Elective Course Information Architecture

Introduction to Information Architecture

Prof Dr Gerhard Schmitt

September 22, 2009

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Chair for Information Architecture

Elective Course Information Architecture

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Elective Course Information Architecture

Lecture | 13 - 14 p.m. | HIT H42
Participation 80% = 1 ECTS

Information Architecture
Prof Dr Gerhard Schmitt
051-0723-08

Elective Course Information Architecture

Exercise | 14 - 17 p.m.* | HIT H42
Participation 80%
+ accepted Project = 3 ECTS

The sensitive Tapestry | Workshop
Christian Schneider, Sandra Wipfli
Lukas Treyer
051-0725-08

*no additional Homework

Elective Course Information Architecture

L1	22/09	Introduction Information Architecture
L2	29/09	The Architecture of Information
L3	06/10	Thinking with your Eyes
L4	13/10	Info Aesthetics (Workshop Processing)
		Seminar week
L5	27/10	Tangible Bits (Visiting the ValueLab)
L6	03/11	Tabletop Interaction (Guest)
L7	10/11	Responsive Environments
L8	17/11	The digital Ornament (Guest)
L9	24/11	Interactive Architecture (Guest)

Overview

- Information Architecture
- INFORMATION Architecture
- Information ARCHITECTURE
- INFORMATION ARCHITECTURE

Overview

– **Information Architecture**
– INFORMATION Architecture
– Information ARCHITECTURE
– INFORMATION ARCHITECTURE

Information Architecture

INFORMATION Architecture or Information ARCHITECTURE?

Jantar Mantar, astronomical Observatories of Jai Singh II

Information Architecture

INFORMATION Architecture

Metaphors and principles of physical architecture applied to digital data and information creates an architecture of information, using information as raw material

Information ARCHITECTURE

Making the invisible visible in the form of digital information applied to physical architecture to better understand and design physical architecture

Overview

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INFORMATION Architecture

Architecture
Requires thoughtful analysis to manifest thoughtful synthesis (design).

The Architecture of Information
Construction of a structure or the organization of information.

INFORMATION Architecture

The Architecture of Information

‚INFORMATION Architecture' expands the definition of architecture to areas outside the traditional realm.

INFORMATION Architecture

Using architectural metaphors for better structuring, understanding and communicating information

What is changing with Technology?

1750 | Systematics | Element

INFORMATION Architecture

What is changing with Technology?
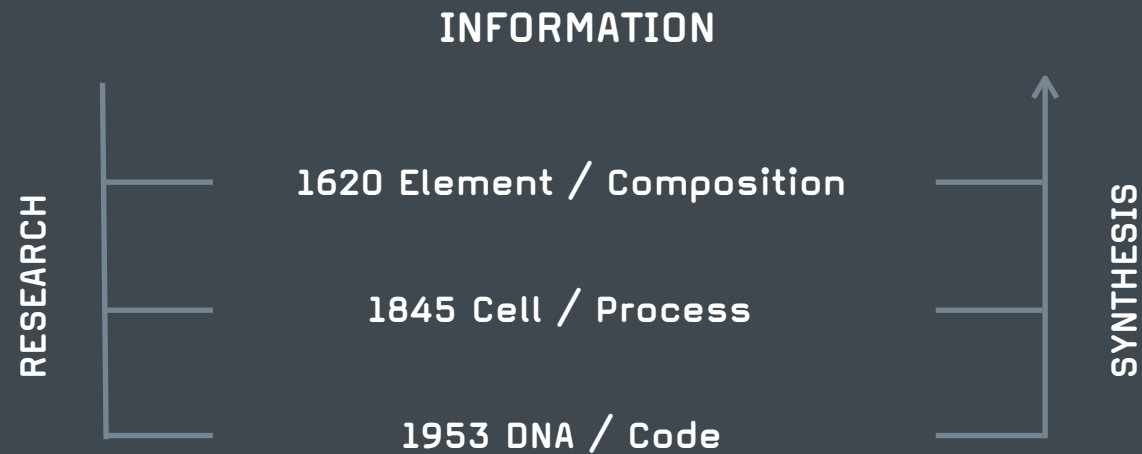
1855 | Process | Omnis Cellula e Cellula

What is changing with Technology?

1953 | Code | DNA

What is changing with Technology?

INFORMATION

RESEARCH

SYNTHESIS

1620 Element / Composition

1845 Cell / Process

1953 DNA / Code

Overview

– Information Architecture
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Information ARCHITECTURE
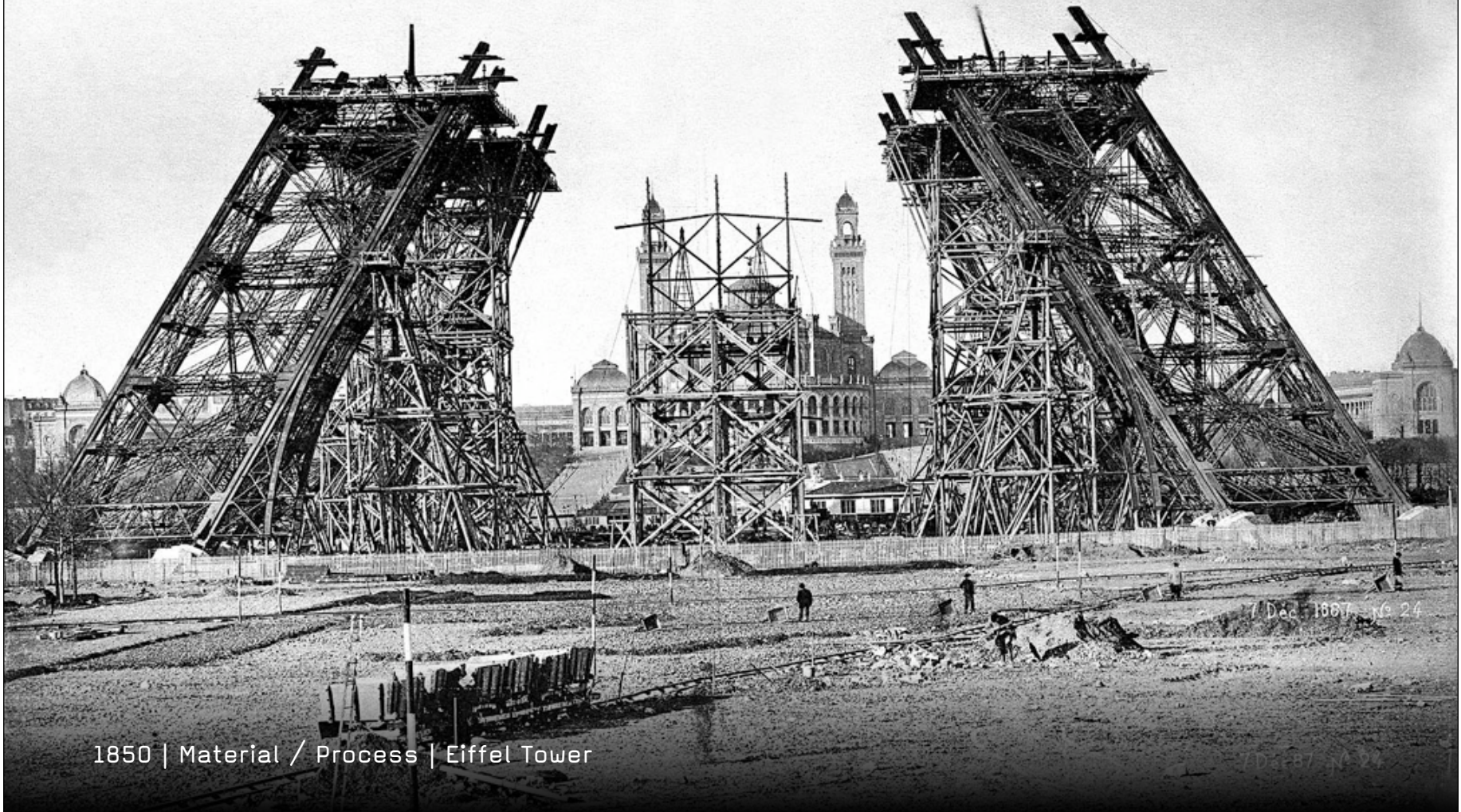
What is changing with Technology?

1750 | Element / Craftsmanship | Versailles

What is changing with Technology?

1850 | Material / Process | Eiffel Tower

Information ARCHITECTURE

What is changing with Technology?
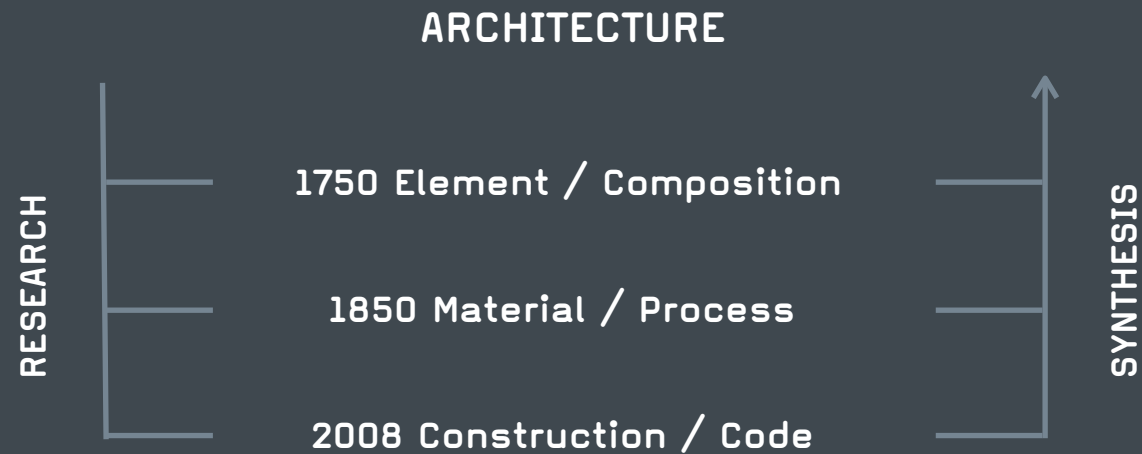
2008 | Code | National Stadium Beijing

What is changing with Technology?

ARCHITECTURE

RESEARCH

1750 Element / Composition

1850 Material / Process

2008 Construction / Code

SYNTHESIS

Information ARCHITECTURE

‚Information ARCHITECTURE' uses simulation for more than creating images or artefacts based on geometric constraints, rules, or cases.

Rather, non-geometric factors such as light, energy, structure, behaviour or systems knowledge become available for integrated direct modelling.

Formalise and generalise design principles

Overview

– Information Architecture
– INFORMATION Architecture
– Information ARCHITECTURE
– **INFORMATION ARCHITECTURE**

Physical versus Digital

PHYSICAL

– direct manipulation

– persistent

– collaborative

– affordability

DIGITAL

– symbolic representation

– extremely flexible

– quick to disseminate

– cheap reproducibility

Yesterday - Pick-and-drop, Rekimoto, J. (1997)

Today - Wii, Nintendo (2006)

CHALLENGE: BITS + PHYSICAL

How to combine the best properties of both worlds?

INFORMATION ARCHITECTURE

Think INFORMATION as a raw MATERIAL!

From Data to Information to Knowledge

Data is unprocessed facts and figures without any added interpretation or analysis

Information is data that has been interpreted so that it has meaning for the user

Knowledge is a combination of information, experience and insight that may be of benefit

Information Architecture

What are our two challenges in Information Architecture?

- Investigate the potential of merging digital information and physical architecture

- Develop tools for supporting analysis, design and planning of urban systems

Summary

How does a way of thinking become a technical reality?

INFORMATION ARCHITECTURE

Collaboration in space

High Resolution Displays and new Simulation Tools

INFORMATION ARCHITECTURE

Tools for collaborative planning

Future City Designer

Tools for planning future cities

CityEngine

Discussion

Merging digital Information and physical Architecture

Developing Methods and Tools for supporting Analysis, Design and Planning of urban Systems

Notice: Exercise Information Architecture

Exercise | 14 - 17 p.m. | HIT H42 (3 ECTS)
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Christian Schneider, Lukas Treyer, Sandra Wipfli
051-0725-08

Podcast Information Architecture

http://www.ia.arch.ethz.ch/teaching/
teaching-08/

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Sources

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15 Mitosis, http://www.youtube.com/watch?v=m73i1Zk8EAO
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