

ARCHDES 701 | ADVANCED DESIGN 2 | TOPIC OUTLINE | SEM 2 2019

The Advanced Design 2 topics are structured around the theme of 'urban patterns'. At their broadest, the topics foreground large-scale urban investigations concerning infrastructure, context, landscape, architecture, relationships between these factors and patterns of inhabitation thus supported. Crafted propositions are to be developed that demonstrate an exploration of the urban patterns theme across a range of scales.

OCEANIC CONTROVERSIES: Connecting architecture to issues of concern



The controversial Makoko Floating School in Lagos by NLE

NICK SARGENT

Nick Sargent is a researcher, educator and designer who has previously taught at UTS and the University of Sydney and worked for The Festival of Transitional Architecture (Festa), FIELD Studio and Melling:Morse Architects. He currently researches how architectural practice and education participate in social change.

GENERAL COURSE INFORMATION

Course :	Advanced Design 2 ARCHDES701
Points Value:	30 points
Course Director:	Andrew Douglas andrew.douglas@auckland.ac.nz
Course Co-ordinator:	Uwe Rieger u.rieger@auckland.ac.nz
Studio Teacher:	Nick Sargent
Contact:	N.Sargent@auckland.ac.nz niksrgt@gmail.com (emergencies)
Location:	TBC
Hours:	Tuesday and Friday 1:00-5:00pm

For all further general course information see the ARCHDES701 COURSE OUTLINE in the FILES folder on CANVAS.

OCEANIC CONTROVERSIES

Students joining this studio should have an interest in social change, architectural and political theory, and a desire to translate this into design.

This studio operates as a kind of mini-thesis project in which students will be supported in learning to develop a research inquiry, a project brief, a political intent and a design proposition. We will foreground a massive and complex issue of concern—the urban problem of sea level rise caused by climate change—and help students to orient themselves within this field by considering ideas from contemporary theorists and architects to better formulate how architecture might participate in social issues. This is a broad (rather than deep) studio in that it will quickly cover a wide range of skills:

Research: How do we make a large and complex research topic manageable?

Design: How do we connect design practices across scales (trans-scalarity) to issues we're interested in or are concerned about?

Communications: What is it that architects and architectural propositions actually do in the world, and how do we design for these performative effects?

We will apply this approach to the problem of sea level rise (SLR) as it acts on a diverse range of sites in Auckland. In coastal cities the issue of SLR will almost certainly become one of the major challenges for architects and urban designers as buildings, infrastructure and ecosystems are increasingly flooded by the ocean. However, this isn't just a technical problem to be solved by experts; it is socially controversial with a variety of contestatory beliefs and arguments. For instance: *will SLR actually occur and, if so, how much?; who is to blame?; who will be affected?; is this a problem for governments, corporations or private individuals to fix?; should we focus on adaptation or mitigation strategies?; should we proceed quickly or cautiously?; should cities retreat, defend or float?; who should be allowed to participate in these debates?* There are many more questions we could also ask—none of which have straightforward answers. What they highlight is the deep uncertainties at the core of this issue. This is what a controversy looks like: a dynamic and contested site where people come together, often through disagreement. Here we can witness and participate in the various ways – architecture is one - the social world is constructed.

Following theorists like Bruno Latour, Isabelle Stengers and Jane Bennett, who include non-human entities as active participants in social collectives, we will test architecture as a type of social connector that can give a voice to the ocean as a participant in the controversy of SLR in Auckland. We will thus focus our architectural skills and devices on a deceptively simple question: *what social relationship should we have with the ocean in the era of climate change?* If the era of modernity has treated the threshold between ocean and city as a site to be exploited for leisure, privilege, circulation or shipping, what architecture might be appropriate for the ocean's edge in an era of climate change? And, as we explore these questions and position ourselves in relation to this controversy, how can we, as architects, have an influence?

TOPIC STRUCTURE AND CONTENT

This studio is structured by three inquiries that act as a scaffold supporting students to learn how to develop their own research and design trajectories. Students will be encouraged to take ownership over this structure with the tutor acting primarily as an event manager keeping things running smoothly. Inquiry 1 focuses on research and orientation; Inquiry 2 on designing; and, Inquiry 3 on theoretical fundamentals.

Inquiry 1: Researching SLR in Auckland

The studio will operate as a research lab exploring the dynamic social construction of SLR as an urban controversy connected to specific sites in Auckland. Inquiry 1 will articulate a socio-material assemblage into which Inquiry 2 will be embedded.

In 'site groups' of 3-4, students will select a specific site with a specific spatial problematic that will form the basis for their research and individual design proposition. Site options will be supplied once confirmed.

To create a class database of shared research information we will begin by working for two weeks in vertical research groups (1 student from each group above) to explore SLR at different scales:

- Global Scale
- National Scale
- Urban Scale
- Architectural and Human Scales

At each of these scales research groups will need to ask:

- Who are the key human and nonhuman actors?
- What effects will SLR have?
- What actors are not able to participate in the controversy?
- What are the potential design opportunities for architects?

Once this information is compiled, students will work in their site groups to synthesise this to the specifics of their design site. Each group will produce a 3-4 minute film that will be screened prior to their individual design presentations and summarise their site problematic into narrative form.

Inquiry 2: Designing oceanic architectural propositions

Through three stages each student will individually design an inventive architectural proposition that explores the implications of the question: *what social relationship should we have with the ocean in the era of climate change?*

2a: Material inventions

The first stage of design will be to develop a material artefact that creates a spatial and aesthetic relationship between humans and the ocean. Starting points could be ideas of **retreat, resistance, flotation, submersion, caring, repairing, utilising and so on**. These could be conceived as architectural details or object-design. We will conceptualise this object as being a nonhuman entity that has a particular type of political influence on the world. The only rules are:

- you will have to physically experiment with materials
- build the object, or a piece of it, at 1:1
- fully integrate the object into your architectural proposition and demonstrate its performance at reviews

2b: Spatial inventions

Connecting the small scale of 2a to the large scale, this second stage will be the design of an architectural proposition that responds to the specific SLR problematic of your chosen site. Questioning the certainty and authority of a 'master or directional plan,' we will collectively explore ways to represent and choreograph the temporality, materiality and spatiality across a range of scales (the detail, building, site, urban and planetary scales). Each student will produce architectural drawings and models that operate in a trans-scalar way and show how small things, like an architectural detail or spatial moment, are connected to big things like the global problem of SLR. Brief specifics will be refined on an individual basis in conversation with your tutor.

2c: Communicative inventions

Working from the premise that architecture is social, each student will be asked to question the political neutrality of standard pin-ups. How do architects persuade others? How do architects encourage debate or controversy? How do architects antagonise opponents? How do architects communicate transparently or opaquely? What role can drawings, models and other architectural devices play in social

controversies? With these questions in mind, students will be asked to consider a range of performative effects architectural devices might have. To do this students will design a fictitious scenario that their project is to be presented within and treat their final presentation as a communicative event. This will be introduced and developed through a studio workshop in week 7.

Note: *Do not forget to document your individual design process for your process document. Make notes of tutorial conversations, take photographs, save progress images etc.*

Inquiry 3: Supplementary conceptual tools

Research and design will be supplemented by four modules that introduce useful concepts for working with complex and dynamic situations. These will be based on the writing of contemporary architects and theorists and will be presented in 2 hour tutor led workshops.

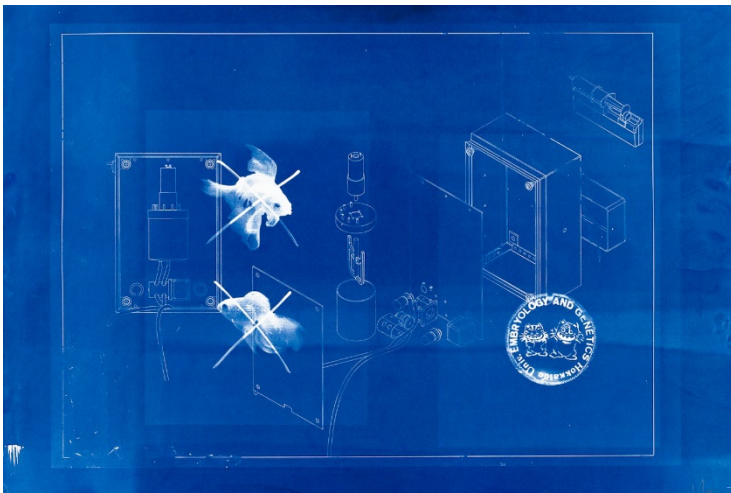
Module 1 – Controversy and the social – Why are we looking at controversies? Who gets to participate in these?

Module 2 – Narrative techniques – How to turn complex information into a good story? (*Presented by Script to Screen's Eloise Veber*)

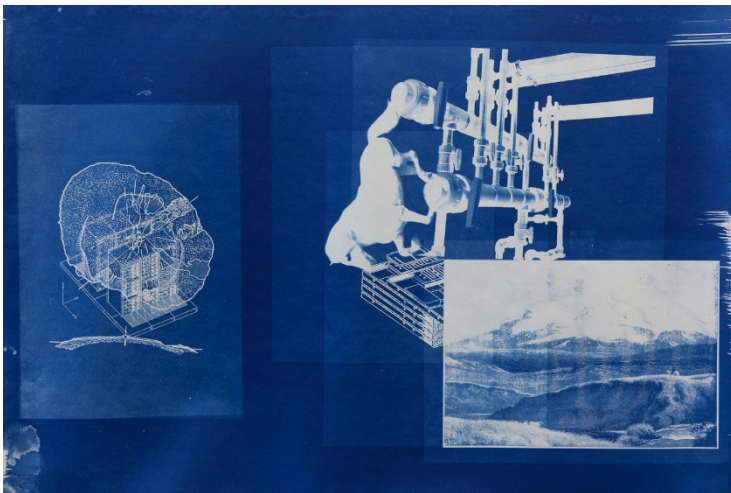
Module 3 – Trans-scalarity – How do we work with the interconnectedness of different things and different scales?

Module 4 – Architectural cosmopolitics – In what ways can architecture have political effects?

Students will be supplied with a small amount of targeted readings prior to these modules.



Revital Cohen and Tuur van Balen, "Sensei Ichi-go (Mixing Unit)"



Revital Cohen and Tuur van Balen, "From Below (Year Round Ambient)"

SPECIAL NOTE: *My partner is expecting a baby August 21. Due dates are unpredictable but there will likely be an unexpected rearrangement of a class when this happens!*

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|---------------|----------------------------|---|
| Week 1 | M 22/7
T 23/7
F 26/7 | Studio ballot
Introduce Inquiry 1 in studio , form groups, select sites, start research
Introduce Inquiry 2 @ Kelly Tarlton's \$15.50 |
| Week 2 | T 30/7
F 2/8 | Inquiry 1 – Research workshop
Research presentations |
| Week 3 | T 6/8
F 9/8 | Module 1 + visit to St Paul St Gallery
Inquiry 2a – presentation, Introduce 2b |
| Week 4 | T 13/8
F 16/8 | Module 2 (Eloise Veber), storyboards
Inquiry 2 - desk crits |
| Week 5 | T 20/8
F 23/8 | Inquiry 1 – rough cut film screening and desk crits
Module 3 + Inquiry 2 desk crits |
| Week 6 | T 27/8
F 1/9 | Student directed working session
Mid-semester crit – Inquiry 1 film screening and Inquiry 2a and 2b |

MID-SEMESTER BREAK – develop inquiries 1, 2a and 2b further

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| Week 7 | T 17/9
F 20/9 | Module 4 + Introduce 2c
2c presentation |
| Week 8 | T 24/9
F 27/9 | Cross-crit TBD
Inquiry 2 – desk crits, engineer input tbd |
| Week 9 | T 1/10
F 4/10 | Inquiry 2 –desk crits
Inquiry 2 –desk crits |
| Week 10 | T 8/10
F 11/10 | Inquiry 2 –desk crits
Prefinal rehearsal |
| Week 11 | T 15/10
F 18/10 | Inquiry 1 + 2 –desk crits
Inquiry 1 + 2 – desk crits |
| Week 12 | T 22/10
W 23/10 | Optional desk crits
AD2 Final Reviews |



Armin Linke, "Norwegian University of Science and Technology."



Armin Linke, "ISA, XXII Assembly of the International Seabed Authority."

RESOURCES

Bennett, Jane. *Vibrant Matter : A Political Ecology of Things*. Durham, North Carolina: Duke University Press, 2010.

Fallan, Kjetil. "Architecture in Action: Traveling with Actor-Network Theory in the Land of Architectural Research." *Architectural Theory Review* 16, no. 2 (2011): 184-200.

Latour, Bruno. "Politics of Nature: East and West Perspectives." *Ethics & Global Politics* 4, no. 1 (2011): 1-10.

Paglen, Trevor. "Some Sketches on Vertical Geographies." 2016, accessed 17 July 2019, <https://www.e-flux.com/architecture/superhumanity/68726/some-sketches-on-vertical-geographies/>

Stengers, Isabelle. "The Cosmopolitical Proposal." In *Making Things Public : Atmospheres of Democracy*, edited by Bruno; Weibel Latour, Peter. Cambridge, Mass.: MIT Press, 2005.

ARCHITECTURE

Awan, Nishat, Tatjana Schneider, and Jeremy Till. *Spatial Agency : Other Ways of Doing Architecture*. Abingdon, Oxon: Routledge, 2011.

Modelling Kivalina. "The Coming Storm and the Changing Shoreline of Kivalina." In *Forensis*, edited by Forensic Architecture, 700-11. Berlin: Sternberg Press, 2014.

Easterling, Keller. *Extrastatecraft : The Power of Infrastructure Space*. Brooklyn, NY: Verso, 2014.

Gaestel, Allyn. "Things Fall Apart." 2018, accessed 17 July 2019, <https://magazine.atavist.com/things-fall-apart-makoko-floating-school>

Moore, Jacob, ed. *Climates : Architecture and the Planetary Imaginary*. New York: Columbia Books on Architecture and the City, 2016.

Obrist, Hans Ulrich. "Andres Jaque Interviewed." In *Andres Jaque: Phantom. Mies as Rendered Society*, edited by Andres Jaque, 22-29. Barcelona, Spain: Fundació Mies van der Rohe, 2013.

Till, Jeremy. *Architecture Depends*. Cambridge, Mass.: MIT Press, 2009.

Yaneva, Albena, and Alejandro Zaera-Polo. *What Is Cosmopolitical Design? : Design, Nature and the Built Environment*. Burlington: Ashgate, 2015.

CLIMATE CHANGE

Demos, TJ. "Against the Anthropocene." Demos, T. J. *Against the Anthropocene : Visual Culture and Environment Today*. Berlin: Sternberg Press, 2017.

Edwards, Paul N. *A Vast Machine : Computer Models, Climate Data, and the Politics of Global Warming*. Cambridge, Mass.: MIT Press, 2010.

Morton, Oliver. *Eating the Sun : How Plants Power the Planet*. London: Fourth Estate, 2007.

Morton, Timothy. *Being Ecological*. Cambridge, Massachusetts: The MIT Press, 2018.

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Cambridge, Mass.: Harvard University Press, 2011.

Oreskes, Naomi. *Merchants of Doubt : How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York: Bloomsbury Press, 2010.

OCEANS / SEA LEVEL RISE

Auckland Council. *Climate Change Risks in Auckland*. Technical Report. Auckland: Auckland Council, 2019.
<http://www.knowledgeauckland.org.nz/assets/publications/TR2019-019-Climate-change-risks-in-Auckland-Arup-March-2019-final.pdf>

Helmreich, Stefan. *Alien Ocean*. Oakland: University of California Press, 2009.

The Intergovernmental Panel on Climate Change. *The Ocean and Cryosphere in a Changing Climate*. Forthcoming Report. 2019.
<https://www.ipcc.ch/report/srocc/>

Ministry for the Environment. *Preparing for Coastal Change*. Report. Wellington: Ministry for the Environment, 2017.
<https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/coastal-hazards-summary.pdf>

National Institute of Water and Atmospheric Research. "Sea Levels and Sea-level Rise." Accessed 17 July 2019,
<https://www.niwa.co.nz/natural-hazards/hazards/sea-levels-and-sea-level-rise>

Golubiewski, Nancy E.Kyle Balderston, Chad Hu and Jamie Boyle. *Auckland's Exposure to Sea Level Rise: Part 1 – Regional Inventory*. Technical Report. Auckland: Auckland Council, 2019.
<http://www.knowledgeauckland.org.nz/assets/publications/TR2019-017-Aucklands-exposure-to-sea-level-rise-part-1-regional-inventory-final.pdf>

Foley, Melissa M. and Megan Carbines. *Climate Change Risk Assessment for Auckland's Marine and Freshwater Ecosystems*. Technical Report. Auckland: Auckland Council, 2019.
<http://www.knowledgeauckland.org.nz/assets/publications/TR2019-015-Climate-change-risk-marine-freshwater-final.pdf>

CONTROVERSIES

Callon, Michel, Pierre Lascoumes, and Yannick Barthe. *Acting in an Uncertain World : An Essay on Technical Democracy*. Inside Technology. Cambridge, MA: MIT Press, 2009.

Venturini, Tommaso. "Diving in Magma: How to Explore Controversies with Actor-Network Theory." *Public Understanding of Science* 19, no. 3 (2010): 258–73.

FILMS

Lee, Spike, dir. *When The Levees Broke. A Requiem in Four Acts*. 2006; USA: HBO

Castaing-Taylor, Lucien & Verena Paravel, dirs. *Leviathan*. 2013.

Fothergill, Alastair, dir. *Our Planet*. 2019.

ARTISTS

Revital Cohen and Tuur van Balen, see *Sensei Ichi-go*

Armin Linke, see *Prospecting Ocean*

Pierre Huyghe, see *Unpredictable Ecosystems*

Sarah Sze

Joan Jonas, see *Moving off the Land*

Forensic Oceanography, see *The Left-to-die Boat*

Olafur Eliasson, see *Green River Project* among others

The Distance Plan, see *Climate and Infrastructure, Human Resources*

REQUIRED PRODUCTION

Per research group:

A 3-4min film that presents the reviewers to the problematic of your site based *research* challenge, introduces key actors, and conveys a sense of place.

Per individual:

A presentation of your design proposition including:

- architectural drawings and models
- 1:1 prototype of a material invention that participates in the proposition
- a communication strategy for a fictitious scenario that operates as a meta-proposition about the role architects play in relation to controversies
- an A5 size process document

DESIGN REPORT

Advanced Design 2 requires the preparation of a **Design Report**. In 2019 this will be prepared in a workshop as part of the core course taught con-currently with studio, *ARCHGEN 703 Design as Research*, where it will account for %40 of the grade. While assessed as part of the Design as Research course it will be focussed on the studio project and should be refined and re-submitted to your studio teacher in week 10 so that it can be

circulated to the critics allowing them to prepare ahead of the final review.

ASSESSMENT & FEEDBACK

This course is assessed as 100% coursework. Conversational feedback is given throughout the semester. Written feedback, with indicative grading, is given at a date around the mid-point of the semester. All further information regarding assessment is available in the ARCHDES 701 Advanced Design 2 Course Outline (on Canvas).



CNN, Hurricane Katrina



CNN, prisoners being guarded during Hurricane Katrina

LEARNING OUTCOMES

General Course Outcomes & Specific Outcomes for this Brief

On successful completion of this course students should be able to:

- *Theory*: Show evidence of development of critical thinking and conceptual consistency throughout the design process.
Theory: Contribute to class discussions and research, and experiment with translating theoretical concepts into making both a design proposition and a meta-proposition about the role of architects/architecture in relation to issues of concern.
- *Architectonics*: Demonstrate abilities to advance conceptual thinking and design propositions through identifying and addressing issues of materiality, structure and construction.
Architectonics: Demonstrate how material inventions and architectural proposition perform temporally and spatially and what their materiality, structure, temporality and construction has for issues of concern.
- *Performance*: Show abilities to advance conceptual thinking and design propositions through interrogating and addressing in depth the natural environmental, contextual, and programmatic factors underlying the project.
Performance: Show abilities to advance conceptual thinking and design propositions through consideration of the interrelationships between natural, social and programmatic factors underlying the project.
- *Form and Space*: Demonstrate skill in the development of three dimensional architectural form and space, both exterior and interior.
Form and space: Show an understanding of how organization of form and space relates to critical positions underpinning design.
- *Media*: Display skill in the communication and development of conceptual, preliminary and developed design propositions through the strategic use of architectural media.
Media: Work collaboratively to produce quality communications shaped by narrative syntheses. Work

individually to present architectural propositions expressed through inventive communication strategies.