and digital cadavers increasingly encroach on the role of a dead bodies in the classroom. This section of the paper summarizes the cultural, scientific, and ethical consequences of the integration of cadavers into the professional medical curriculum. Part Two explore a specimen First Year studio, developed and taught by the authors, abandoning all traditional approaches to introductory design. Instead, the 30-week syllabus emerges around derelict kitchen appliances—stove, refrigerator, dishwasher (hot, cold, wet)—one dead appliance distributed to each of nine 15-student sections. Students first study the role of these appliances in domestic experience, especially food preparation and custom; then delicately dismantle

the appliances as though cadavers, documenting each part in multiple medias; and then transform those dismembered parts into a variety of morphologies, culminating in musical instruments, which they play in the performance of an original score. Part Three explores the potential of hybrid “architectural cadavers” utilizing “mixed” or “hybrid” reality—the merging of real and virtual worlds to produce new environments and visualizations where physical and digital objects co-exist and interact in real time—including and especially hacked fabrication tools that support a program of structured disassembly and analysis in and around the life of dead buildings.

Architecture Exhibitions: The Pedagogical Edge?

Ellen Donnelly, University of Nebraska-Lincoln

Architectural exhibitions have proliferated during the 20th century and are becoming the primary driver of architectural discourse. In the essay “Just What is it that Makes Today’s Architectural Exhibitions So Different, So Appealing?” Sylvia Lavin explains the recent “shift in focus from the image of the architect as recipient of work [buildings] to the image of the architect as giver of opportunity to show work (in the form of access to gallery space) reflects the degree to which exhibition culture is not only increasingly central to architecture but is an increasingly pivotal force in defining architecture itself.”¹ This paper will expand upon Lavin’s claim and will explore our current exhibitionary impulse as a crucial pedagogical moment in architectural education. The paper and discussion session will explore past and present exhibitionary moments that have shaped pedagogy to speculate on how exhibition culture can serve as a vehicle to reconsider how and with whom we communicate and teach. In museums and private galleries, exhibitions are required to reach the general public in addition to professional architects, academic architects and members of the art world. In this context, exhibitions serve “to reflect on current dilemmas, to provoke inquiry and debate, and to determine architecture and design’s implications for everyday life.”² Galleries in schools of architecture have the advantage of primarily catering toward individuals - students and faculty - with a high level of fluency within the field of architecture, enabling exhibitions to avoid didactic formats and instead focus on contemporary disciplinary questions. This has enabled academic galleries to become sites of experimentation which encourage innovative thinking and promote active design-research agendas. The Architectural Association exhibition program, initiated by Alvin Boyarsky in the early 1970s exemplifies the potentials for a reciprocal relationship between teaching and exhibitionary practice.³ Using Boyarsky’s AA and our current moment as two distinct starting points, this paper/session will position architectural exhibitions as sites of urge and

fascination which enable their creators (curators, designers, teachers) to rethink both pedagogy and audience. As such, exhibition production will be considered as a pedagogical design tool which fosters craft and speculation, skill and imagination, criticality and creativity, resulting in an active reconsideration of architectural education.

1. Sylvia Lavin. "Just What is it that Makes Today's Architectural Exhibitions So Different, So Appealing?" in *As seen: exhibitions that made architecture and design history* by Zoe Ryan (New Haven: Yale University Press, 2017).
2. Zoë Ryan. "Taking Positions: An Incomplete History of Architecture and Design Exhibitions," in *As seen: exhibitions that made architecture and design history* (New Haven: Yale University Press, 2017).
3. Irene Sunwoo. "We fight the battle with the drawings on the walls: Exhibiting Architecture at the Architectural Association," in *Exhibiting Architecture: A Paradox?*, eds. Eeva-Liisa Pelkonen, Carson Chan and David Tasman (New Haven: Yale University Press, 2015).

Measuring what Matters

Linda Samuels, Washington University in St. Louis

For two years sociologist Mathew Desmond lived among the poorest renters in Milwaukee to understand firsthand the fine grain of America's eviction crisis. How is it possible, he wondered, that stable shelter was often chronically elusive for 1 of every 5 black women in the city. Not only do the evicted face the obvious risks associated with homelessness, they lose connectivity to neighbors that makes a social safety net, affiliations with schools and associations that build collective memory, ties to political wards and council districts that foster engagement in the democratic process, and motivation for investment in quality of place that builds safe and cared for neighborhoods. Dr. Mindy Fullilove calls this unwelcome displacement, and its larger version perpetuated by the pandemic of urban renewal, root shock. Fullilove argues that the collective displacement of 1,000,000 African Americans in nearly 1000 cities across the country created root shock at the scale of an entire race. Today in St. Louis, the National Geospatial Agency revealed its latest plans for their NGA West campus, which includes one 712,000 square foot office building, a "visitor control center" and two parking garages. On 92 acres of land, claiming to be located in the heart of a historic neighborhood as a "project that will transform a swath of [the city] hollowed out by decades of disinvestment" (Barker 2019), today's announcement fails to report the entire eradication of the neighborhood, whose last

homes were razed to make way for the NGA, or the urban renewal, shady real estate transactions, and malignant neglect that instigated and perpetuated the neighborhood's demise. To add insult to injury, the new NGA will sit adjacent to the old Pruitt Igoe site, where the spontaneous urban forest that emerged after the imploding of the infamous project is being bulldozed for cheap housing, disposable retail and a two-bed hospital. Life expectancy nearby is 17 years less than in counties five miles west. Tax incentives for both projects measure in the hundreds of millions of dollars, most funneled to a single developer currently in legal trouble with the city for unfulfilled promises and unethical purchasing practices. But the cost of the NGA West project and hundreds of projects like it in the country that continue discriminatory practices of urban renewal under the name of economic development, continue to prolong the neoliberal paradigm that development dollars are the sole value worth pursuing and that consideration of social and environmental costs – both the visible and the invisible – are not part of the equation. As educators of architects, landscape architects, and urban designers, we introduce constructed measurement frameworks like LEED ND, STAR Communities, SITES, Living Building Challenge, BREEAM and others that mask the true costs of the pro-growth model. This call to action asks participants – intentionally interdisciplinary actors – to grapple with the value of the immeasurable in design work – rootedness, hope, happiness, opportunity, justice, democracy – and to work towards strategies of measuring what matters rather than only measuring what's profitable.

We Belong Here

Doron Serban, Academy of Art University

Sameena Sitabkhan, Academy of Art University

Homelessness, or the state of being unsheltered, does not have a simple solution, but instead is representative of a state that requires many, thoughtfully designed responses at different scales that encompass the sensitive nature of the human spirit. As studio instructors in San Francisco, a city that is struggling with the weight of an ever-increasing unsheltered community, we are poised to address the challenge from the perspective of forming an empathetic response to the SF unsheltered community. This group of individuals are often underestimated and underrepresented in the decisions that rule their lives, and because of this, it is through personal engagement and conversation that perhaps a step forward may be found. Our undergraduate students develop their political voice as fledgling designers advocating for their unsheltered clients. The first step in becoming advocates involves the act of sharing a cup of coffee, a simple gesture that sparks

conversation, the sharing of time, and a sense of community. While change can and does exist in a variety of forms and gestures, the student-designed Guerrilla Coffee Unit (GCU) roams the streets of San Francisco offering opportunities for the unsheltered community to be served and heard. The GCU is rolled out on any public space sidewalk that is bound by the sit/lie ordinance (section 168 San Francisco Police Code) which forbids sitting or lying down on the sidewalk, an ordinance specifically designed against the homeless/unsheltered community. The moment is symbiotic, offering students the opportunity to learn directly from their prospective clients, and in turn offering their clients the opportunity to teach and share. This exercise emboldens our undergraduate architecture students to design with empathetic minds, training them to confidently engage with different groups born from their conversations with a particular homeless resident, and using that knowledge to design for the greater unsheltered community. The goal is that through the GCU, students engaged to act and design a homeless shelter with empathy and purpose. The response to homelessness is not resolved through a single act, but rather through a continuous series of empathetic and sensitive gestures that take the challenge on in a multivalent manner. And while a shelter represents a first step, humanity is not one note, but rather a symphony, and it is through the GCU interactions that this symphony is given a voice and audience.

SUNDAY, SEPTEMBER 15, 2019

3:00pm – 3:45pm

Site Visit: An Invitation to a Live Podcast

Ashley Bigham, The Ohio State University

Erik Herrmann, The Ohio State University

Site Visit is a podcast dedicated to engaging architecture everywhere. Site Visit is interested in locating the site of Architecture itself through meaningful conversations with architects, designers and educators. To do so, each episode of Site Visit begins with a visit to an architectural site chosen by the guest(s) and follows with a discussion centered on the experience. This Action at the ACSA Fall Conference proposes a group Site Visit by conference participants and a live recording of one podcast episode. Like previous studio episodes, this live recording will be released on iTunes and other podcast platforms. Each Site Visit takes place in a public building or space and offers a broad audience of listeners insight into the way architects look at the world. While each episode of Site Visit is focused on a single building or site, the interviews inevitably bring to light each guest's understanding of the built environment. The podcast's tone strikes a careful balance between fresh, earnest conversation and critical commentary. The conversation starts about the site, but can go anywhere. This format attempts to move past rehearsed conversations of the discipline and offer diverse viewpoints on architecture, while still providing a platform for critical commentary. Site Visit does not aim to take a single stance on what architecture is or should be. Instead, it attempts to open and interrogate the state of the discipline today through frank and earnest conversations about buildings and spaces with some of the most important designers and thinkers in the field today. Site Visit aspires to bring fresh, in-depth conversations about the built environment to a wide (and increasingly non-architectural) audience. Site Visit has amassed over 4,000 subscribers since its launch in 2017. Past episodes have included a visit to Menard's home improvement store with T+E+A+M principal Ellie Abrons, downtown Denver with Arch League Prize Winner Kevin Hirth, the Monadnock building with Design With Company co-founder Stewart Hicks, and a musical theater performance with architectural critic and theorist John McMorrough. Upcoming episodes aim to expand the diversity and breadth of our audience. Site Visit is significant to the field of architecture because its format and conversations aim to reach listeners within and outside of the discipline of architecture. As architects struggle to make their expertise and relevance known to an outside

audience, Site Visit provides a way to connect directly with listeners of various interests and presents architecture as an intellectual pursuit available to all. This type of free, open, and inclusive pedagogical experiment is desperately needed at this moment in architectural education.

Mapping the Conference in Walking Practices for New Potentials in Hospitality **Jeffrey Hogrefe, Pratt Institute**

Mapping the Conference in Walking Practices for New Potentials in Hospitality The program focus is on the site of the conference as a potential site of hospitality which can be observed, recorded, analyzed and reimaged through material practices in mapping. In this interactive session, we will practice together as a group a genealogy of artist and writer's walking practices from the historical avant-garde to conduct a walking practice in and around the conference site. So that we may see that the relationship between human behavior and the site of the conference is dynamic, the concept of time and the manifestation of the past, present and future will inform our investigations and interventions. This intensive walking practice will lead you to compose a proposition that proposes an intervention in the conference so as to promote hospitality. Hospitality is here considered as a philosophical position with which to examine and investigate the relationship between human behavior and institutionalized sites of learning, to analyze and expose the potential for creative intervention so that stewardship can become an essential practice for a designer, writer, artist, and critical theorist. We will consider theory which propose that the site of the conference is a dynamic text that consists of a multiplicity of systems which can be examined and excited through walking practices. The goal of the session is to present new ways to gather information from the existing text of the conference through walking practices so that creativity emerges from deep and penetrating examinations of the difference that makes a difference. The session aims to excite you intellectually to want to locate a gesture in hospitality in a conference site. As a result of taking this session you will be able to conduct research through walking practices so as to propose through visualization an alternate present on a site. The session requires a room for introductory comments and access to the rooms and hallways and streets of the conference for the group walking practices.

Welcoming International Students into a Global Teaching of Architectural History and Theory

Alicia Imperiale, Yale University

The history of modern architecture and urbanism is not clearly signaled by geographic or temporal periodizations, but as part of larger systems of culture and technology, understood in light of the larger frameworks of globalization. This has been reflected in a concerted effort to be more inclusive in teaching architectural history that questions the euro-centric bias. But this has not been adequately addressed in how we teach increasingly international cohorts of students. It is the expectation that the reading and writing of history and theory will occur in English. But this does not acknowledge the extraordinary diversity of students in our classrooms and how to be open to their experience, languages, and expertise and how that can enrich the learning environment for all.

An example: A graduate theory seminar in which we have read excerpts from Henri Bergson's *Time and Space*. We were speaking about multiplicity and Bergson's move to contain contradictory ideas of difference or heterogeneity and continuity. Together with the seminar group made of native English speakers and native speakers of Russian, Spanish, and Mandarin we grappled with the concept of "time." "Let's think about the word 'time' in other languages," I suggested. I volunteered "tempo" in Italian, "temps" in French, the languages I know and discussed how "tempo" made me conceptualize time not only as a noun, as a thing, but in flux, a rhythm, or as Bergson inspired us to think, time is fluid, mobile and incomplete. He thought of durations, difference, the ineffable, only understood in that dynamic place.

An awkward silence: For the native English speakers, this thought was disconcerting. How is it possible that time is relative, though we know this from Einstein? The Chinese students in the group, often apologetic for their skills in English were hesitant to speak. I asked them to write the word for time, "Shíjiān" for us. 时间 (shíjian / shíjiān) is composed of these characters: 时 (shí) , 间 (jiān) 时间 时 间 Shí + jiān Time, hour, tense, moment, hour, season, period +solid, lasting, room, space between rooms, hard unyielding, unwavering, firm That beautiful moment when the native Mandarin speakers who are often very quiet in seminar are leading the class and having us all begin to understand the complexity of thinking in a different language, how their silence could open up and become an inclusive and exciting conversation. We are all so fortunate to be here together, sharing our differences and expanding our thinking and biases. I have never forgotten this moment, which I try to

recreate in every course I teach. How can we all speak to the silence and open up explosive and exciting conversations? In bringing this story to the table, I hope to invite other educators to share their experiences and pedagogies toward teaching history and writing to international students so as to be inclusive, receptive, and open to working through the awkward silences to develop new techniques in teaching the discussion and writing of the history and theory of architecture.

Missing in Action / The Return of Real-Time Urban Observation

Jennifer Birkeland, Cornell University

Jonathan Scelsa, Pratt Institute

The act of the social survey is a long and disciplined task, which requires a designer, engineer, social scientist to create an inventory of data representing activity on a site. In the 1960's, environmental engineers like Jane Jacobs and Jan Gehl developed approaches to observing public life, informing better approaches to urban planning. In Gehl's book, "How to Study Public Life," he provides a series of procedural methods of how to document the site through the observation of habitation and movement through counting individuals and layering the accumulated physical spatial data such as walking paths and occupancy on a single drawing. This methodology demonstrates to students that environments are always active, and not merely formal grounds for insertion of autonomously designed material. More specifically, it prefaced the people as the measurement of space and occupancy. More recently, physical real-time observation has been abandoned in favor of teaching students predictive algorithmic simulations wherein the paths of city would be projected based purely on formal morphology and predictive behavior modifiers and co-efficients through open source data. Removing the student's need to engage and understand the space and its context, including observing individuals movements and their responses to environmental conditions. We need to get students and designers out of the digital model and back into the city armed with new technology! The analogue technique pertaining to field study often included, counting, mapping, tracing, tracking, and simulating to translate the interaction between public life and public space. This took a considerable amount of time and provided the observer with a translation of how they considered a space was utilized and occupied over a specific period of time. Digital surveying, drones, and cameras are the upgraded tool of this established technique. Rather than documenting in intervals over the course of the day, scanning can show patterns in density, activity, and opportunities within sites. Our conference proposal is to use Stanford University's campus as a testing ground for demonstrating methods of for how real-time action can be brought back into the

design and pedagogical process using Drone surveying. Prior to the conference we would be in conversation with the UFV risk management team for approval of flying permit on campus. During day one of the conference our Team would provide several drone flying photogrammetry demonstration sessions in a set area of Stanford's engineering quad, during which times we would register a visual log of the observable movements and activities in the real world outside of the conference doors. On day 2, our team would present the data by layering the multiple pre-recorded video feeds and digital projecting in a designated area at the conference, to facilitate a conversation about the process and findings. This three dimensional digital record of the landscape, objects, material imagery would be activated by the real time information about the bodies in motion within the public realm.

City On-The-Go

Yong Huang, Drury University

A music teacher, his first grader, and her retired grandpa are rushing through the same subway stop every morning. Each SUBJECT reflects a different set of mobile spatial experiences in the same daily urban space. A cook, his delivery boy, and their alleyway vendor are syncopating the pedestrian flows at the same corner of a busy street on every working day. Each spatial PRACTICE of its subject intervenes the urban dynamics to spontaneously activate various patterns in a seemingly unchanging setting of an urban pocket. A zebra crossing between a newly built residential compound and the adjacent business block, an alleyway stretching between a restaurant and a doorway of an apartment, and a revolving door at the gate between a department store and its front shopping plaza are common places in a city. Each SPACE in any generic urban setting can be experienced differently by different SUBJECTs for different PRACTICES. Inspired by Tim Cresswell's "Geographies of Mobilities: Practices, Spaces, Subjects", this on-going short exercise from an urban design studio investigates spatial practices of urban mobilities. Each student produces experimental models and drawings, as personalized methods of design research through different modes of representation, and develops subjective readings of urban experiences. These reflective images also project alternative visions of how urban spaces could be diversified.

Absenting Authorship, Resurrecting Readership.
Malini Srivastava, University of Minnesota

"...the true locus of writing is reading."

Roland Barthes, *Death of the Author* (translated by Richard Howard).

This graduate level design studio taught in the final or penultimate year of the accredited degree programs at two Universities, asks the students to consider all the concepts developed in the studio as being held in shared authorship and cooperative readership. Roland Barthes, in his essay, *The Death of an Author*, states that, "... we know that to restore to writing its future, we must reverse its myth: the birth of the reader must be ransomed by the death of the Author." In order to allow students to cycle between the role of the author and reader for the duration of the studio, this studio is structured around shifting allegiances between concepts. The studio cycles between (Step 1) iterative making and development of artifacts in response to a challenging question related to the studio topic; (Step 2) periodic display and discussion of the studio work as a whole in order to develop common language and assign terminology to describe, identify and categorize the work thematically rather than by authorship (Figure 1); (Step 3) students align themselves with a thematic category based on interest, inheriting all the work from various members of the studio associated with that thematic category. With each cycle, the Step 3 alignment exercise marks a milestone event where allegiances to projects or people might shift. Step 1 where the common activities are making and development, positions the students as authors. Step 2 where the common activities are conducted in a group through discussion, development of terminology, categorization of work, positions the students as readers. During Step 3, one or more students may self-organize into sub-groups as they align themselves around particular themes. During the alignment exercise, some students choose to stay with a thematic idea that they were working on, while others choose to advance thematic ideas that had been previously developed by others (Figure 2). The students in the sub-groups determine the research, artifacts, and tools needed to develop the concept and educate others in the studio. Discussions incorporate comparisons and critique of work and consideration of tools and competencies needed, shared, and taught in order to meet the studio's learning goals. Step 3, marks the transition of the students from readership back to authorship as they restart the cycle.

This studio foregoes the traditional presenter-jury-silent audience layout (Figure 3), replacing it with a group discussion where the students, instructor, and external reviewers participate equally. Though external reviewers bring expertise and new points of view to the discussion, theirs is not the only voice heard. Instead of enabling a silent, uninterested, background audience, all students are expected to be actively engaged throughout the review (Figures 4, 5). This paper and presentation/simulation will demonstrate and discuss the cooperative structures that establish an ongoing dialogic between authorship and readership in support of students' developing multiple competencies and creating cognitive diversity around concepts being developed by the studio, individually and collectively.