

Architecture's Supply Chains

Like the production of many commodities, also the construction industry is organized within global or translocal networks. Dispersed sites of extraction or production, processing and logistics within cities and urban hinterlands worldwide are connected by complex infrastructural arrangements. They enable the circulation of materials as well as immaterial commodities and thus the exploitation of spatial difference from the urban to the planetary scale. These production and infrastructure systems have massive impacts on urbanization processes and the urban form by creating splintered landscapes, altering or reinforcing patterns of socio-spatial inequality.

This seminar explores the spatiality of supply chains, the physical infrastructures and logistics operations enabling commodity flows, their local and translocal urban impacts. It introduces key theoretical debates on commodity chains, logistics, infrastructure and urbanization through a series of readings in architecture and urban studies, political economy, human geography and anthropology, covering different geographical contexts in the Global South and North.

Students will develop individual case studies tracing the production and circulation of specific building materials. In small group projects, we will map and analyze sites of extraction/processing and distribution feeding selected building sites in Berlin. Through the engagement with the case studies and literature rooted in different strands of critical theory the seminar aims to build a sensitivity regarding the socio-economic relations and power structures embodied in architecture's supply chains.

Participants may choose to develop

- a case study as a group project (6 posters, written report) with interim presentations and consultations (6 ECTS, Qispos-Nr. 4805)
- individual term papers and presentations (3 ECTS, Qispos-Nr. 4817, registration for WA-HA: „Freie Hausarbeit“, Modulnr. 61406, Prüfungsnr. 2349550)

Seminar
WiSe 2020

3/6 ECTS
M_Arch, M_Arch_T, UD, SRP

Monday 1.30-3 pm
online

First meeting
Nov 9, 2020

Registration
Motivation letter & first assignment
due by Wed, Nov 11, 12pm

Dr. Elke Beyer e.beyer@tu-berlin.de
Lucas-Andrés Elsner l.elsner@tu-berlin.de

Chair of International Urbanism and Design
Professor Dr. Philipp Misselwitz

Technische Universität Berlin
School VI Planning Building Environment
Department of Architecture

Habitat Unit

Syllabus

Nov 9 1. Introduction

Nov 16 2. Commodity Chains

Reading

Plank, L., & Staritz, C. (2009). [Introduction: Global Commodity Chains and Production Networks – Understanding Uneven Development in the Global Economy](#). *Journal für Entwicklungspolitik*, 25(2), 4–19.

Tsing, A. (2016). What Is Emerging? Supply Chains and the Remaking of Asia. *The Professional Geographer*, 68(2), 330–337.

Crawford, K., & Joler, V. (2018). *The Amazon Echo as an anatomical map of human labor, data and planetary resources*. Retrieved from SHARE Lab website: <https://anatomyof.ai/>

Wikstrom, L. (2017). Three Material Stories. In D. Benjamin (Ed.), *Embodied Energy and Design. Making Architecture Between Metrics and Narratives*. (pp. 36-39, ff) New York/Zurich: Columbia University GSAPP/Lars Müller. See also: <http://www.lindseywikstrom.com/projects/three-material-stories/>

Beyer, E., Hagemann, A., & Misselwitz, P. (2020). Commodity Flows and Urban Spaces. An Introduction. *Articulo Journal of Urban Research* 21 [in print]

Hulme, A. (2017). Following the unfollowable thing: Methodological considerations in the era of high globalisation. *Cultural Geographies*, 24(1), 157–160.

Nov 23 3. Urbanization

Reading

Brenner, N. (2016). The Hinterland Urbanised? *Architectural Design*, 86(4), 118–127.

Harvey, D. (2001). Globalization and the “Spatial Fix”. *Geographische Revue*, (2), 23–30.

Moser, L., & Schär, G. (2013). Sand: Construction of Territory. Singapore's Expansion into the Sea. In M. Topalovic, M. Knüsel, & M. Jäggi, *Architecture of Territory - Hinterland: Singapore, Johor, Riau*. (PDF pages: 172-213) Zürich: ETH Zürich DArch. <http://topalovic.arch.ethz.ch/materials/hinterland/>

Nov 30 4. Infrastructure

Reading

Carse, A. (2017). Keyword: Infrastructure. How a humble French engineering term shaped the modern world. In P. Harvey, C. B. Jensen, & A. Morita (Eds.), *Infrastructures and Social Complexity. A companion* (pp. 27–39). London; New York: Routledge.

Plus one article of your choice:

Silver, J. (2014). Incremental Infrastructures: Material improvisation and social collaboration across post-colonial Accra. *Urban Geography*, 35(6), 788–804.

Kanai, J. M., & Schindler, S. (2019). Peri-urban promises of connectivity: Linking project-led polycentrism to the infrastructure scramble. *Environment and Planning A*, 51(2), 302–322.

Harris, A. (2013). Concrete geographies: Assembling global Mumbai through transport infrastructure. *City*, 17(3), 343–360.

Wiig, A., & Silver, J. (2019). Turbulent presents, precarious futures: urbanization and the deployment of global infrastructure. *Regional Studies*, 1–12.

Dec 7 5. Logistics

Reading

Chua, C., Danyluk, M., Cowen, D., & Khalili, L. (2018). Introduction: Turbulent Circulation: Building a Critical Engagement with Logistics. *Environment and Planning D*, 36(4), 617–629.

Waldheim, C., & Berger, A. (2008). Logistics Landscape. *Landscape Journal*, 27(2), 219–246.

Dec 14 6. Labour

Reading selection from:

WBYA? (2017). *Who Builds Your Architecture? A critical field guide*. Retrieved from: <http://whobuilds.org>

Tonetti, A. C., & Nobre, L. V. (2019). Counter-Conducts: Politics of Architecture and Labor in Brazil. In A. Fitz, & E. Krasny (Eds.) *Critical Care: Architecture and Urbanism for a Broken Planet* (pp. 78–90). MIT

Bronner, U. & Reikersdorfer, C. (2016). *Urban Nomads Building Shanghai. Migrant Workers and the Construction Process*. Transcript.

Dec 14 & 15 Exchange Sessions with the seminar Production Relations in Architecture

Jan 11 7. Researching Cement in Global Perspective – Urban Talk

Material Histories of Architecture Kim Förster, Manchester University

Conquering (with) Concrete. German Construction Companies as Global Players in Local Contexts. Monika Motylinska & team, IRS Erkner

Jan 18 & 25 8. & 9. Case Study Presentations

Guests (tbc): Lukasz Stanek, MARC; Kim Förster, MARC; Monika Motylinska & team, IRS Erkner; Alexander Stumm, TUB; Moritz Ahlert, TUB; David Bauer, TUB; Anke Hagemann, BTU

Feb 1 10. (Post)Colonial Infrastructures, Architecture and Material Circuits

Reading

Scotto, G. (2018). Colonial and Postcolonial Logistics. *Footprint*, 69–86.

le Roux, H. (2003). The Networks of Tropical Architecture. *The Journal of Architecture* 8(3), 337–54.

Henni, S. (2008). [Colonial Ramifications](#). *E-Flux Architecture, History/Theory*, gta Institute, ETH Zurich.

G, E. (2018). The New Silk Road and Logistical Geopolitics. *Society & Space*. Retrieved from: <http://societyandspace.org/2018/03/27/the-new-silk-road-and-logistical-geopolitics/>

Feb 8 11. Architectural Production and World-Making – Urban Talk

Architecture in Global Socialism Lukasz Stanek, Manchester University

Reading

Stanek, Ł. (2019) *Architecture in Global Socialism: Eastern Europe, West Africa and the Middle East in the Cold War*. Princeton University Press.

Feb 15 12. Knowledge Transfers: Transnational Planning, Globalizing Architecture

Reading selection from:

Faulconbridge, J., & Grubbauer, M. (2015). Transnational building practices: Knowledge mobility and the inescapable market. *Global Networks*, 15(3), 275–287.

Robinson, J. (2011). The Spaces of Circulating Knowledge: City Strategies and Global Urban Governmentality. In E. McCann & K. Ward (Eds.) *Mobile Urbanism: Cities and Policymaking in the Global Age*. University of Minnesota Press.

Easterling, K. (2012). Zone: The Spatial Softwares of Extrastatecraft. *Places Journal*.

Feb 22 13. Final discussion: Global and Regional Building Supply Chains

Student presentations & Guests: tba

Group Case Study Guidelines (6 ECTS)

Case studies are developed as group projects (ideally 4 participants, including different backgrounds and competencies in research, drawing and writing).

The final output of case studies consists of six A3 posters and a written report.

A layout template (IDML) for the A3 posters and case study reports is provided on the seminar cloud as a working document for the case studies. We aim to produce a booklet for download/print and an exhibition.

In developing case studies, seminar participants are invited to address a double research question:

How do specific sites and buildings enable trans-local commodity production?

In which ways are the material circuits and sites interrelated with urbanization processes?

The starting point for designing your research project is a **building material type used in a specific building site** of your choice, ideally a current project in Berlin.

In developing your case studies, follow a basic structure of different scales:

Trans-local analysis

Product

Production Network (Supply Chain)

Infrastructure Network

Site analysis

Extraction/Manufacturing

Logistics

Building site

Developing a precise research focus for each scale and site is a crucial part of the research design.

The scales requires different approaches of mapping or architectural drawing to visualize research findings and arguments. The visualizations are presented on a sequence of six A3 posters with short text commentary.

The written case study report (ca. 2500 words) provides a more extensive discussion in light of relevant literature from the syllabus of of your own choice, and additional visual material plus a full list of references for text, maps and drawings.

Grades will be based on the group's final output (50%), interim presentations (25%) and individual regular and active participation in weekly reading discussion (25%).

Group Case Study Topics & Key Dates

Suggestions for Case Study Topics:

Building Material Types

Sand
Cement
Timber
Brick
Steel
Insulation materials, plastic foils
Glass / Windows & Frames
Natural Stone
Nails, Screws, Tubing, Cables, Outlets (small mass items)
Smart devices (AI)
...
...

Key Dates for Group Case Study Projects

Nov 16	First Assignment Presentations Research ideas (all participants, one image & one minute each)
Nov 30 & Dec 7	Storyboard Presentations (all groups, with guests) Sketches for case study poster sequence
Dec 7–15	Abstract Submission & Short Presentations for feedback from course coordinators
Nov 30– Dec 16	Case Study Group Consultations (on appointment, Mon/Tue/Wed 10-12am)
Jan 4–15	Case Study Group Clinic (individual slots as required)
Jan 18 & Jan 25	Final Poster Presentations (all groups) with guests
Jan 18– Feb 3	Case Study Group Consultations (on appointment, Mon/Tue/Wed 10-12am)
Feb 22	Final discussion, Submission of posters and reports

Term Paper Guidelines (3 ECTS)

You may also choose to write an individual term paper (2500-4000 words excluding references) and to present on your research topic in a seminar session.

Term papers are to be developed on individually chosen topics, to be agreed on with the seminar coordinators based on a short written outline (abstract, 300-500 words).

In the paper you are expected to relate reading from the course syllabus to the topic you have chosen.

In the text, clearly identify the sources for the information and arguments you present (Author Year: Page). A list of all references you have used or quoted must be added at the end of the paper (not included in the word count).

We encourage you to include photographs or other graphical elements into the paper that support your arguments. Always identify sources and copyright holders.

A layout template for the term paper will be provided. We aim to produce a booklet with final reports for download/print.

Grades will be based on final output (50%), interim presentations (25%) and regular active participation in weekly reading discussion (25%).

Term Paper Topics & Key Dates

Suggestions for Term Paper Topics & Presentation Dates

Building Site Logistics	Dec 7
Construction Work	Dec 14
Global Architecture and Construction Engineering Firms	Feb 15 (tbc)
Regional Material Circuits (Principles, Examples)	Feb 22 (tbc)
Waste in Construction	
...	
...	

Your own suggestions for topics are welcome.

You might take a building material type as a starting point and address similar questions as group case studies.

Key Dates for Individual Term Papers

Topics and presentation dates must be fixed in the first seminar weeks.

By Nov 30 **Abstract submission** (300-500 words)
Abstracts should include topic, main question, an outline of the content structure and ca. five key references/information sources.

Feb 22 **Term Paper Final Submission**

Architecture's Supply Chains | Seminar Schedule | Winter 2020/21 | Habitat Unit | TU Berlin
 Dr. Elke Beyer, Lucas-Andrès Elsner

	Session Topic	Inputs & Guests	Presentations & Submission Deadlines
Nov 9	1. Introduction		
Nov 16	2. Commodity Chains		First idea: 1 image (all participants)
Nov 23	3. Urbanization	Tyler Sonnichsen: Internet Ethnography	
Nov 30	4. Infrastructure	Moritz Ahlert: Mapping	Case Study Storyboards I Term Paper Abstracts
Dec 7	5. Logistics	David Bauer (tbc) Anke Hagemann	Case Study Storyboards II Case Study Abstracts
Dec 14	6. Labour		Student presentations
Dec 14/15	Exchange sessions with students in the seminar Production Relations in Architecture		Case Studies: Short Abstract presentations
Jan 4-15	on appointment: Case Study Group Clinic		
Jan 11	7. Researching Cement in Global Perspective – Urban Talk Material Histories of Architecture Conquering (with) Concrete. German Construction Companies as Global Players in Local Contexts	Kim Förster, Manchester University Monika Motylinska & team, IRS Erkner	
Jan 18	8. Case Study Presentations I	Guest critics Kim Förster et al.	Poster presentations of group projects
Jan 25	9. Case Study Presentations II	Guest critics: Lukasz Stanek et al.	Poster presentations of group projects
Feb 1	10. (Post)Colonial Infrastructure and Material Circuits	Alexander Stumm	Student presentation
Feb 8	11. Architectural Production and World-Making – Urban Talk Architecture in Global Socialism	Lukasz Stanek, Manchester University	
Feb 15	12. Knowledge Transfer: Transnational Planning, Globalizing Architecture	Sophie Melix	Student presentation
Feb 22	13. Final discussion: Global and Regional Building Supply Chains	Guests tba	Student presentations Online exhibition
Final submission of group case study posters, reports and term papers			