

The Constructed: An introduction to architectural practice **as a complex and collaborative enterprise**. Offers the opportunity to explore materials, construction, fabrication processes, and detailing, **through making**. Requires students to understand the full range of drawings required to move from design concept to actual construction.

JULIANA WILSON
Ab Ab, Ha Ha...Abaa (!!)



MOSES BRIDGE, Ro & Ad Architecten, Halsterem, The Netherlands

“The bridge lies like a trench in the fortress and the moat, shaped to blend in with the outlines of the landscape. The bridge can't be seen from a distance because the ground and the water come all the way up to its edge. When you get closer, the fortress opens up to you through a narrow trench. You can then walk up to its gates like Moses on the water”.

Ro & Ad Architecten

“... we frequently make thoroughviews, called Ab, Ab, which are openings in the walls, without grills, to the very level of the walks, with a large and deep ditch at the foot of them, lined on both sides to sustain the earth, and prevent the getting over; which surprises the eye upon coming near it, and makes one laugh, Ha! Ha! from where it takes its name. This sort of opening is haba, on some occasions, to be preferred, for that it does not at all interrupt the prospect, as the bars of a grill do”.

Architect John James 1712

This studio paper will be centered around the investigation of Threshold as a thematic condition in the prospect for a socially driven exploration of shared learning spaces. Students are to explore and discover the opportunities within and between the thresholds of surface, solid and void, materiality, and craft through the investigation of tolerances, overlaps, layering, junctions, edge conditions and boundary relationships.

Iterative studies of the prescribed materials (stone and timber), will guide the conceptual design process of drawing and modelling, leading to a richly layered architectural language making visible the generative process of

learning-through-making. The discovery of consequence and implication, the re-examination and refinement of drawings and models, will assist students in establishing a material commitment, leading to an overall design emerging from the aggregation of the investigation of the detail and materiality.

*With an emphasise on drawing as generator, students are encouraged to discover architectural opportunities through material experimentation, modeling, drawing and review, recording how an overall architectural language may emerge from the iterative exploration of the detail. **Part of this design paper requires students to design and make their own 1:1 scale piece of furniture.***



RAMALLAH, WEST BANK - 2005. "Art Attack" by Banksy.

GENERAL COURSE INFORMATION

Course :	Design 4 ARCHDES201
Points Value:	30 points
Course Director:	Andrew Douglas andrew.douglas@auckland.ac.nz
Course Co-ordinator:	Farzaneh Haghighi F.Haghighi@auckland.ac.nz
Studio Teacher:	Juliana Wilson
Contact:	juliana@wilsonlawson.nz
Location:	Level 2 studio, building 421
Hours:	Tuesday 1:00-5:00pm and Friday 1:00-5:00pm

For all further general course information see the ARCHDES201

STONEWALL

Design 4 carries the theme of 'Architecture and Realization' and introduces the idea that architecture is a material culture. Tectonic and detail strategies will be emphasized as design generators balancing strategies drawn from brief, site and landscape. The course presents labour, craft, technique, design for and through production, material selection, economy... **MAKING** as the means to propose and develop architecture.

Group working: The Design 4 course requires students to engage in collaborative modes of production. As such the course acknowledges that architecture is always a collaborative endeavour, be that between architect and client, consultants, fabricators, other designers and various public bodies and diverse audiences. This course is an opportunity to develop group skills, to leverage peer-to-peer learning and to develop and test collaborative design strategies. Opportunities will be given to address necessary skill development in this area and for reflection on how the group work process has informed the overall project.

Stonewall

verb

delay or obstruct (a request, process, or person) by refusing to answer questions or by being evasive.

noun

an act of delaying or obstructing a person, request, or process.

The remaining volcanic Basalt stonewall of Albert Barracks (1846-1852) located in the University of Auckland can be traced back to the colonial mid-nineteenth century when early plans for the town of Auckland were developed. A high wall enclosed nine hectares of military fortification, roughly octagonal in plan, included barracks, a munitions magazine, a hospital and a commissariat. More than one hundred Māori stonemasons and builders were involved in this construction, mainly utilising volcanic Basalt blocks quarried from nearby Mangawhau Mt Eden. The barracks were disbanded in 1870 and the wall was largely demolished afterwards with eighty

five metres of the original wall left. The remaining stone itself was returned to Mt Eden to fortify the prison that arose there from 1872.

Walls are key, basic architectural elements that enclose and shelter while separating inside from out. For modernism, glass promised the blurring of this boundary and became widespread globally as figure and actualisation of new configurations of transparency – themselves integral to revisions in walling functions no less than the remarking of territory at levels ranging from personal to national life. Yet, as Wendy Brown observes in *Walled States, Waning Sovereignty* (2010), walls, real physical walls, are reappearing globally not solely for defensive means but for their symbolic and polemic functions. Such barriers separating us/them, inside/outside, friend/enemy, rich/poor are evident everywhere. Consider the growing and intensifying divisions of ‘us’ and ‘others’ effected by the 708 km Israeli west bank barrier; the electrified security fences constructed at the border between South Africa and Zimbabwe in 1984, and then Mozambique in 2012; or Saudi Arabia’s 1,800 km border fence with Yemen; and started in 2006 much of the United States’ border with Mexico – 1000 km - has a steel and concrete barrier.

In the wake of recent troubling events in New Zealand, tens of thousands gathered at parks and public spaces condemning violence and supporting victims precisely through collective acts of disregard for any divisions. In doing so architecture responded by opening doors, and availed itself of adjacent open parks and public spaces. Flows of people, flowers, notes and donations traversed prior divisions calling up new senses of self and connection, senses that similarly make architecture and its walling instincts newly imaginable. This design studio invites a rethinking of the role of walls in the formation/deformation of communities, the encouraging/hindering of generosity, the generating/dismantling of compassion, and the territorialising/de-re territorialising land.

Focusing on the University of Auckland precinct, the city’s colonial history will be examined in the reconsideration and reinvention of gathering space as a learning space. It asks, what material, social and imaginative amalgams are possible in the age of returning walls, and what creative resistance to, and transformation of, the walling instinct is possible in this leaning environment? Further the project invites consideration of architecture’s long association with stonemasonry, and the rich intertwining of stone and companion materials.

The University's teaching spaces are nearing capacity and a range of contemporary, flexible spaces that can accommodate a variety of teaching pedagogies are required. University of Auckland currently looking for replacing buildings B113, B114 according to its 2014 masterplan which is close to the remaining basalt stonewall. This studio explores the potential for a learning space within this area.

The flexible teaching spaces requirements include:

- 2 x Large teaching/learning space (250-300 seats 300 m²)
- 4 x Large flat floor teaching/learning (80 seats at 160 m²)
- 8 x Smaller flat floor seminar rooms (40 to 60 seats at 80 to 120 m²)

In addition to more structured teaching spaces students need a diverse range of spaces to meet and study. The scheme should consider how the different types of learning relate and varying levels of separation required.

Proposals also respond to some of the current challenges such as poor sightlines, level changes that are not accessible and pedestrian linkages through the site as well as considering the historical context and relationship to surrounding heritage buildings.

This site has multiple planning/heritage constraints:

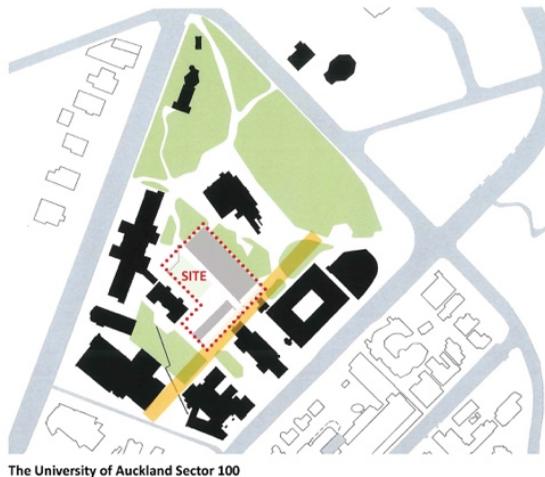
- Buildings are restricted to maximum height of 15m, 3 Storeys within this height is anticipated

- Proposals on this site will need to consider their response to the constraints of the Auckland Unitary Plan (AUP) planning overlay: I207.1. Precinct description:

<http://www.aucklandcity.govt.nz/unitaryplan/Auckland%20Council%20Decision/Chapter%20I%20Precincts/2.%20City%20Centre/I207%20Learning%20Precinct.pdf>

- Several buildings are heritage listed on the site and

<https://www.aucklandcouncil.govt.nz/arts-culture-heritage/heritage-walks-places/Documents/university-heritage-trail.pdf>



This studio asks students to select a part of their design in consultation with their tutor and make a 1:1 model of it. There will be a possible presentation on the site, with client present, exhibiting the (1:1) models and proposals (including technical drawings).

TOPIC STRUCTURE AND CONTENT

SPECIAL NOTE:

- All lectures are 1-2pm in Design Theatre 423-348

Week	Date	Event
Week 1	Mon 22.7	12:00 All architecture meeting, rm 311 1:00 D4 staff presentations and studio ballot
SITE (Threshold)	Tue 23.6	Lecture: Dr Nikolina Bobic on 'the politics of walls' Studio Introduction + Discussion Group tasks presented: Site Research + Model
	Fri 26.7	Peer Review: Pin up +Design Review Design task presented: Material + Threshold Studies/Drawing as Generator (conceptual threshold models + conceptual drawings + text)

Week 2	Tue 30.7	Guest Lecture: Dr Sean Sturm on 'History of UoA' (1-2:00pm) Design Task Presented: Planning + Detail Studies, Precedent Research (students now working in pairs)	Partnerships Established
PLAN (Overlap)	Fri 2.8	Peer Review: Research Review + Material + Conceptual Proposition established. Programmatic + Threshold studies assigned.	
Week 3	Tue 6.8	Guest Lecture: Dr Ross Jenner on 'Stone'. Design Task Presented research and material design task assigned: iterative conceptual sectional models + drawing studies.	
SECTION (Tolerance)	Fri 9.8	Peer Review: Consequence + Implication - Cut off point for concept commitment (point of no return): Sectional Studies continued (chosen concept is placed in/on/above site + elevated /sectioned as a building/furniture/detail proposition	
Week 4	Tue 13.8	Guest Lecture: Tristram Collett on 'Client requirement' (Property Services, UoA) Collaborative task assigned	Groups of 4 Established
DETAIL (Craft)	Fri 16.8	Peer Review: Detail studies (drawing +modelling) 1:1 + 1:20 scale model task presented	
Week 5	Tue 20.8	Guest Lecture: Dr. Kathy Waghorn (tbc) on 'Groupwork' Collaborative task assigned	
MODEL (Fabrication)	Fri 23.8	Peer Review: Prototype Development of preliminary scheme + design proposal (models+plans+details+sectional proposition) 1:20 scale furniture prototype developed	
Week 6	Tue 27.8	Mid-Semester crit, rm 311	Final Groups Established
REVIEW	Fri 30.8	Peer Review: Consideration of the total. Models+Drawings+Details+1:20 Furniture Prototype Design task assigned: Materiality	

MID-SEMESTER BREAK

Week 7	Tue 17.9	Design Review: Re-consideration of the total: Group Organisation + Review Collective Manifesto Drafted Materiality design task assigned Materiality Presentation – Molecular Discoveries (timber/stone)
MATERIAL (Consequence + implication)	Fri 20.9	Peer Review – Furniture Prototype Discovery of consequence and implication: 1:20 scale detail task assigned - Craft/Detail/Furniture/Threshold
	Tue 24.9	Design Group Review
Design	Fri 27.9	Cross-crit, rm 311 Design Group Review
	Tue 1.10	Design Group Review
Design	Fri 4.10	Design Group Review
	Tue 8.10	Developed Design - Drawings+models+prototype
Design	Fri 11.10	Developed Design – Quick Fire Crit with guest critic Drawings+models+prototype
	Tue 15.10	Developed Design - Presentation
PRESENTATION	Fri 18.10	Developed Design - Presentation
	SUN 21.10	Pin up Sunday 20 Oct, time TBA
Week 12	MON 21.10	Final Crit: 9am

RESOURCES

In Canvas you can find relevant maps and reports (archaeological studies, UoA masterplan, etc).

Required Reading

Spatial Thinking – Materials' relevance to design,
Dieter Geissbuhler, 3 Laboratorium, Lucerne University 2012

The Pedagogy & Practice of 'Placing Space', Ronit Eisenbach &
Rebecca Krefling

Regionalism: Collected Writings on Place, Identity, Modernity and Tradition, ed. Vincent Canizaro, ISBN-10: 1568986165

Local Architecture: Building Place, Craft, and Community, Brian Mackay-Lyons & Robert McCarter, 2014

Translations from Drawing to Building and Other Essays.
Evans, Robin, London: Architectural Association
1997

Construction Materials Manual, Hegger, Manfred, Basel, Munich: Birkhauser; Edition Detail 2006

Design Through Making, Sheil, Bob, Chichester: Wiley, 2005

Carlo Scarpa Architecture In Details, MIT Press 1998

REQUIRED PRODUCTION

Each student: An ongoing A3 (maximum) accumulative workbook (to be bought to each session for notes, drawings etc). Submitted at the end of the course.

Each group: A professional presentation of the final design. An A3 booklet explaining the final design.

Each student is to produce a 1:1 scale furniture project. This will be individually designed and made, separate from the group work, students are expected to make good use of the workshop on site and explore construction techniques based on conceptual model studies.

This studio asks students to select a part of their design in consultation with their tutor and make a 1:1 model of it. There will be a possible presentation on the site, with client present, exhibiting the (1:1) models and proposals (including technical drawings).

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 200 Design 3 Course Outline (on Canvas).

LEARNING OUTCOMES

General Course Outcomes & Specific Outcomes for this Brief

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

- *Theory*: Demonstrate an understanding of constraint as a driver of architectural opportunity. Constraints encountered may include client, brief, budget, site, authorities, time, collaborative work practices. Students should also be able to show evidence of conceptual consistency in the face of these encounters.
Theory: Show evidence of sound relevant precedent research, development of critical thinking and conceptual consistency throughout the design process
- *Architectonics*: Demonstrate abilities to develop the tectonic characteristics of the project through the making of material, structural and constructional propositions.
Architectonics: Demonstrate abilities to advance conceptual thinking and design propositions through identifying and addressing issues of materiality and spatial propositions.
- *Performance*: Show evidence of an understanding of architecture as a collaborative enterprise – both in its design and in situ – and event bearing relationships to site and context in time.
Performance: Show abilities to advance conceptual thinking and design propositions through interrogating and addressing detailed material studies through model making, explorative conceptual and architectural drawings
- *Form and space*: Show evidence of conceptual and developed design skills in terms of three dimensional formal/spatial composition.
Form and space: Demonstrate skill in the development of creating three dimensional, to-scale architectural propositions (form and space) resulting in a viable and evolved architectural form and space, both interior and exterior.
- *Media*: Demonstrate engagement with ‘working drawings’ as media that does work that tests ideas. Examples include collaborative drawings, templates, working models, building information models.
Media: display skills in the communication and development of conceptual, preliminary and developed design propositions through the strategic use of architectural media, both analogue and digital.