# Elective Course Information Architecture

Introduction to Information Architecture

Prof Dr Gerhard Schmitt February 22, 2010



# Overview

- Chair for Information Architecture
- INFORMATION Architecture
- Information ARCHITECTURE
- INFORMATION ARCHITECTURE
- Introduction Exercise

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# Overview Lectures FS2010

Chair for Information Architecture Prof Dr Gerhard Schmitt Dipl Arch Gideon Aschwanden Dr Remo Burkhard Dipl Ing Jan Halatsch Dipl Arch Anastasia Koltsova Dipl Ing Antje Kunze Dr Stefan Müller Arisona MSc Christian Schneider Admin Suzanne Coleman

# General Information Lecture

Lecture | 12:45 - 13:30 | HIT H42 Participation 80% = 1 ECTS

Information Architecture and Future Cities

Simulating Urban Design Futures

Prof Dr Gerhard Schmitt 051-0724-10

## General Information Exercise

Exercise | 13:45 - 17:00 | HIT H12

Participation 80% + accepted Project = 3 ECTS

Information Architecture and Future Cities

Projected Realities 
ich glaube nur was ich sehe

Christian Schneider 051-0726-10

## General Information Intensive Course

Intensive Course | 8:00 - 12:00 | HIT H12

Participation 80% + accepted Project + written exam = 6 ECTS

Information Architecture and Future Cities

New Methods in Urban Simulation

Jan Halatsch 063-1358-10

# Overview Lectures

L1	22-02	Introduction to Information Architecture
L2	01-03	Excursion Biblioteca Werner Oechslin
L3	08-03	History of Information Architecture
L4	15-03	Visualising Complexity
	22-03	Seminarweek
L5	29-03	Theory, Experiment, and Simulation
L6	12-04	Design, Modelling, and Simulation
L7	19-04	Analysis, Prediction, and Simulation
L8	26-04	New Methods in Architectural and Urban Simulation
L9	03-05	Guest Ch Derix, Aedas   Computational Design
L10	10-05	Guest T Caro, Foundation for Global Sustainability
L11	17-05	Guest B Tuncer, Delft University of Technology
L12	24-05	Presentation Student Work

# Overview Lectures

Note: Monday, March 1, 2010 | 13:00 - 17:00

Excursion to the Biblioteca Werner Oechslin

Transport by bus

13:00 Meeting point at the orange sign 'SCIENCE CITY INFOSPOT' outside the HIL-building.

### Contact:

Suzanne Coleman, coleman@arch.ethz.ch, + 41 44 633 29 20

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# Information Architecture

# 1 INFORMATION Architecture Metaphors and principles of physical architecture applied to digital data and information creates an architecture of information, using information as raw material.

# 2 Information ARCHITECTURE Making the invisible visible in the form of digital information applied to physical architecture to better understand and design physical architecture.

# 1 INFORMATION Architecture

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

The Architecture of Information

Design of a structure or the organisation

of information.

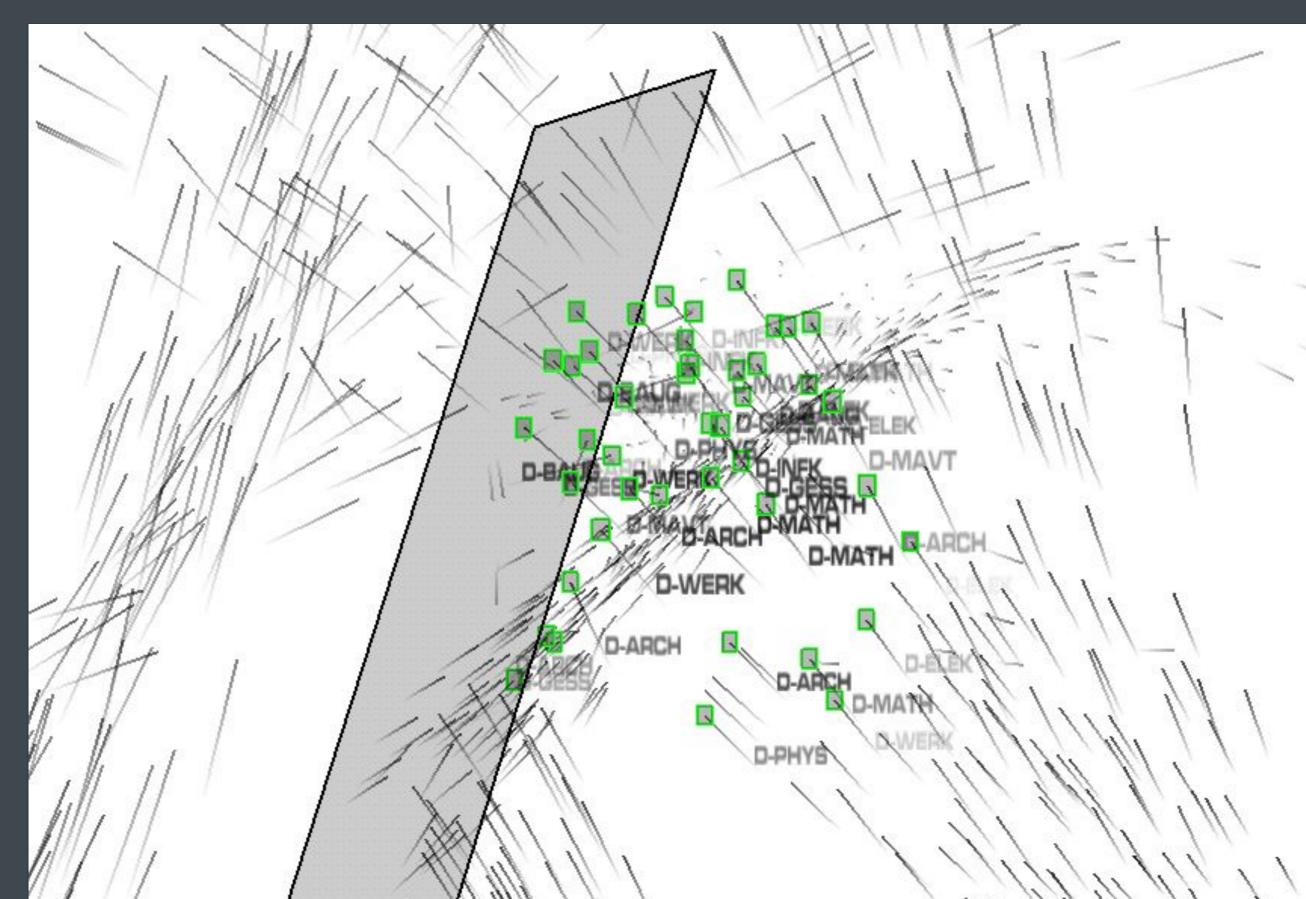
# 1 INFORMATION Architecture

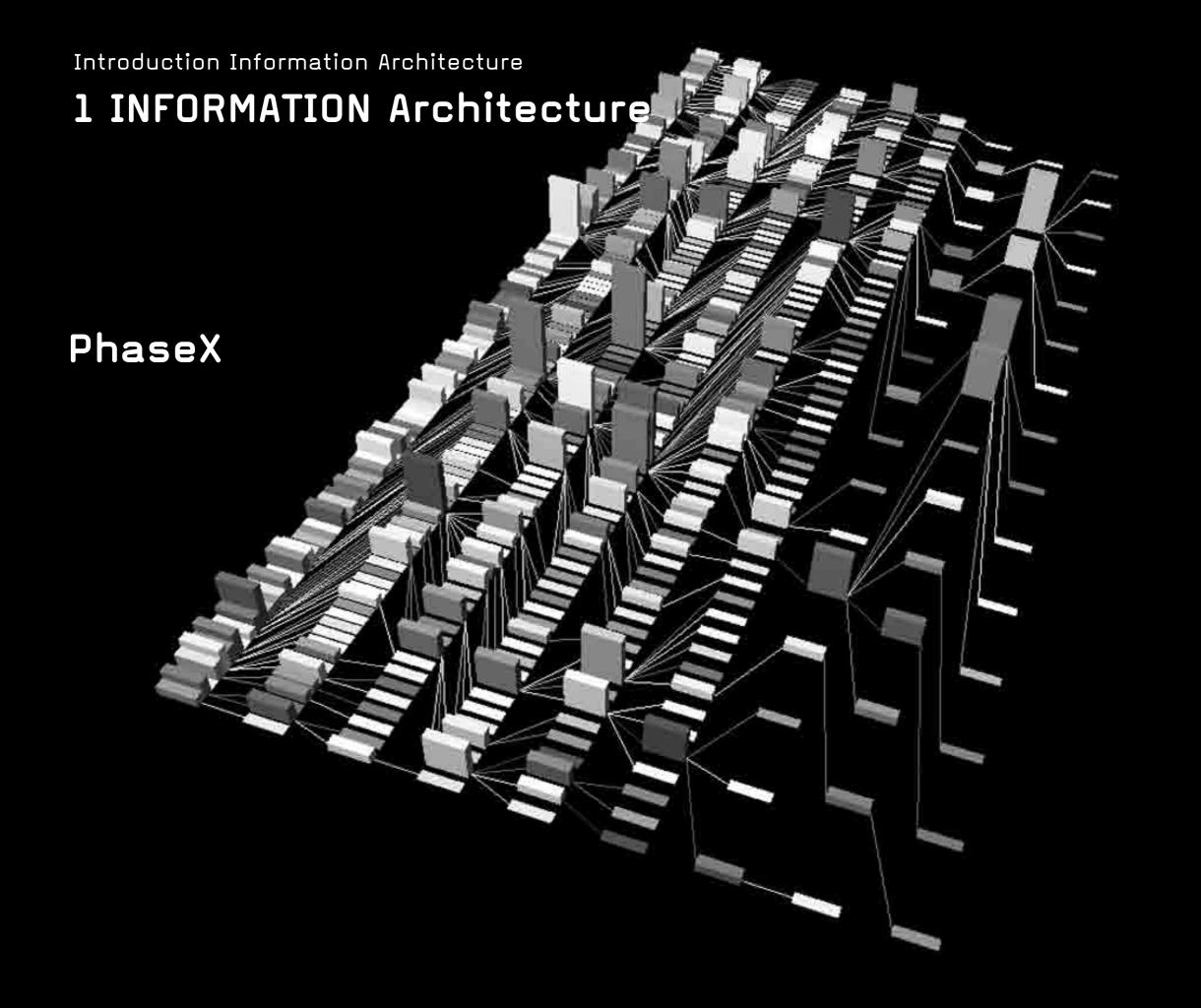
The Architecture of Information

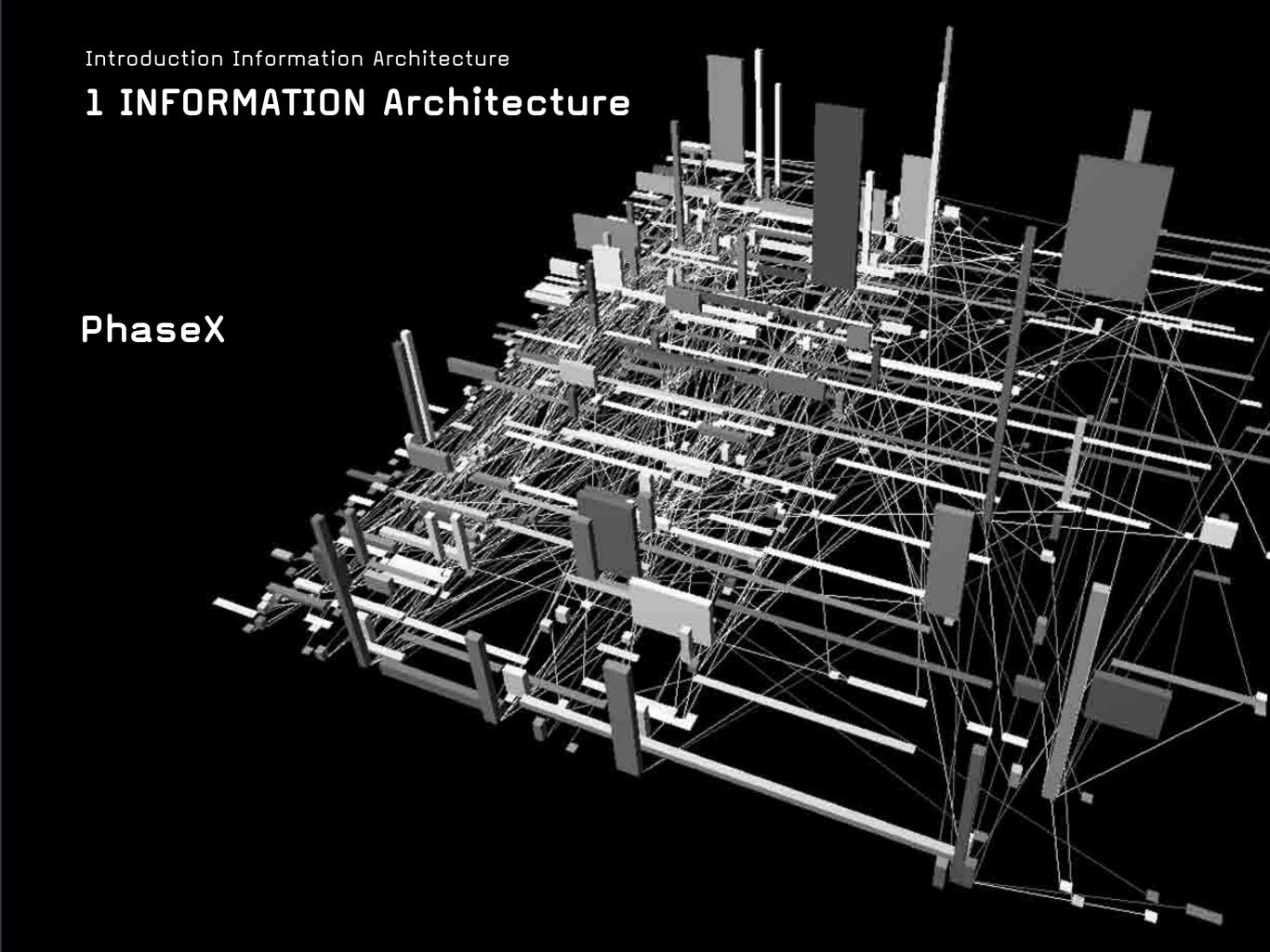
,INFORMATION Architecture' expands the definition of architecture to areas outside the traditional realm.

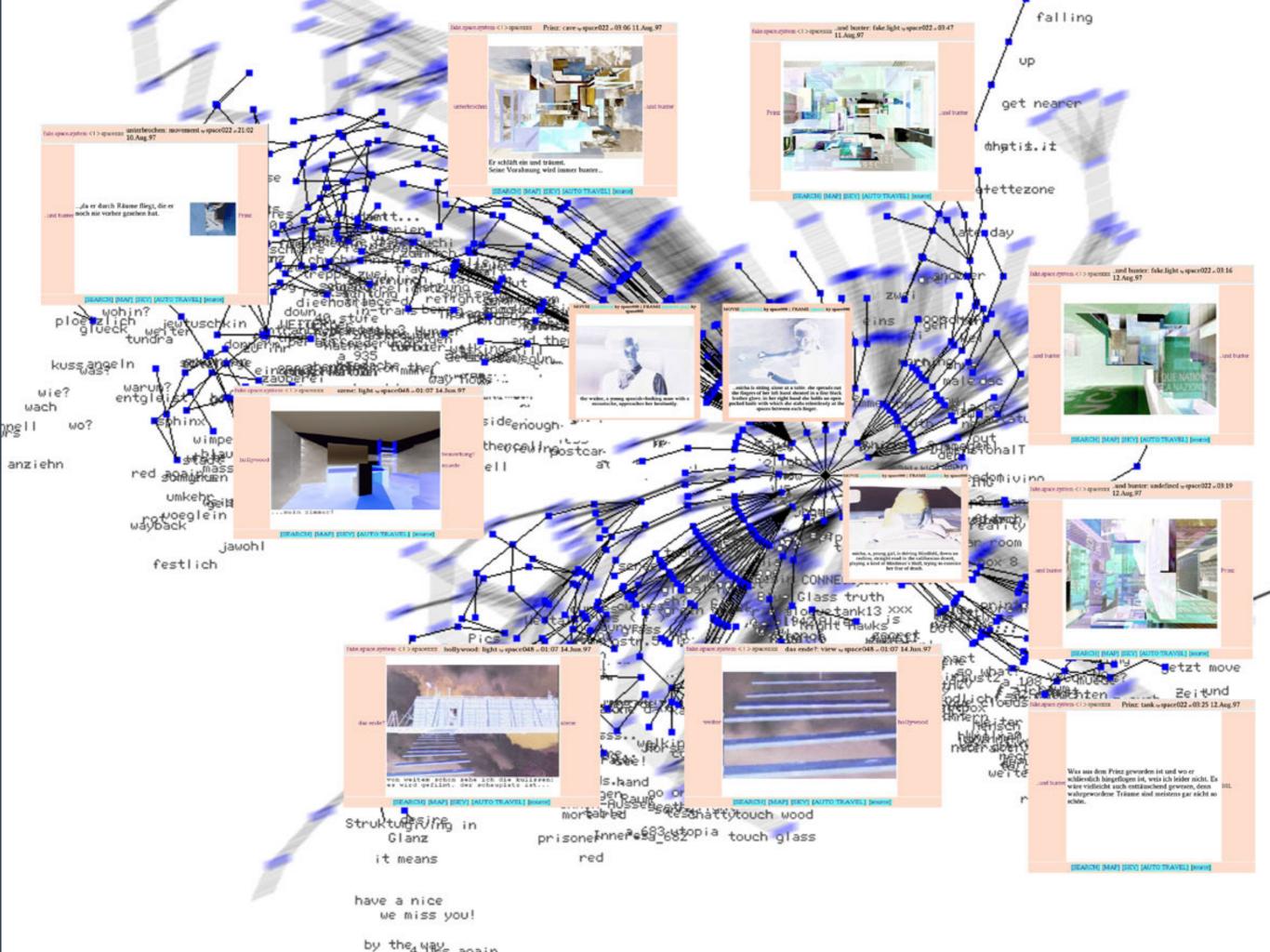
,INFORMATION Architecture' uses architectural metaphors for better structuring, understanding and communicating information.

# 1 INFORMATION Architecture









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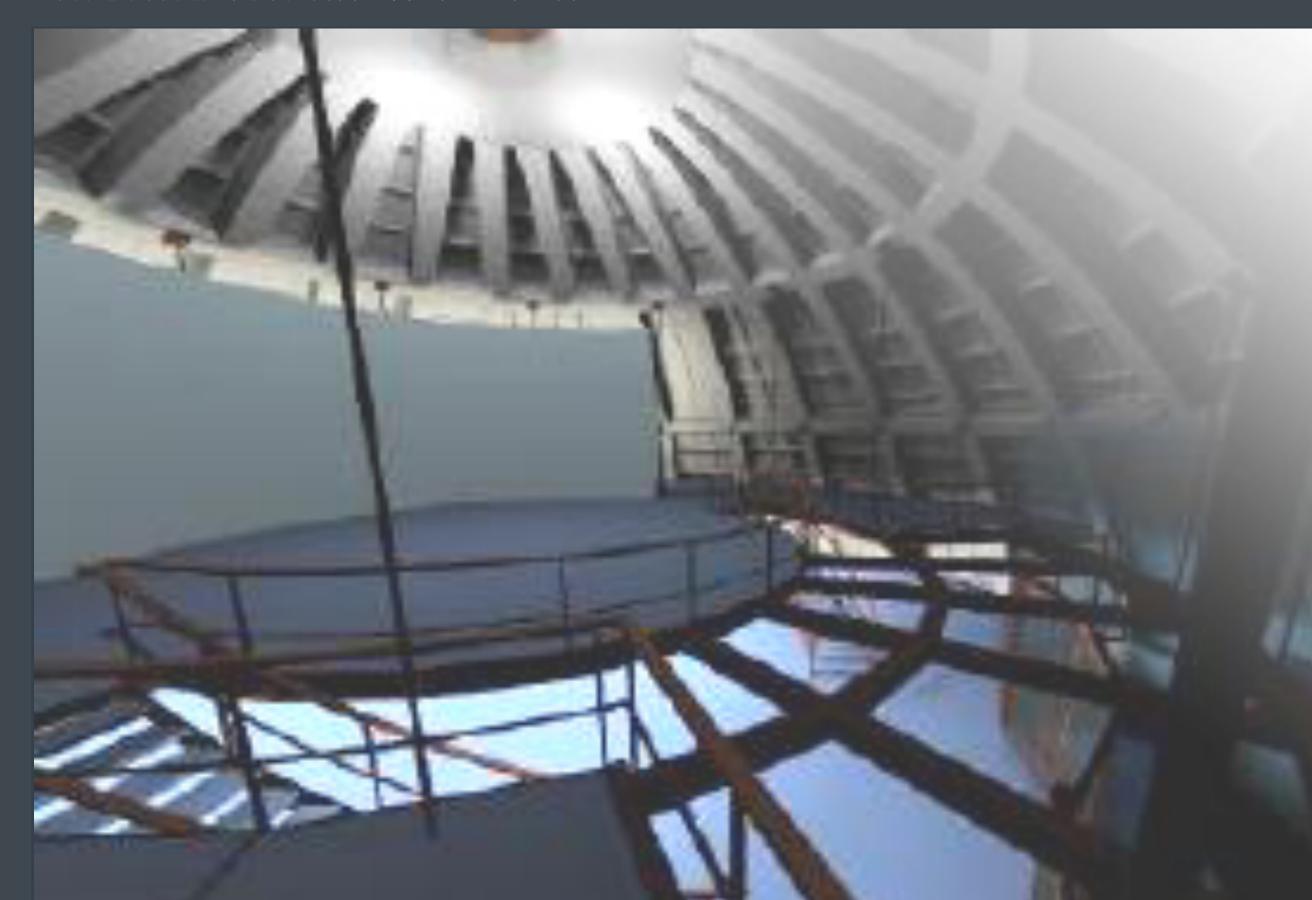
# 2 Information ARCHITECTURE

,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

# Information ARCHITECTURE



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### Introduction Information Architecture

# 1 INFORMATION ARCHITECTURE



# Assignment

Send 1 Image of Information ARCHITECTURE or INFORMATION Architecture with your name to

# koltsova@arch.ethz.ch

until March 3, 2010, and describe the reason for the choice

# 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
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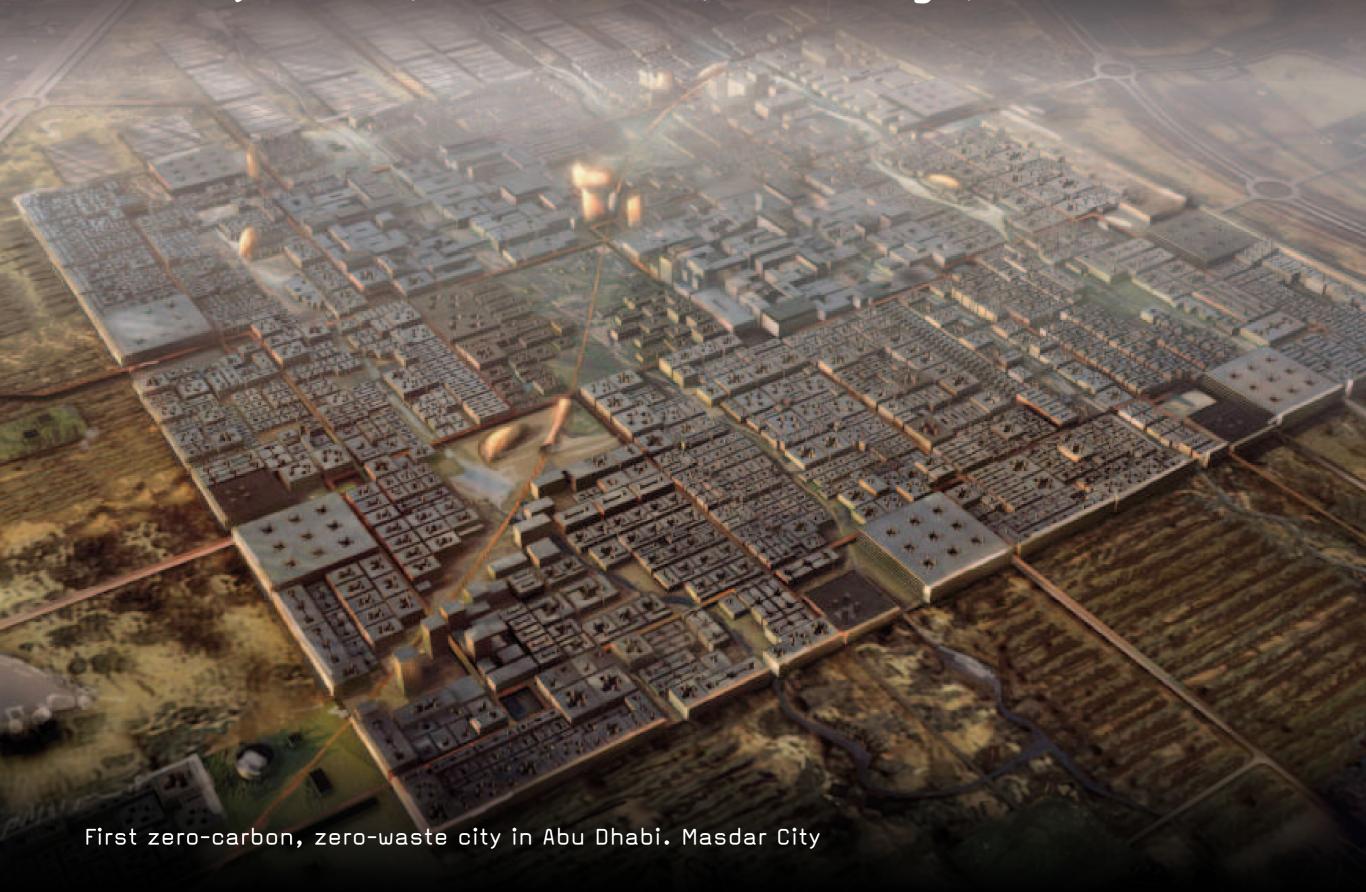
# Thinking INFORMATION as a raw MATERIAL

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249589.2	09208	Kreis 9 Altstetten	1970	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstige	e Nichtwohn	geb√Sude	0.00	46.00	0.00	130.00	0	0	0
249588.8	09208	Kreis 9 Altstetten	1965	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstige	e Nichtwohn	geb√§ude	0.00	204.00	52.00	800.00	0	0	0
249596.6 0 0	09208 0	Kreis 9 Altstetten	1960	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√S	ude"	Industrie-	und Lagergeb	√§ude	0.00	285.00	0.00	1500.00	0	0
249597.5 0 0	09208 0	Kreis 9 Altstetten	1945	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√9	iude"	Industrie-	und Lagergeb	√§ude	0.00	288.00	0.00	1000.00	0	0
249613.0	09208 0	Kreis 9 Altstetten	1991	√úbriges Geb√Sude f	√°r Indus	trie Indus	triegeb/Suc	de In	dustrie- und	Lagergeb	√§ude	0.00	22.00	0.00	55.00	0
249699.5	09288 0	Kreis 9 Altstetten	1991	√úbriges Geb√§ude f	√°r Indus	trie Indus	triegeb√§u	de In	dustrie- und	Lagergeb	√Sude	0.00	22.00	0.00	40.00	0
249628.8	09208	Kreis 9 Altstetten	1991	B√trogeb√Sude B√t	rogeb√§ud	le B√ºrogeb√Sude	0.00	509.00 0.	00 5430.00	0	0	0	0	0	0	0
249672.7	09208	Kreis 9 Altstetten	1978	B√2rogeb√Sude B√2	rogeb√§ud	le B√2rogeb√§ude	7488.00	4980.00 62	2.00 192634.	00	0	0	0	0	0	0
249598.9	09288 0	Kreis 9 Altstetten	1950	"Lager, Silo" "Be	h√≶lter,	Silos, Lagergeb√9	iude"	Industrie-	und Lagergeb	√§ude	0.00	460.00	0.00	2120.00	0	0
249619.1	09208	Kreis 9 Altstetten	1955	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstige	e Nichtwohn	geb√§ude	0.00	73.00	0.00	328.00	0	0	0
249625.5	09208 0	Kreis 9 Altstetten	1950	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√S	iude"	Industrie-	und Lagergeb	√§ude	0.00	238.00	46.00	900.00	0	0
249639.0	09208	Kreis 9 Altstetten	1940	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstig	e Nichtwohn	geb√Sude	0.00	26.00	0.00	100.00	0	0	0
249640.2	09208	Kreis 9 Altstetten	1945	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstige	e Nichtwohn	geb√Sude	0.00	9.00	0.00	20.00	0	0	0
249642.5	09208	Kreis 9 Altstetten	1950	√úbrige Kleingeb√Su	de Sons	tige Hochbauten	Sonstige	e Nichtwohn	geb√§ude	0.00	17.00	0.00	25.00	0	θ	0
249603.2	09208	Kreis 9 Altstetten	1984	Werkstattgeb√Sude	Indu	striegeb√Sude	Industr	ie- und Lag	ergeb√§ude	0.00	130.00	32.00	320.00	0	0	0
249448.7 0 0	09208 0	Kreis 9 Altstetten 0 0 0	1999	Bahngeb√§ude "Ge	b√§ude de	s Nachrichtenwese	ens, Bahnh√a	dfe" Gel	b√§ude des Ve	rkehrs-	und Nach	richtenw	esens	7345.00	7218.00	
249608.8	09208	Kreis 9 Altstetten	1986	Gesch√§ftshaus B√°	rogeb√§ud	le Bürogebäude	1953.00	1560.00 0.	00 37150.0	0	1	0	0	0	1	0
249607.5 0 0	09288	Kreis 9 Altstetten	2003	Industriegeb√§ude	Indu	striegeb√Sude	Industr	ie- und Lag	ergeb√Sude	279.00	279.00	0.00	1939.00	0	0	0
249628.4	09208 0	Kreis 9 Altstetten	2003	Industriegeb/Sude	Indu	striegeb√Sude	Industr	ie- und Lag	ergeb√§ude	3390.00	1613.00	463.00	47011.0	0	0	0
249630.4 0 0	09208 0	Kreis 9 Altstetten	2007 0	Gross- und Einzelha	ndelsgeb√	Sude Gross	- und Einze	e Lhande Lsgel	b√§ude	Gross-	und Einz	e l hande l	sgeb√§ud	е	0.00	
249522.5	09208	Kreis 9 Altstetten	1999	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√§	iude"	Industrie-	und Lagergeb	√Sude	0.00	21.00	215.00	8.00	0	0
0 0 249448.3	-	Kreis 5 Escher Wyss	1980	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√S	iude"	Industrie-	und Lagergeb	√Sude	17884.0	0	8818.00	7732.00	232146.6	30
249466.1	05201	Kreis 5 Escher Wyss	1980	"Lager, Silo" "Be	h√§lter,	Silos, Lagergeb√S	jude"	Industrie-	und Lagergeb	√Sude	15.00	15.00	0.00	134.00	0	0
0 0 249387.0			2888	√úbriges Geb√Sude f	√°r Indus	trie Indus	triegeb/§u	de In	dustrie- und	Lagergeb	/Sude	0.00	38.00	0.00	228.00	0

# The City - Data, Information, Knowledge, Architecture

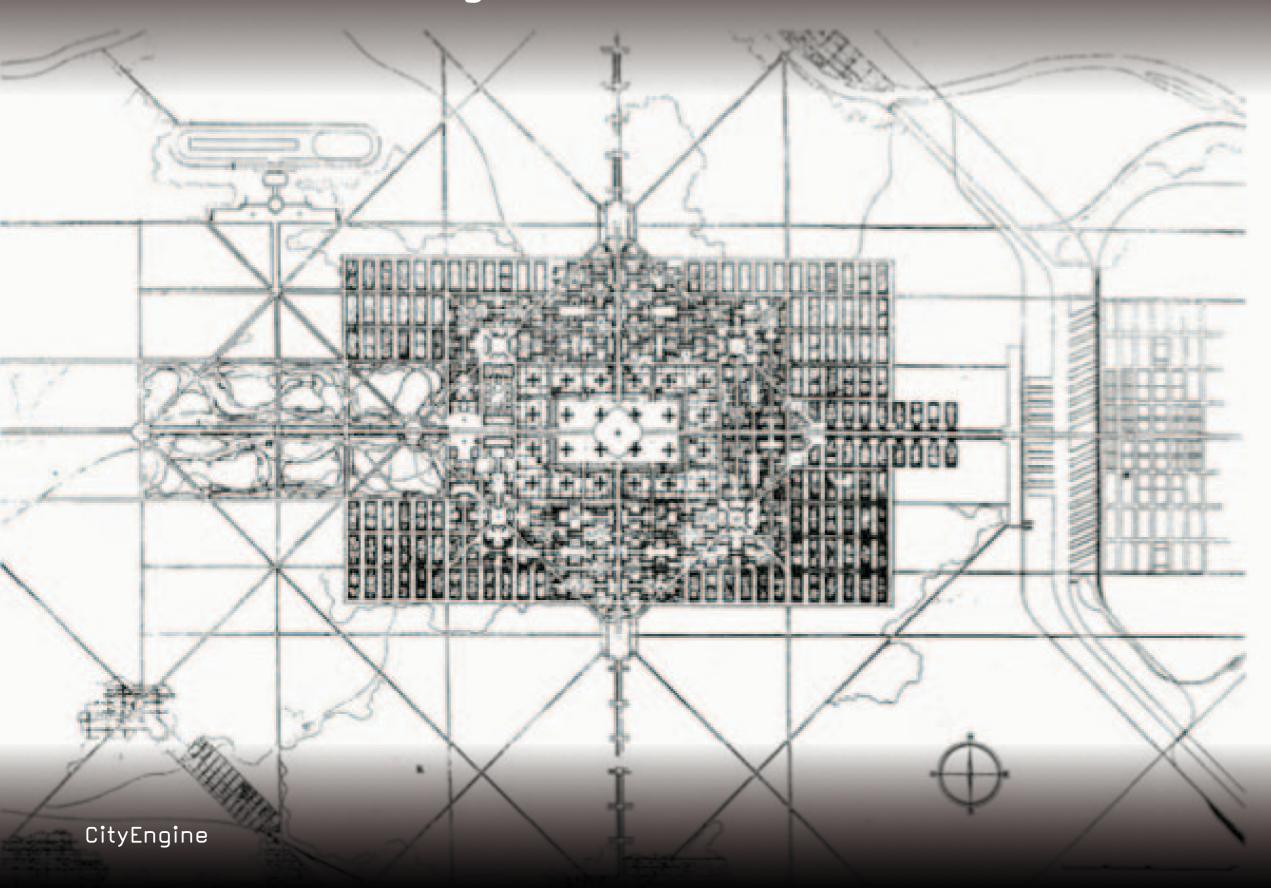


# The City - Data, Information, Knowledge, Architecture





# Tools for Planning Future Cities



# Reduce Complexity

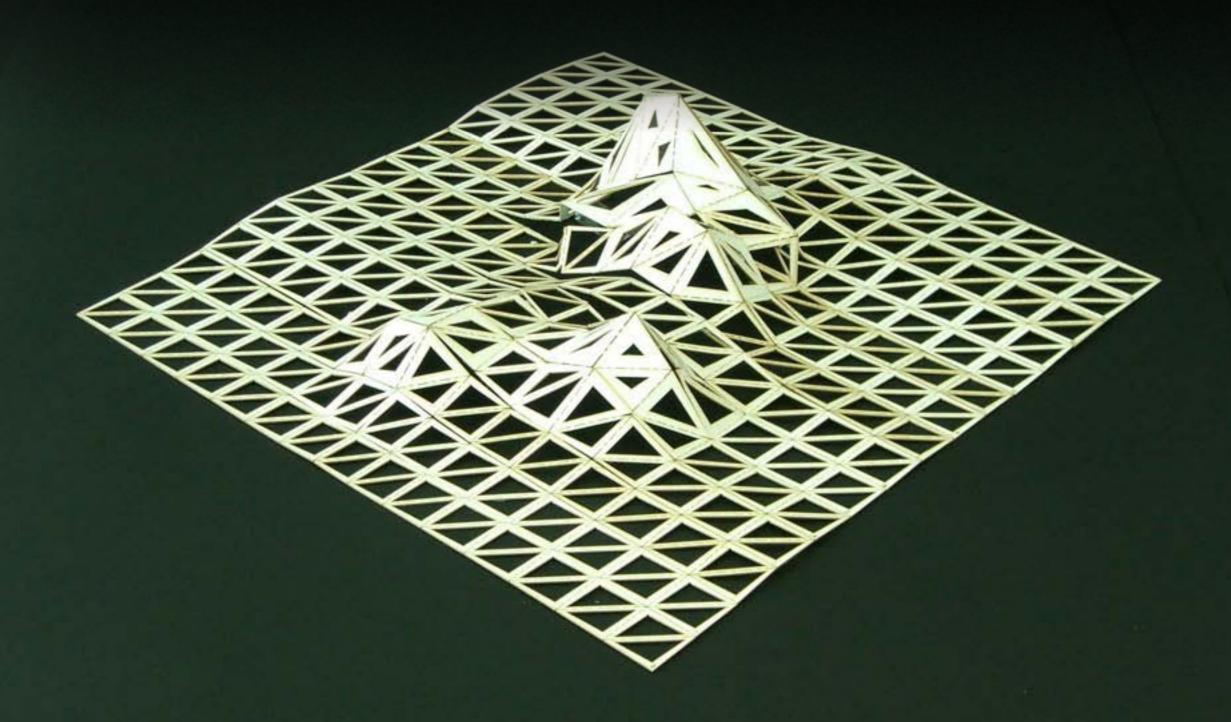


Projects

# Bridging the Gap Between Digital and Physical



# Materialise Information



Projects

Reclaim the Public Space

# public transportation simulation

Elsa Wifstrand, Ben Spicer, Bettina Pfister

# Projects

Reclaim the Public Space



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Introduction Information Architecture

# Overview

- Questions
- Discussion

# Information Architecture - Exercise

Course: 051-0726-10 (Elective Course Exercise, 3 ECTS)

Series: Projected Realities - Ich glaube nur was ich sehe

When: Mondays, 14:45 - 17:00

Where: HIT H12

Who: Christian Schneider, christian.schneider@arch.ethz.ch

Lukas Treyer, lukastreyer@student.ethz.ch

Web: http://www.ia.arch.ethz.ch/teaching/fs2010-exercise/



# Schedule

12:45-13.30 Lecture

13.45-14:30

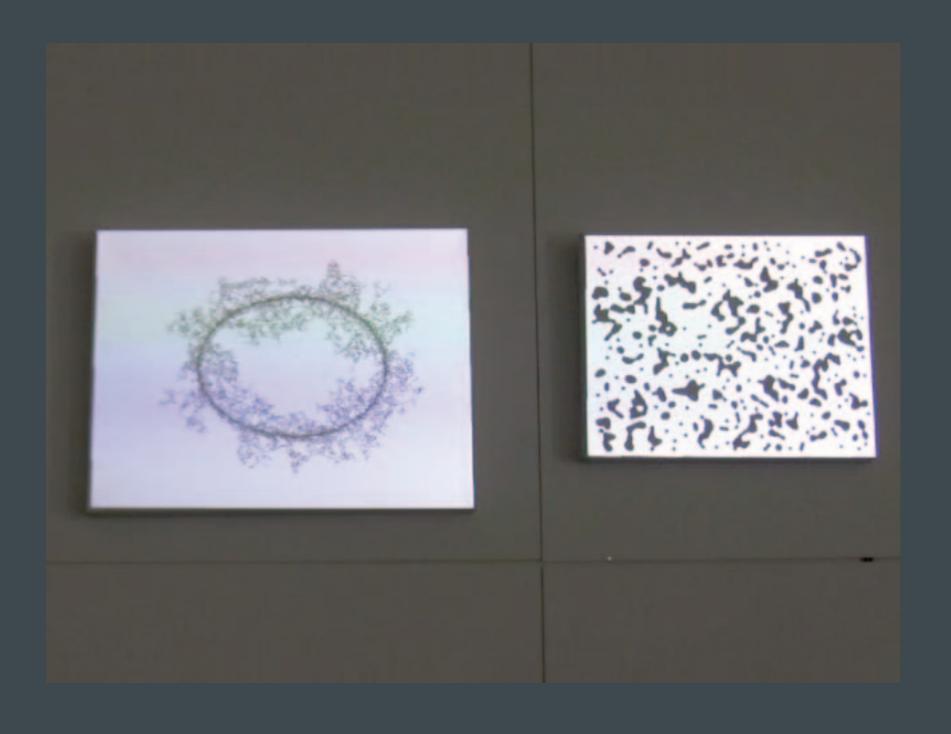
Exercise

14:30-17.00

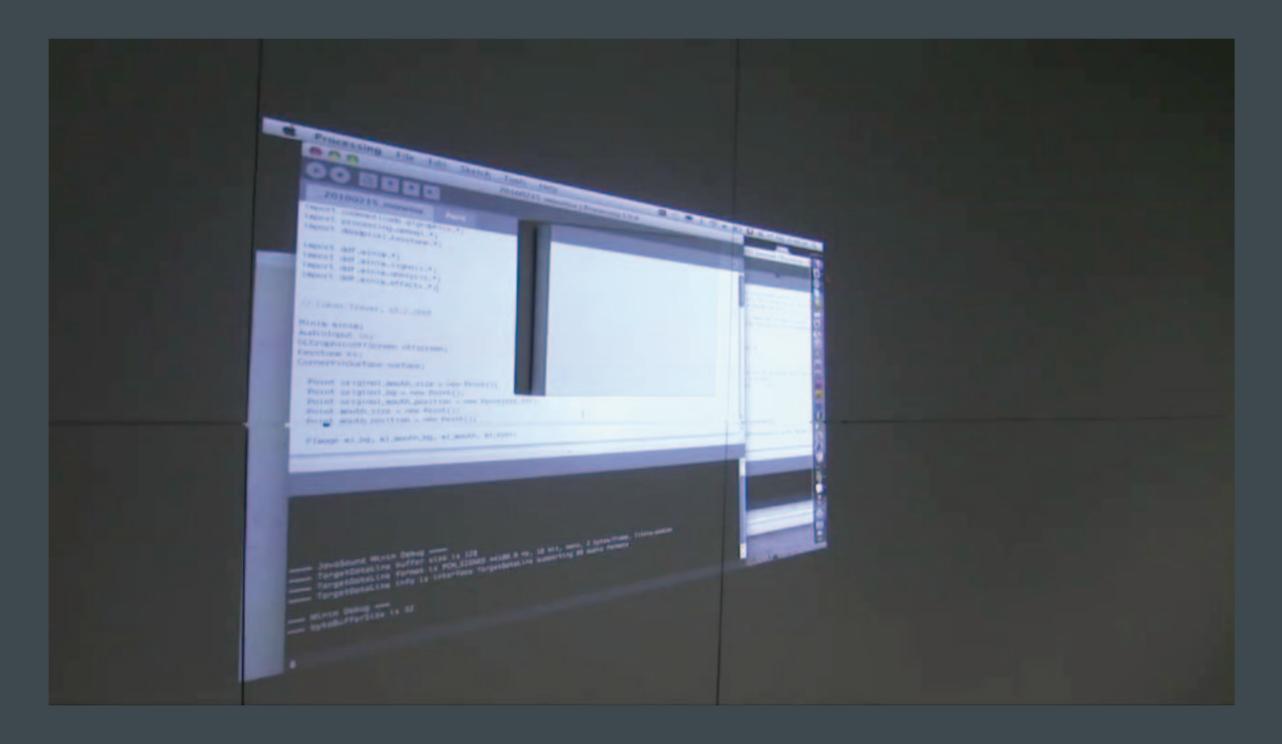
Processing

monday afternoons until seminar week

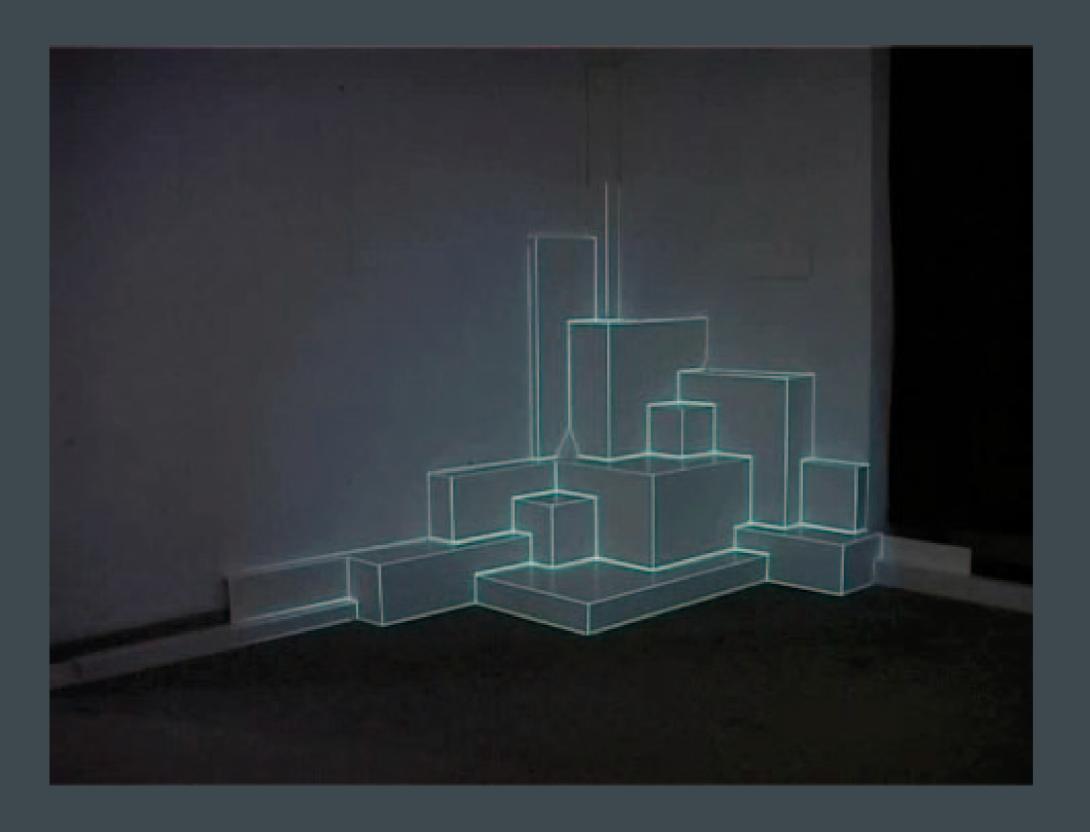
# Projected Realities



# Projected Realities



# Augmented Sculpture, Pablo Valbuena



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# Sandtable, Redfish Group

Chair for Information Architecture | FS2010

555 KUBIK, facade projection

http://vimeo.com/5595869

# Conclusion

- Information Architecture, IA, as a new field of research and learning
- Exercise: ....
- Next Monday: Excursion to the Bibliotheca Oechsliana in Einsiedeln. Departure at 13:00