DIALOGUE
5pm, February 3
McConomy Auditorium

C.E.B.**Reas**
Design | Media Arts, UCLA
www.reas.com

Marius **Watz**
Oslo School of Architecture
Oslo National Academy of the Arts
www.unlekker.net

WORKSHOP
8:30am-11:30am, February 4
Margaret Morrison Hall, Room 203 + *RSVP*

Reas / **Watz**

LUNCHEON + DISCUSSION
Noon - 1pm, February 4
Margaret Morrison Hall, Room 203

LECTURE
5pm, February 4
Giant Eagle Auditorium

Ben **Pell**
PellOverton + Yale University
www.pelloverton.com

LECTURE
5pm, February 5
Giant Eagle Auditorium

Hilary **Sample**&
Michael **Meredith**
MOS + Yale and Harvard Universities
www.mos-office.net

EXHIBITION OPENING
5:30-8:30pm, February 7
Pittsburgh Center for the Arts

CODE and FORM
C.E.B. **Reas** / Marius **Watz**
Generative and Algorithmic Prints, Projections, and Sculpture

Code, Form, Space

FEBRUARY 3-7, 2009

A mini-symposium on generative form and digital fabrication at Carnegie Mellon University

Code, Form, Space

A mini-symposium on generative form and digital fabrication at Carnegie Mellon University, 3-7 February, 2009

Algorithmic processes, harnessed through the medium of code, allow creators to generate complex forms and organic structures by the application of elementary but carefully-tuned sets of rules. **Digital fabrication systems,** such as computer-controlled laser cutters, 3D printers, and machining systems, offer a nearly instantaneous way of exploring ideas in new spatial and material formats. The combination of these two approaches represents an extreme but growing position in art and design, wherein the traditions of hand-craft are exchanged almost entirely for the unprecedented possibilities made possible through a demanding new form of mind-craft.

In this mini-symposium, we present four practitioners – Casey Reas, Marius Watz, Ben Pell, and MOS Architects (directed by Michael Meredith and Hilary Sample) – who are refiguring the material world through rule systems and digital fabrication tools. Their work spans the disciplines of art, design, architecture, and engineering; the objectives of provocation, of utility, and of pure aesthetic delight; and the realms of bits, atoms, and ideas. All of these practitioners have singularly rigorous personal aesthetics and sensitive understandings of how the arts can transform the way we live. In their contrasting approaches at the limits of digital craft we can catch a glimpse of a new humanism in our increasingly computer-articulated environments.

CREDITS & SPONSORS

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Schedule of Events

DIALOGUE Tues. 3 Feb, 5-6pm

In CMU McConomy Auditorium. C.E.B. Reas and Marius Watz work, independently, at the global forefront of generative and algorithmic art. In this unusual lecture format, Reas and Watz will trade short presentations about their complementary approaches to digital fabrication, rule-based systems, and the use of computer programming to produce their work. *This dialogue is co-presented with the CMU School of Art Lecture Series. More info: http://lectureseri.es.*

WORKSHOP Weds. 4 Feb, 8:30-11:30am

In College of Fine Arts (CFA) 317. C.E.B. Reas and Marius Watz visit Adjunct Professor Ian Ingram's "Digital Fabrication for the Arts" class to demonstrate their process and share tips and techniques for generating physical forms from code. *Space may be limited. To attend, please* **RSVP** *before February 3rd by email to: golan@andrew.cmu.edu.*

LUNCHEON + DISCUSSION Weds. 4 Feb, 12-1pm

In Margaret Morrison 203. View the morning's workshop results and enjoy an informal lunch-time discussion with C.E.B. Reas, Marius Watz, Ben Pell, and "Code, Form, Space" co-hosts, Professors Jeremy Ficca (School of Architecture) and Golan Levin (School of Art).

LECTURE Weds. 4 Feb, 5-6pm

In CMU Giant Eagle Auditorium. Architect Ben Pell investigates the intersection of contemporary ornament, display culture, and digital fabrication. In this one-hour presentation, Pell discusses new interventions for urban and domestic spaces produced by his firm PellOverton, an architectural research and design practice based in New York since 2003.

LECTURE Thurs. 5 Feb, 5-6pm

In CMU Giant Eagle Auditorium. MOS Architect partners Michael Meredith and Hilary Sample engage interdisciplinary research spanning art, design, environment, and computation. In this one-hour lecture, they present a diverse range of innovative projects made possible through new approaches to digital craft, including a puppet theater (with artist Pierre Huyghe), a generative rug system, a prizewinning 9/11 memorial, and the first-ever American drive-in theater produced by a non-profit cultural arts space.

EXHIBITION OPENING Sat. 7 Feb, 5:30-8:30pm

At Pittsburgh Center for the Arts. "CODE and FORM", an exhibition of new generative artworks by C.E.B. Reas and Marius Watz, runs February 7th through April 19th at the Pittsburgh Center for the Arts (PCA). Located at 6300 Fifth Avenue, in Shadyside, the PCA is open Tuesday-Saturday, 10am-5pm, and Sundays from noon-5pm. *There is a $5 suggested donation. More info: http://www.pittsburgharts.org.*

Reas is a visual alchemist obsessed with networks; he writes software machines to explore unknown artificial forms and systems.

C.E.B. Reas lives and works in Los Angeles. He is an associate professor and Chair of the department of Design | Media Arts at UCLA. Reas has exhibited his work internationally at institutions including Laboral (Gijon, Spain), The Cooper-Hewitt Museum (New York), and the National Museum for Art, Architecture, and Design (Oslo); at independent venues including Telic (Los Angeles), <>TAG (The Hague), and Ego Park (Oakland); at galleries including Bitforms (New York), BANK (Los Angeles), and [DAM] Berlin; and at festivals including Sonar (Barcelona), Ars Electronica (Linz), and Microwave (Hong Kong). He has lectured at institutions including The Royal Academy of Art (The Hague), and the NTT ICC (Tokyo), and at artist-run spaces including Machine Project (Los Angeles) and Atelier Nord (Oslo). With Ben Fry, Reas initiated *Processing* in 2001. *Processing* is an open source programming language and environment used worldwide for creating images, animation, and interaction. *See:* reas.com, processing.org

c.e.b. **Reas**

Marius **Watz**

Merging organic form with hard-edged geometry, Watz uses generative processes to create abstract visual narratives.

Marius Watz is an artist and performer working with visual abstraction through generative software systems. He is known for his bold use of colors and hard-edged geometric compositions, producing work for live projections, print and audiovisual performances. Recent experiments include output for physical formats through the use of digital fabrication technologies such as 3D printing and laser cutting. Watz has exhibited internationally in festivals and exhibitions like Club Transmediale (Berlin), Todaysart (The Hague), Emocao Art.ficial (Sao Paulo) and Abstracts of Syn (Vienna). In 2005 he founded *Generator.x*, a curatorial platform for generative art and computational design that has resulted in a series of exhibitions, concerts and seminars as well as an influential blog. He is currently a lecturer at the Oslo School of Architecture and the Oslo National Academy of the Arts. *See:* **unlekker.net, generatorx.no**

Pell is an architect with an addiction to graphic behavior and other forms of excess.

Ben Pell is an architect and co-founder of PellOverton, an architectural research and design practice based in New York since 2003. He is on the faculty of the Yale School of Architecture, where he teaches graduate design studios and seminars which examine contemporary interests in ornament, display culture, and digital fabrication. Ben has previously taught at the Syracuse University School of Architecture, where he co-edited a publication of graduate student work entitled: "IKEAGRAMS: Project on the Waterfront". The work of PellOverton has been exhibited in New York and Los Angeles, and was recently recognized with a 2008 AIA Design Award, and a 2008 Young Architects Award from The Architectural League of New York. Select projects have been published in The New York Times, 306090, Architectural Record, Metropolis, Surface, and Blend magazines, and will be featured in a forthcoming publication from Princeton Architectural Press entitled: "Resonance: Young Architects 10". *See:* **pelloverton.com**

Ben **Pell**

Hilary **Sample** & Michael **Meredith**

The first thing to know about MOS is that we are a collective of designers, architects, thinkers, and state-of-the-art weirdos.

Hilary Sample and **Michael Meredith** are principals in MOS, a collective which designs private houses, institutional buildings, urban strategies, research, books, installations, and other projects that are less easily categorized. Sample and Meredith teach at Yale and Harvard while maintaining the practice. Today, as they have grown, MOS continues to operate as a close-knit experimental office that works on each project through playful experimentation, serious research, and old-fashioned problem-solving. MOS engages architecture as an open system of interrelated issues ranging from architectural typology, digital methodologies, sustainability, structure, fabrication, materiality, tactility, and use, as well as larger networks of the social, cultural, and environmental. This process of participation and inclusion - radical inclusion - allows MOS to produce and inflect environments at a multiplicity of scales and around the world. *See: **mos-office.net***