Bauhaus Digital Masterclass & Grundlagenkolloquium Digitalisierung

Die Bauhaus Digital Masterclass bringt ab Wintersemester 2018/19 zwei bis dreimal pro Semester renommierte nationale und internationale Forscher und Lehrende für einen Abendvortrag und ein eintägiges Blockseminar an die Bauhaus Universität Weimar.

Die Seminare widmen sich Grundlagenfragen der Digitalisierung im Schnittfeld zwischen Architektur, Design und Medien und richten sich an Studierende aller Fakultäten der Bauhaus Universität Weimar.


Öffentlicher Vortrag, 18. Oktober 2018 19 Uhr
The Calculative Imagination: Computation and the Boundaries of Design
Ort: Bauhausstraße 11, SR 014

Blockseminar 19. Oktober 2018 9:15-16:45 Uhr
Form & Information, Software comes to matter, Design, Ecologies & Networks
Ort: Bauhausstraße 11, SR 013

Website Daniel Cardoso Llach: http://dcardo.com

Stipendien
Für Studierende von Universitäten außerhalb Weimars stehen eine begrenzte Zahl von Fahrtkosten und Unterkunftsstipendien zur Teilnahme an den Blockseminaren bereit. Für die Bewerbung schicken Sie bitte ein kurzes Motivationsschreiben an: christoph.engemann@uni-weimar.de

Bauhaus Digital Masterclass 2018-2019
Organisation & Koordination
Dr. Christoph Engemann

https://www.uni-weimar.de/de/medien/professuren/medienwissenschaft/theorie-medialer-welten/personen/engemann/

https://www.uni-weimar.de/bauhaussemester/
https://www.bauhaus100.de/

Information & Anmeldung unter: christoph.engemann@uni-weimar.de
Lecture, October 17

**The Calculative Imagination: Computation and the Boundaries of Design**

During the three decades following the Second World War, government investment in university research on both sides of the Atlantic funded multidisciplinary projects to harness the calculative power of computers for manufacturing and design. Along with novel technological systems and disciplinary identities, these projects kindled new visual and material languages, as well as new understandings of the design process and its actors. This lecture will examine this period of remarkable technical (and discursive) inventiveness, and trace critically its repercussions in architecture and other design fields. I will discuss how as Cold-War era technologists formulated Computer-Aided Design theories and methods, they debated the proper role of the computer in design, and re-specified, through their systems, notions of image, materiality, and labor. In their technological imagination, design was re-cast as a human-machine endeavor, and labor was subdivided anew and reconfigured around the calculative, representational, and material agencies of the computer. Through a selection of recent research projects, I will further show how experimental archaeologies and digital ethnographies may serve as instruments to probe this condition, and argue for an expanded form of architectural and design criticism that incorporates the extra-disciplinary socio-technical and discursive infrastructures of computing as central subjects of analysis, and as materials with which to model new questions about media and the design of our environments.

Sessions, October 18

Session 1 (90 minutes)

**Form and Information**

This session proposes to explore “computational design” as a non-monolithic field shaped by different (and often conflicting) cultural sensibilities and aesthetic traditions. In particular, one concerned with accident, unpredictability, and authorial detachment, and another concerned with control, descriptive accuracy, and accountability. The first thematizes *form*, the second thematizes *information*. The session starts with a short lecture outlining the historical and cultural roots of both of these traditions — as well as some of their contemporary disclosures — and continues with an active exploration of procedural design methods. The session ends with a discussion about formal systems (understood to encompass a broad range of algorithmic devices) and their descriptive, analytical, and generative capacities.

**Readings**

Session 2 (90 minutes)

**Software Comes to Matter**

This session focuses on the materialities enabled by (and constitutive of) computing. Framed within the relatively recent turn to materiality across disciplines, the session explores opportunities for design and technology scholarship in the messy intersections between symbolic systems and material artifacts. Conceptual and methodological tools to address these as worthy subjects of scholarly analysis and creative exploration will be introduced. We will consider ways to look at software as infrastructures and as theories of action, at technologies as artifacts historically and materially situated, and at the tensions between what Collins has termed “tacit knowledge” and the project of technical formalization underlying AI and machine learning as territories of design and media scholarship. Finally, through an overview of the “Archaeology of CAD” and other recent projects, we will consider experimental software archaeologies as instruments to both “re-presencing the past” (Sobchak, Vivian), and to approximate the material, sensual, and ergonomic signatures of technological systems, opening them up as spaces for creative exploration and analysis.

*Note: Prior to this session participants are asked to identify and document, in as much detail as possible, a design technology (broadly understood).*

**Readings**


Session 3 (90 minutes)

**Design, Ecologies, Networks**

This session reflects on the new forms of authorial agency emerging around digital infrastructures for design production. The session explores the tensions introduced in architectural and design discourses by computing paradigms such as BIM, as well as by more recent, data-intensive AI and machine learning methods, and considers —through recent work in design, urban, and spatial analysis— new methodological and pedagogical vehicles for addressing them, such as trace ethnography, critical data studies, and algorithmically enhanced forms of observation. Through these we will seek to trace situated and performative accounts of
design and computational media which avoid black-box explanations, and challenge central, panoptic views of design, technology, and the environment.


Session 4 (90 minutes)
**Special Projects Seminar**

This session asks participants to draw from the concepts and methods introduced during the day to develop proposals for research projects addressing the intersection of design and computational media. The session ends with brief presentations by students, feedback discussion, and plans for further steps.

**Link to readings PDFs:**
[https://www.dropbox.com/sh/nhxidxcq2rogm1i/AABQN6yO0q0Ms0ltIibc8Tnba?dl=0](https://www.dropbox.com/sh/nhxidxcq2rogm1i/AABQN6yO0q0Ms0ltIibc8Tnba?dl=0)