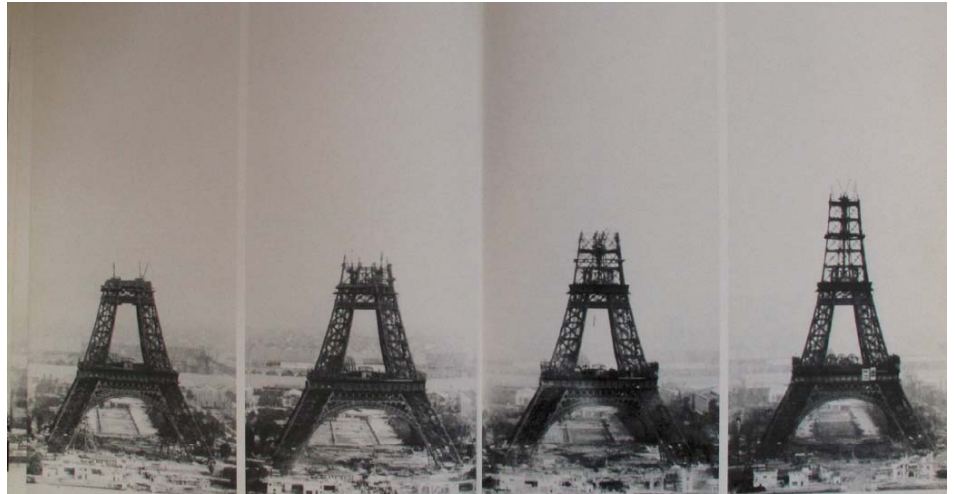




Physical calculations, Jørgen Utzon



Herzog and de Meuron exhibition
Tate Gallery, UK



METHODOLOGY AND EXPERIMENT

2 ECTS points

Participants: Evy Slabbinck, Tom Svilans, Angelos Chronis, Dimitrie A. Stefanescu, Paul Poinet, James Solly, Vasily Sitnikov, Giulio Brugnaro, Helena Westerlind, Arthur Prior, Kasper Ax, Stephanie Chaltiel

Hosts: CITA- Mette Ramsgaard Thomsen, Martin Tamke and Phil Ayres

Abstract: *Introduces ESRs to established research methodologies with a focus on experimentation and the inclusion of material evidence. The course presents, discusses and critically reviews methods employed in research-by-design and parallel these with interdisciplinary methods from engineering and physical science in which experimentation is central.*

Format: Five web seminars of three hours, 2000 word essay, reading

Description:

This course discusses scientific theory surrounding practices of experiment and the role of experiment in design. Using original philosophical texts and examples from design research practice, the notion of experiment and its relation to theory building and testing will be examined.

The course will be structured around reading, lectures, open discussion, peer critiqued written assignment and verbal presentation in seminar format. The primary learning objective is to develop the ability to critically reflect upon the role of experiment within their own research practice.

Structure: The course is structured around five sessions and include three seminars with external presentations

- 1) Introduction: The role of experiment 08.11.2016: 9:30 - 13:00
 1. Introduction to the course and to research methodology, Mette Ramsgaard Thomsen
 2. Introduction to the history experimentation, Martin Tamke
 3. Epistemology of experiment, Experiment as scientific practice , Phil Ayres
 4. Discussion and presentation of expectations to essay



Herzog De Meuron, Venice Biennale 2012



Olafur Eliasson, Model Room, Louisiana



Renzo Piano office

- 2) Seminar 1: Research by Design 15.11.2016 9:30 - 13:00
1. Research by Design - design as research methodology, Mette Ramsgaard Thomsen
 2. Ways of Drifting - 5 Methods of Experimentation in Research through Design, Peter Gall Krogh, Århus University
 3. Discussion, Moderation Martin Tamke

PRE TUTORIAL ON ESSAY THEME: individual tutorials are set up with tutors in which essay theme is discussed and chosen. The role of own experimental practice is discussed. Week of 15.11.2016 – 22.11.2016.

- 3) Seminar 2: Simulation and experiment 22.11.2016 9:30 - 13:00
1. Simulation in Stressed Skin and A Bridge Too Far, Paul Nicholas
 2. Experimentation through simulation, Eric Winsberg **To Be Confirmed**
 3. Discussion, Moderation Mette
- 4) Seminar 3: Formats for experimental PhDs 29.11.2016 9:30 - 13:00
1. Gossamer Timescapes - Designing Self-Actuated Textiles for the Home, Aurelie Mosse
 2. Bending-Active Structures: Form-finding strategies using elastic and kinetic systems and the structural potentials therein, Julian Lienhard,
 3. Tim Anstey and Mette Ramsgaard Thomsen present and discuss formats for PhD's and what the nature of a PhD might be, examples are brought to table and discussed... (Jonas Runberger, Brady Peters, Aurelie Mosse, Norbert Palz etc)

Essay is finalised and handed in 06.12.2016

- 5) Prototype presentation and discussion of ESR essays 13.12.2016 9:30 - 15:00
1. Presentation of role of experiment by students (20 min per student) peer reviewing Phil Ayres, Mette Ramsgaard Thomsen, Tim Anstey, Peter Gall Krogh and Martin Tamke. Written and oral feedback is given.