

ARCHDES 201 | DESIGN 4 | TOPIC OUTLINE | SEM 2 2019

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.

Sue Calder

STONEWALL



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:	Sue Calder
Contact:	sue.calder@orcon.net.nz
Location:	Level 2 studio, building 421
Hours:	Tuesday and Friday 1:00-5:00pm

For all further general course information see the ARCHDES201 COURSE OUTLINE in the FILES folder on CANVAS.

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.

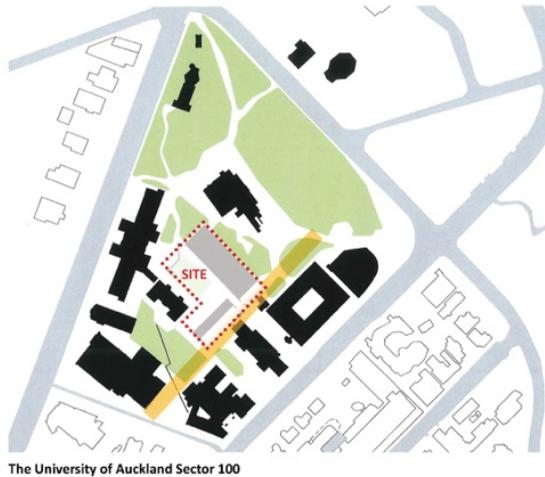
This site has multiple planning/heritage constraints:

- 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%20Dec>

[ision/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>

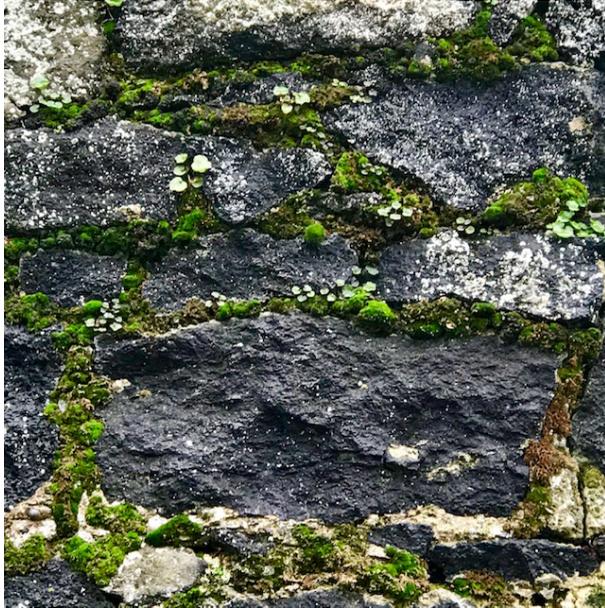


This studio asks students to select a part of their design in consultation with their tutor and make a 1:1 model of it. There will be a possible presentation on the site, with client present, exhibiting the (1:1) models and proposals (including technical drawings).

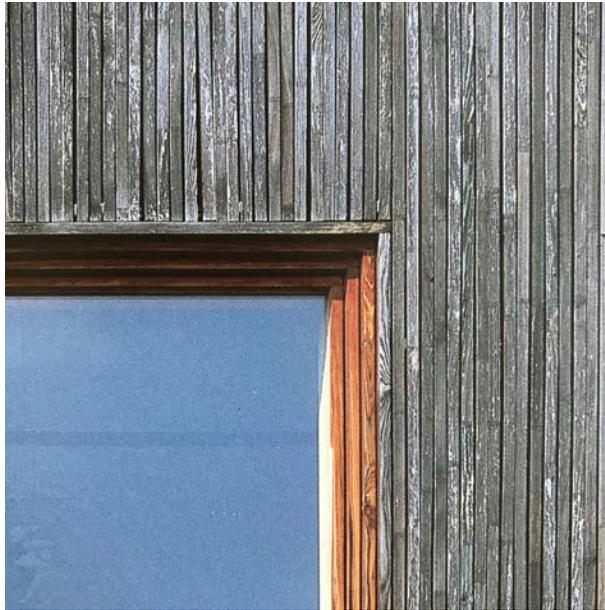
CRAFTING CONNECTIONS – AN OPPORTUNITY

The main aim of this studio is to focus on and take advantage of the opportunities that can arise from crafting connections at multiple levels in Architecture. This studio proposes that Architecture can be derived from the learning that occurs during making process.

This will be a hands on studio that will focus on an appreciation for materials, their textures and qualities, and look at the design opportunities that can arise from the way materials can be joined together to form walls.



Crafting [Material] Connections



We will craft physical connections in the workshop and draw upon the theories of Juhani Pallasmaa and explore the concept that the craft of Architecture cannot be separated from the embodied knowledge in the craft of the hand.

“Even in the age of computer-aided design and virtual modelling, physical models are incomparable aids in the design process of the architect and the designer. The three-dimensional material model speaks to the hand and the body as powerfully as to the eye, and the very process of constructing a model simulates the process of construction.”

Juhani Pallasmaa. *The Thinking Hand. Existential and Embodied Wisdom in Architecture.*

Chapter 2 *The Working Hand.*

“Architecture is always faced with the challenge of developing a whole out of innumerable details, of various functions and forms, materials and dimensions. The architect must look for rational constructions and forms for edges and joints, for the points where surfaces intersect and different materials meet. These formal details determine the sensitive transitions within the larger proportions of the building. The details establish the formal rhythm, the building’s finely fractionated scale.”

Peter Zumthor. *A way of Looking at Things.*

In this part of the studio we will also look into how details are drawn – and begin exploring the concept of crafting working drawings as a type of drawing to build from.

Crafting [Spatial] Connections



Sean Godsell

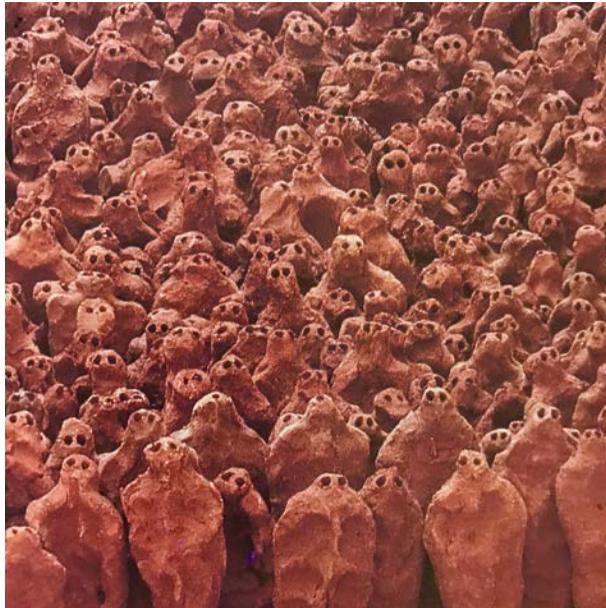
“Understanding the nature of a material defines how to use it. Glass is a tensile material, hanging is ideal, Timber is good in compression but not in tension, and steel is good in tension, so elements in composite construction, such as timber teaming with steel. I’m really interested in these things..... I also learned something about the beauty of simple space, about containment, security, prospect, refuge and materiality”

Glenn Murcutt. *Basic Lessons of the Utilitarian. A Singular Architectural Practice.* Haig Beck and Jackie Cooper.

In this studio we have the particular condition of being close to our site. This allows us many opportunities to study and reflect upon the daily conditions of the site and respond to them accordingly. We will visit the site on many occasions, and you are encouraged to visit the site at different times of day and see how it responds differently.

We will reflect upon the different levels of containment the spaces in the Learning Centre will require and whether our studies of details can respond to these conditions. We will also consider how the Learning Centre will make connections with the rest of the site, breaking down walls, both materially and conceptually. How can an Architecture expand its on site connections and make connections with the rest of the campus and with Auckland City?

Crafting [Collaborative] Connections



Antony Gormley. European Field (detail) 1993.

A requirement of Design 4 is group work. In our studio we will take the approach of collaboration.

We will all come to this studio bringing different skills and strengths and with pooled resources we will aim to achieve a greater whole. An open attitude to engaging in the collaborative process is required.

“The role of the author is undergoing a massive transformation process. If, contrary to what Roland Barthes once famously wrote, the author is not dead, the idea of a sole creator working alone has certainly lost credibility and appeal. In its place new forms of cultural production are emerging: open, collective, horizontal, and participatory.”

Come Together: The Rise of Cooperative Art and Design. Francesco Sampinato

At first we will work in pairs and gradually increase the group size until we have larger groups. Each individual is expected to contribute to a pool of shared

resources that will be amalgamated at Mid Semester. Students are expected to show evidence of contribution as well as documenting their own reflections on the studio project in a separate A4 Journal to be handed in with the final work.

When the collaborative practice SIMPARCH were asked why they work collaboratively. Their response was “We can do ambitious projects much faster. Collective conscience, common goal, spirited, convivial, intensive production”.

This is our target.

SPECIAL NOTE:

Students will need to source materials for model making and share costs where group models are required.

Architecture Wood and Metal Workshops open 9.00am – 4.00pm

[NB:The Architecture Wood Workshop is Unavailable: Thurs 8th, 15th, 22nd, 29th Aug 10-12 for Workshop Classes for another group]

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

Week	Date	Event
Week 1 MAKING/ RESEARCH	Mon 22.7	12:00 All architecture meeting, rm 311 1:00 D4 staff presentations and studio ballot
	Tue 23.6	AD2 Studio classes commence: Guest Lecture: Dr Nikolina Bobic on ‘the politics of walls’ (1-2:30pm) Paper Briefing and Introductions.
	Fri 26.7	Creating Solids : Workshop. (Pairs) Students will be given examples to study.
Week 2 MAKING/ RESEARCH	Tue 30.7	Guest Lecture: Dr Sean Sturm ‘History of UoA’ (1-2pm) Creating Solids : Workshop (Pairs)
	Fri 2.8	Informal Pin Up and Information Swap. Introduction to Creating Spatial Connections
Week 3 MAKING/ RESEARCH	Tue 6.8	Guest Lecture: Dr Ross Jenner on ‘Stone’(1-2pm) Creating Spatial Connections : Workshop (Pairs)
	Fri 9.8	Creating Spatial Connections : Workshop (Pairs) Informal Pin Up
Week 4 MAKING/ RESEARCH	Tue 13.8	Guest Lecture: Tristram Collett on ‘Client requirement’ (Property Services, UoA) (1-2pm) Creating Spatial Connections : Workshop (Pairs)
	Fri 16.8	Informal Pin Up and Information Swap > Form Small Groups

Week 5 MAKING/ MAPPING	Tue 20.8	Guest Lecture: Dr. Kathy Waghorn 'Groupwork'(1-2pm) Site Mapping/Site Model (for use by whole group)
	Fri 23.8	Discussion : Crafting Drawings Site Mapping/Site Model
Week 6 MAKING/ MAPPING	Tue 27.8	Mid-Semester crit, rm 311
	Fri 30.8	Site Mapping/Site Model (for use by whole group) Informal Pin Up and Information Swap > Form Large Groups(3x) Reflection on Mid Semester Crit. Discussion about Group Work/Manifesto for going forward.
MID-SEMESTER BREAK		
Week 7 DRAWING/ MAKING	Tue 17.9	Individual Group Catch Up/Planning Finalise Programme for Additional Flexible Spaces
	Fri 20.9	Informal Pin Up
Week 8 DRAWING/ MAKING	Tue 24.9	
	Fri 27.9	Cross-crit, rm 311
Week 9 DEVELOPED DESIGN	Tue 1.10	
	Fri 4.10	Informal Pin Up/Catch Up
Week 10 PRESENTATION WORK	Tue 8.10	
	Fri 11.10	Informal Pin Up/Catch Up
Week 11 PRESENTATION WORK	Tue 15.10	
	Fri 18.10	Informal Pin Up/Catch Up
Week 12	SUN 20.10	Pin up Sunday 20 Oct, time TBA
	MON 21.10	Final Crit: 9am

RESOURCES

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

The Thinking Hand. Juhani Pallasmaa.
Complexity and Contradiction. Inside and Outside. Venturi.

Stephen Holl.
Peter Zumthor
Making. Heatherwick Studios.

Arte Povera
Joseph Beuys

REQUIRED PRODUCTION

Mid-Semester Output

Physical Models 1:1
Detail Drawings 1:5
Research A4
1x Collaborative Group Site Model
Journal A4 – Reflections so far

Final Output

Drawing set A3/A2 size tbc during Semester (Group Work)
Group massing model to fit into site model (Whole Group Work)
1:1 Physical Detail. Type of detail tbc during Semester
Journal A4 – Reflections

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: This studio draws upon the theories of Juhani Pallasmaa in the *Thinking Hand* and explores the theories that the craft of Architecture cannot be separated from the embodied knowledge in the craft of the hand. Students are to demonstrate a response to the crafted process and derive an Architecture from the making process.

- *Architectonics*: Demonstrate abilities to develop the tectonic characteristics of the project through the making of material, structural and constructional propositions.
Architectonics: Students will demonstrate the ability to make and draw 1:1 details and craft connections.
- *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: Students are to demonstrate an ability to collaborate and reflect upon working in a collaborative situation, plus demonstrate how their scheme interacts with the surrounding site.
- *Form and space*: Show evidence of conceptual and developed design skills in terms of three dimensional formal/spatial composition.
Form and space: Students are to demonstrate an understanding of the degrees to which spaces can be connected with each other/separated from one another via different visual and material mechanisms.
- *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: Students will create physical models to explore crafting of materials. Students will use hand drawing as their primary means of drawn communication. Students are to document their semesters work in an A4 Sketch book, which will be submitted at the end.