

Architecture as Catalyst is an annual week-long event, bringing new ideas, conversations, and expertise to the school by inviting guests from around the world to run experimental workshops with graduate students and give public lectures on their work. Each year, the week before spring break, first and second year graduate architecture students engage with the guests and host faculty in intensive five-day workshops, each focused around a unique set of ideas and techniques.

The primary goal of Catalyst is to raise the level of discourse about design and to provoke leaps in perception of what design can be. The workshops serve as intense, rigorous, transformative and creative sparks within the spring semester, and participants then re-engage their peer groups able to share new ways of thinking, communicating and making.

Catalyst guests have ranged from experienced educators to practitioners to artists, both within and outside the discipline of architecture. Workshops span a wide field of topics, such as parametric modeling, digital fabrication, smart materials, sensory objects, food science, filmmaking, sound recording, book arts, stereotomy and photogrammetry.

This year's Architecture as Catalyst investigates the topic of Representing Systems [as *type* and *action*], specifically leveraging the promises and pitfalls therein. With attention towards constructive logics latent within these systems, workshops and lectures will engage a range of strategies from the deranged, the subjective, the analogical, the material, the formal, and the speculative potentials of acceleration. Inherently non-neutral, these systems affect the formation of realities and our subsequent perceptions thereof.

— DRAWING ANALOGIES: REINVENTING TOWNSCAPES

Workshop Summary

The purpose of the workshop is to demonstrate how the study of a specific architectural or urban precedent can spur new and inventive design proposals. To that end, we ask the students to focus on developing the following skills: to develop free hand drawing as the principal observation and analytical tool; to move from the perception of objective spatial situations to a subjective formal or conceptual abstraction of the same; to transform the information acquired in this way into a design vision through a courageous use of imagination. And finally, the hope is that by means of these experiences, students can begin to build their own architectural language that can be applied, properly adapted, to various contexts and design projects.at.

Guest Instructor

Andrea Ponsi, Studio Ponsi, Architecture and Design, Florence, Italy

Andrea Ponsi

Andrea Ponsi's activities include architecture, city planning, design, painting, and writing.

Born in Viareggio, he graduated in architecture in Florence in 1974. He then completed the AA Graduate Diploma at the Architectural Association in London and after being awarded the ITT International Fellowships, a Master in Architecture at the University of Pennsylvania in Philadelphia.

Since the early 70's he has worked on the relationships between ecology and architecture. In 1977 together with Giovanni Del Signore he published "The Solar House," a monograph on bioclimatic architecture. From 1978 to 1988 he lived in San Francisco where he worked with Mark Mack, Peter Calthorpe and Sym Van Der Ryn on architecture and city planning projects, focusing on environmental sustainability. He has taught architectural design and drawing at the University of California-Berkeley, Syracuse University, University of Toronto and the Institut Technion in Haifa, Israel. Since the early 90S he has been professor of architectural design at Kent State University in Florence and Visiting Lecturer at Washington University in Saint Louis, University of Minnesota, Cal Poly San Luis Obispo and Bahcesehir University in Istanbul.

Faculty Host

Gayla Lindt, University of Minnesota

— FORM IS A VERB

Workshop Summary

This catalyst focuses on drawing. When a designer uses drawing as a tool, it is typically done to represent a construction or assembly—and since these are architecture's main currencies, drawing form is a reasonable act.

But while *form defines space*, it is simultaneously *formed by it*. So, we might begin to understand space and form, not as oppositional, but as interdependent, each signaling the other its qualities and prompting responses. This suggests a reading of architecture as *something* taking place between *space and form*. In other words, architecture is a verb. If this is the case, then as architects our work is to understand, predict and direct the effects of space and form.

This catalyst will develop some methods of drawing that seek to represent the forces that inform form. And reciprocally, seek to understand and analyze the effects that forms generate. The multi-faceted stuff that is *in-between* forms, connecting them, implying their boundaries.

Can those effects and forces (heat, motion, sound, movement, currents, intent, desire, joy, sadness...) influence form? Do they have a form of their own? How can we begin to described them, draw them? Drawing as inquiry. Drawing as analysis. Drawing as observation that leads to communication and (sometimes) a proposition. Drawing as generator.

Guest Instructors

Luke Bulman, Luke Bulman—Office, New York
Blair Satterfield, UBC + HouMinn, Vancouver

Blair Satterfield

Principal Blair Satterfield is an Associate Professor of Architecture at the University of British Columbia School of Architecture and Landscape Architecture in Vancouver, where he serves as Intirim Chair of Architecture. Satterfield holds a Chair of Wood Building Design of Construction at UBC. His ongoing research centers on material behavior and production processes. He is currently conducting research on vacuum forming and paper pulp forming and was awarded a 2015 Hampton Grant to perform research on the latter. He has been a Visiting Critic at Rice University and a Research Assistant Professor at the University of Houston where he directed the development of projects for the U of H Green Building Components initiative. Blair has also been a Visiting Assistant Professor at the University of Minnesota. Marc and Blair were the Micheal Owen Jones Fellowsat the University of Virginia in 2009. Satterfield received a Bachelor of Science in Architecture from the University of Illinois in 1991, and a Master of Architecture from Rice University in 1995.

Luke Bulman

Luke Bulman—Office is a Brooklyn-based graphic design office directed by Luke Bulman. The office works on public and private projects, most often in the areas of architecture, art, design, and culture.

Faculty Hosts

Blaine Brownell and Marc Swackhamer, University of Minnesota

— HUNCHES, APPROXIMATIONS, AND SHOTS IN THE DARK

"Using pre-spatial language prompts can trigger inventive programmatic thinking, imagine germinal objects, verdant programs, fallow surfaces, knotted thresholds—all subject to change at the flip of a phase shift... just like that." This is one of many spontaneous and provocatively aphoristic statements offered by Perry Kulper with the intent to derange the thinking and process of students of architecture.

As subject for Perry's multi-valent approach to representation, the Catalyst will give open-ended exploration to programmatic regeneration within the context of the sublime yet ruinous Southeast Minneapolis Industrial [SEMI] area.

College of Design and School of Architecture

UNIVERSITY OF MINNESOTA Driven to DiscoverSM

Guest Instructor

Perry Kulper, Associate Professor of Architecture, University of Michigan

Perry Kulper

Perry Kulper is an architect and associate professor of architecture at the University of Michigan. Prior to his arrival at the University of Michigan he was a SCI-Arc faculty member for 16 years as well as in visiting positions at the University of Pennsylvania and Arizona State University. Subsequent to his studies at California Polytechnic State University, San Luis Obispo (BS Arch) and Columbia University (M Arch) he worked in the offices of Eisenman/Robertson, Robert A.M. Stern and Venturi, Rauch and Scott Brown before moving to Los Angeles. His interests include the roles of representation and methodologies in the production of architecture and in broadening the conceptual range by which architecture contributes to our cultural imagination.

Perry Kulper pushes architectural drawing as a cosmos of information and possibilities that optimistically resist the banal and simplistic reductionism so typical of contemporary architectural representation. Both Perry's drawings and those he inspires of his students display objects as background, and background as object in a constant visual journey of an architecture that doesn't settle and always evolves: an architecture of ideas. If "action painting" is produced by the dynamics of dripping, smearing, and sweeping brushstrokes of paint to reveal the complex character of abstract art, then "action drawing" would be something like juxtaposing lines, planes, volumes, typographical elements, photographs, and paper cutouts on a drawing that aims to uncover the intricate universe of architectural ideas.

Faculty Host

Eric Amel, University of Minnesota
Guest Host
Partick Lynch, MSR

— NO SPEED LIMIT: THE AESTHETICS OF ACCELERATIONISM

"Don't start with the good old days, but the bad new ones."
— Bertolt Brecht

When it becomes apparent that a certain approach for working within a discipline has reached its limit, there appears two modes of moving forward.

1. Return to the good old days and pick up the thread for an alternative approach to the contemporary problems.
2. Start with the bad new days as they exist and accelerate them towards a speculative reality.

This workshop will side with the second position. Each student will identify a contemporary problem in the discipline of architecture and accelerate it 25 years into the future as a speculation on its possibilities. This is an aesthetic investigation, not an attempt at a pragmatic solution.

Guest Instructor

Michael Young, Young-Ayata, Founding Partner; Assistant Professor, The Cooper Union; Visiting Assistant Professor, Princeton University

Michael Young

Michael Young is an architect and an educator practicing in New York City where he is a founding partner of the architecture and urban design practice Young & Ayata.

Michael is an Assistant Professor at The Irwin S. Chanin School of Architecture at the Cooper Union where he has taught design in the third year and second year undergraduate studios, and graduate seminars on a range of topics. Additionally, he is a Visiting Assistant Professor at Princeton University teaching geometry and representation. Previously Michael taught in the core graduate studios at Yale and was the co-coordinator of the Architectural Drawing & Representation II course at Columbia University, GSAPP. He has been a Visiting Professor at Syracuse University, University of Innsbruck, Shih Chien University, the Crete Technical University, the GSAPP Studio X summer workshop in Thessaloniki, Greece, and the Possible Mediums Conference and Workshop at Ohio State University. Michael received his Masters of Architecture from Princeton University where he was

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards.

the recipient of the Suzanne Kolarik Underwood Prize and the Howard Crosby Butler Traveling Fellowship in Architecture. He received his Bachelor of Architecture from Cal Poly San Luis Obispo including studies at the Washington-Alexandria Architecture Consortium and the CVUT in Prague.

Prior to forming Young & Ayata, Michael worked for a number of award winning architectural firms in New York and San Francisco, including Reiser+Umemoto, Stan Allen Architects, and Pfau Architecture. His professional experience includes cultural institutions, office towers, residential projects and experimental competition entries. Michael is a Registered Architect in the State of New York. Michael's drawings are part of the Drawing Center's Viewing Program and have been shown nationally and internationally. In addition to teaching & practicing, he is invested in writing, research and experimentation on issues concerning geometry, representation and aesthetics.

Faculty Host

Andrew Lucia, Cass Gilbert Visiting Assistant Professor, University of Minnesota

— VAGUETERRAIN

Workshop Summary

Vagueterrain is a workshop examining structural growth systems that extend both laterally and vertically, merging landscape environment with 3-dimensional structure that can structurally support itself. By studying Frei Otto and his research into form finding with material systems based on viscous material behavior, the workshop aims to develop strategies and models of optimized path/ construction systems and derive self-intelligent organizational model structures in the design process.

Guest Instructor

Dr. Maria Ludovica Tramontin, PhD, ASPXstudio, Cagliari, Italy

Maria Ludovica

Maria Ludovica Tramontin is a registered engineer in Italy and co-founder of ASPX studio, a design practice based in Cagliari (IT) focusing on design and research at the convergence of technology, environmental consciousness and contemporary culture. Her interest in technological advancements and energy-saving concepts, conventionally used to 'support' architecture, reflects in fact a desire for an understanding of how these can be inducted into the design from the upstart in order to inspire novel architectural constructs. She has previously worked at NOX on projects like the Son-O-house in the Netherlands and the Maison Folie in Lille, France, both completed in 2004. Her work has received several awards, most relevantly: (1st prize) for a competition for 60,000 m² Hospital (Nuovo Ospedale SS. Annunziata di Sassari) with a project that engages the latest trends in renewable energy sources and (3rd prize) for a competition for an Office Building in the area of the "ex-Consortio Agrario" in Olbia (Italy). Her work has been shown at the First and Second Beijing International Art Biennale, at the First Biennale 'Sardegna Arte Fiera 2005', at the Urban Promo in Venice, at the DRL TEN in London, at the UIA World Congress Turin, at the Mostra A/R Andata e Ritorno in Cagliari. The work of ASPX studio was selected for the AAST Advanced Architecture Settimo Tokyo Biennale (2009-11).

Recently completed project include a building of six apartments and a penthouse located in a beautiful residential area in the centre of the city in Cagliari with a railing/screen concept developed with parametric design and an office building in the Port of Cagliari area that uses light wood prefab sustainable construction system (X-lam, cross laminated wood technology). Ludovica holds a MS degree in Advanced Architectural Design from Columbia University and a Ph.D. from the Faculty of Architecture in Cagliari. She is Visiting Assistant Professor at GAUD, School of Architecture at Pratt Institute (NY) where she has taught from 2006 to 2013. She has taught at a number of universities internationally (UniKassel, BerlagelInstitute, ColumbiaUniversity, UICBarcelona, Upenn , Faculty of Architecture in Cagliari , Italy).

Faculty Host

Dr. Kristine Mun, PhD, Lecturer, University of Minnesota

Doctor of Architecture and Master of Architecture degree programs may require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

University of Minnesota, College of Design, School of Architecture, offers the following NAAB-accredited degree programs:
M. Arch. (preprofessional degree + 59 graduate credits)
M. Arch. (non-preprofessional degree + 90 credits)

Minn.