INFRASTRUCTURAL IMAGINARIES IN SCANDINAVIA

GSAPP 2018 SUMMER WORKSHOP
TEI CARPENTER & JESSE LECavalier
JULY 25 - AUGUST 10
TEI CARPENTER

Tei Carpenter is an architectural designer, educator and founder of Brooklyn based design studio Agency—Agency. The studio’s recently completed work includes a new non-profit headquarters in downtown Houston and a winning entry for LA+ Journal’s island competition. In 2018, Agency—Agency was a winner of the New Practices New York award from the American Institute of Architects. She is Adjunct Assistant Professor at Columbia University’s Graduate School of Architecture, Planning and Preservation and Director of the Waste Initiative, an applied research and design platform.

Carpenter’s design and research work into architecture’s entanglement with emerging natures has been supported by the New York State Council on the Arts and has been exhibited at the Storefront for Art and Architecture and at the 2016 Venice Biennale. Recent design work and writing have appeared in Artforum, Cite, Pidgin, and Plat. Previously she has taught at Brown University, Cornell University, City College of New York and at Rice University as the Wortham Visiting Lecturer. Carpenter earned a Bachelor of Arts degree in Philosophy from Brown University and her Master of Architecture degree from Princeton University where she was awarded the Howard Crosby Butler Traveling Fellowship in Architecture.

JESSE LECAVALIER

Jesse LeCavalier (LECAVALIER R+D) is a designer, writer, and educator whose work explores the architectural and urban implications of contemporary logistics. He is the author of The Rule of Logistics: Walmart and the Architecture of Fulfillment (University of Minnesota Press, 2016). He is Assistant Professor of Architecture at the New Jersey Institute of Technology and the Daniel Rose Visiting Assistant Professor at Yale School of Architecture.

LeCavalier is a 2018 MoMA PS1 Young Architects Program finalist for his project SHELF LIFE and his installation “Architectures of Fulfillment” was recently part of the 2017 Seoul Biennale for Architecture and Urbanism. Recognition for teaching includes the 2015 New Faculty Teaching Award from the Association of the Collegiate Schools of Architecture (ACSA) and the 2010–11 Sanders Fellow at the University of Michigan. His work has appeared in Cabinet, Public Culture, Places, Art Papers, and Harvard Design Magazine and his essay, “The Restlessness of Objects,” was the recipient of a 2013 Core77 Design Award.
Copenhagen's ambitious push to be carbon-neutral by 2025

The Danish capital is moving rapidly toward a zero-carbon future, as it erects windfarms, transforms its citywide heating systems, promotes energy efficiency, and lures more people out of their cars and onto public transportation and bikes.
WATER & SANITATION

Here's How Sweden is Recycling 99% of its Waste

Don’t waste waste!

Starting Sunday, August 25, the global water community – decision makers from government, civil society and business - will meet in Stockholm for the world’s leading annual event on water and development - World Water Week. Follow #WWWweek for updates.
SCALES OF INFRASTRUCTURE

REGION
SAMSØ
ENERGY ISLAND

DISTRICT
KALUNDBORG
INDUSTRIAL SYMBIOSIS

BUILDING
COPENHILL
CROSS-PROGRAM
PART I
COPENHAGEN ++

COPENHAGEN
1-COPENHILL WTE, BIG
2-ROSKILDE ENERGY TOWER, ERICK VAN EGGERAAT
3-UN CITY HEADQUARTERS, 3X NIELSEN
4-THE SILO, COBE
5-MIDDELGRUNDEN WIND FARM
6-NORDHAVN DEVELOPMENT AREA
PART I
COPENHAGEN ++

1-SUPERKILEN PARK, BIG + TOPOTEK
2-LOUISIANA MUSEUM, BO & WOHLERT
3-BAGSVAERD CHURCH, JØRN UTZON
4-MOUNTAIN HOUSING, BIG
5-TIETGEN HOUSING, LUNDGAARD & TRANBERG
6-THORVALDSENS MUSEUM, M.G.BINDESBØLL
7-FROSILØ, MVRDV
8-HARBOUR BATH, BIG + JDS
9-FREETOWN CHRISTIANIA
...AND MORE!
PART I
COPENHAGEN ++

KALUNDBORG
INDUSTRIAL “ECO-PARK”
PART I
COPENHAGEN ++

SAMSØ
CARBON NEUTRAL COMMUNITY

SAMSØ: THE ENERGY SELF-SUFFICIENT ISLAND

The first island to become completely energy self-sufficient in 15 years.

11 ONSHORE WIND TURBINES
1 turbine generates enough electricity to power 410 houses.

The turbines transmit electricity to the mainland where it is used by the island's consumers.

11 OFFSHORE WIND TURBINES
10 1.5 MW offshore wind turbines generate 12,000 MWh, enough for 20% of the island's consumption.

One of the heating plants burns wood from 3300 MWh of wood pellets, which are combined with 460 kW wood chip fuel.

EXCESS ENERGY
Excess electricity produced from offshore wind farms is invested in new energy projects.

5 MW ONSHORE WIND TURBINES
5 MW onshore wind turbines generate 25,000 MWh, enough electricity for 10,000 electric cars or 6,000,000 gallons of oil.

SAMSØ ISLAND FACTS

- Area: 114 km²
- Population: 1130
- Investment: DKK 300 million
PART II
MALMO / STOCKHOLM

MALMO
LINKOPING
STOCKHOLM
PART II

MALMO

1-SYSAV
MOST ENERGY EFFICIENT WTE IN SWEDEN; ONE
OF THE MOST ADVANCED WTE FACILITIES IN
THE WORLD

2-WESTERN HARBOR DISTRICT
NEW “ECO” NEIGHBORHOOD ANCHORED BY
CALATRAVA’S TURNING TORSO
PART II
MALMO

1-FLOWER SHOP, SIGURD LEWERENTZ
2-ST. PETER’S CHURCH, SIGURD LEWERENTZ
3-MODERNA MUSEET, THAM & VIDEGÅRD
4-IKEA MUSEUM
5-MALMO OPERA, SIGURD LEWERENTZ
...OCH MER!
PART II
LINKOPING/STOCKHOLM

1-LINKOPING WTE
2-ENVAC WASTE HANDLING
3-HAMMARBY “ECO-DISTRICT”
4-THE CATHEDRAL, PETRA GIPP
PART II
STOCKHOLM

1- NATIONAL LIBRARY, GUNNAR ASPLUND
2- WOODLAND CHAPEL, GUNNAR ASPLUND
3- ST. MARK’S CHURCH, SIGURD LEWERENTZ
4- STOCKHOLM U. LIBRARY, RALPH ERSKINE
5. MODERNA MUSEET STOCKHOLM
...AND MORE!
OUTPUT MODELS

FIELD GUIDE
(PETERSON’S FIELD GUIDE TO BIRDS)

RECOGNITION MANUAL
(US NAVY)

SYSTEMS DRAWINGS
(LATERAL OFFICE, STATES OF DISASSEMBLY, 2017)

BROADSHEET POSTER
The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation

POTENTIAL PARTNERS

KTH Vetenskap och Konst
Malmö University
BJARKE INGELS GROUP

International Society for Industrial Ecology