

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.

XUAN MCARTHUR NGUYEN

Xuan is a director at architectural practice Keshaw McArthur Limited. He graduated from the UOA School of Architecture in 2007 and worked for a number of years in NZ and abroad.

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:	Xuan McArthur Nguyen
Contact:	info@keshawmcarthur.com // attention: Xuan
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%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).

ARCHITECTURE & 'THE OTHER'



Phase—Mother Earth,
Nobuo Sekine, 1968,
1st Kobe Suma Rikyū Park Contemporary Sculpture Exhibition

“Architecture is the very mirror of life. You only have to cast your eyes on buildings to feel the presence of the past, the spirit of a place; they are the reflection of society”.
(I.M. Pei)

Architecture is so intrinsically connected with all aspects of life and it is never practised/exists in a vacuum without context. Context can be – cultural, religious, spatial, historical...

Architects can therefore benefit from possessing a broad base of knowledge spanning a range of areas, and a good sense for things in life. This knowledge and sense can provide a resource from which to draw inspiration into the design conception and development process.

This studio asks students to select a subject or course taught within the University of Auckland (from the selected list below) which they have interest in, to use as an opportunity to further their knowledge, and to use as a driver for the design process and on which to draw inspiration.

Selected subjects/courses (listed in no particular order):

- Drama
- Dance
- Languages
- Mathematics
- Music
- Philosophy
- Film
- Fine Art

Note: students are not expected to engage with the actual subject/course taught at the University, this subject/course is to simply serve as a starting point for which to begin their research.

Students are asked to consider questions such as - How can the subject heighten or juxtapose the topic of 'stone wall' which are being explored as part of the overall theme of this course.

How can the selected subject be used as a device to generate learning spaces which are functional, engaging and inspiring for the users?

How can this selected subject be used as a means to explore light and shadow, movement, colour, scale and proportion...?

'Urban Living Room'

Among other things, the Albert Barracks Wall symbolises the prospect of war, defence, attack and racial division. This studio asks students to explore how architecture can be used as a means of 'connecting' in the form of a communal outdoor space – serving as an 'urban living room'. The purpose of this space being to facilitate inclusion of different races and cultures and celebrate diversity - within this space people will be able to connect and express themselves. This 'urban living room' is to provide a functional role in connecting the surrounding parts of the campus.

As this space will adjacent to the remaining part of the Albert Barracks Wall, students are asked to consider the relationship between the two – can this space be used to juxtapose the wall? To

reinterpret/reimagine the wall in a way which is better suited for the future?

Materiality

Students are asked to explore the use of a masonry material (or other similarly heavyweight material) as a means of enhancing their design proposition. Particular emphasis is placed on how the selected material can be utilised/applied in a contemporary way so as to arrive at a design outcome that will stand the test of time and remain visually relevant in the future. Can the material be approached in a way that reinterprets the status quo in terms of how its used, how it appears etc.?

The selected material is to be used in at least one application within the final proposal.

Exercise 1 – ‘Wall’

Individual exercise

This exercise looks at the theme of ‘wall’. Students are asked to explore interpretations of wall in an architectural sense and otherwise in an energetic, and free-thinking fashion – through the creation of several evocative hand drawings (charcoal, pencils, pens...), and quick yet considered physical cardboard models.



As shown in the diagram above, the project site is located just outside of the walled extents/perimeter of the old Albert Barracks Wall.

Students are asked to also engage with this notion of outside/inside, inclusion/exclusion, solid/void in regards to the theme of wall.

Exercise 2 – ‘Site’

Groups of 2

‘Site analysis’ – a preliminary phase of architectural/urban design processes dedicated to the study of the climatic, geographical, historical, legal, infrastructural context of a specific site. It is an inventory of the site factors and forces, and how they coexist and interact. It identifies the site opportunities and liabilities.

A site visit will be carried out early in the semester. Students will carry out field recordings, so are asked to bring along visual/audio recorders, pens, paper etc.

Students will carry out an analysis of the site. This will be demonstrated in two ways –

1. a site analysis drawing capturing a range of information about the site and surrounding context. Scale of drawing to be specified during semester.
2. an evocative physical model communicating a reading of a particular characteristic of the site. This is to serve as an abstract diagram.

Exercise 3 – ‘Time’

Groups of 2





Removal of stone from the Albert Barracks wall provided a path through, allowing for movement and connection. Other than a physical path, this also has symbolic relevance.

Students are asked to explore this notion of 'removal' in regards to their own design process/proposal. How can this be explored as a means of expressing the idea of time, history, memory, something being removed, the absence and residue left by something which has now gone?

Some examples of media and processes tested may include casting (mould removed in different ways), breaking, reductive drawing techniques etc. A series of models and drawings are to be generated as part of this exercise – consideration in regards to scale, and proportion is expected.

The ideas explored in this exercise may continue through into the architectonics of the final design proposal – material, structural, constructional propositions.

Exercise 4 – 'Materiality'

Groups of 2

Students will select one masonry material (or other similarly heavyweight material), and examine its properties and opportunities to use it in a unique way. How can this material be used to explore 'blurring of boundaries' or in a new configuration of 'transparency'?

Students are to produce one physical model at 1:50 (or at a scale as agreed with the tutor).

Group Work

Students will carry out most of the initial exercises in pairs.
At week 6, students will form larger groups of 4-5.

Group work is an integral part of this studio. Students are expected to find ways to collaborate and show evidence of this through the production of work and presentation and discussion of this work.

Techniques used in architectural practices as a means of communicating ideas between team members include – modelling, pinning-up, sharing of inspiration/references. Tasks are often divided into smaller parts in order to find greater efficiency in working. It is expected that progress and outputs will reflect the number of people in a group.

Students will demonstrate their individual contribution and involvement in the larger group by means of a digital scrap book. (Refer to ‘Required Production’).

A sharing table – tutors only get a short period of time with each student so to get a better understanding of what each student has been looking at, working on, producing, a shared table will be set up for students to leave/replace material throughout the semester. This will also allow the opportunity for further dialogue between students on their work.

TOPIC STRUCTURE AND CONTENT

- 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
	Tue 23.7	D4 Studio classes commence 1:00 – 2:30 Dr Nikolina Bobic on ‘the politics of walls’
		Studio topic introduction.

		Exercise 1: Introduction & concept development. [Individual work]

	Fri 26.7	Exercise 1: Group pin-up/presentation & discussion Individual work
Week 2	Tue 30.7	1:00 – 2:00 Guest Lecture: Dr Sean Sturm on ‘History of UoA’ Exercise 2: Introduction & site visit. [Groups of 2] <i>Bring along material as outlined in Exercise 2 description, and appropriate clothing for the weather.</i>

	Fri 2.8	Exercise 2: Development. [Groups of 2]
Week 3	Tue 6.8	1:00 – 2:00 Guest Lecture: Dr Ross Jenner on ‘Stone’ Exercise 2: Crit and overall group discussions. [Groups of 2] Exercise 3: Introduction & concept development. [Groups of 2]

	Fri 9.8	Exercise 3: Development. [Groups of 2]
Week 4	Tue 13.8	1:00 – 2:00 Guest Lecture: Tristram Collett on ‘Client requirement’ (Property Services, UoA) Exercise 3: Development. [Groups of 2]

	Fri 16.8	Exercise 3: Crit and overall group discussions. [Groups of 2] Exercise 4: Introduction & concept development. [Groups of 2]

Week 5	Tue 20.8	<p>1:00 – 2:00 Guest Lecture: Dr. Kathy Waghorn on ‘Groupwork’</p> <p>Exercise 4: Development. [Groups of 2]</p> <p>Preparation of material from all Exercises for Mid-semester Crit.</p> <p>-----</p>
	Fri 23.8	<p>Exercise 4: Development. [Groups of 2]</p> <p>Preparation of material from all Exercises for Mid-semester Crit.</p>
Week 6	Tue 27.8	<p>Mid-Semester crit, rm 311</p> <p>Presentation of Exercises 1-4. This will be done in groups of 2. Include your individual work from Exercise 1.</p> <p>-----</p>
	Fri 30.8	<p>Learning Centre introduction.</p> <p>Large groups of 4-5 formed.</p> <p>Groups to discuss and choose the ‘other’ subject from the list included in the studio brief, and advise the tutor of this selection. Begin initial thinking of this subject in relation to the Learning Centre.</p>
MID-SEMESTER BREAK		
Week 7 CONCEPT DESIGN	Tue 17.9	<p>Exploration/research of chosen subject.</p> <p>Learning Centre concept development.</p> <p>Smaller groups formed as desired by the students for focused research into spaces for learning, ‘urban living room’ and other programmatic requirements of the brief.</p> <p>-----</p>

	Fri 20.9	<p>Learning Centre concept development in small & large groups.</p> <p>Consideration of the site, and massing. Strategies on how to occupy this site. Gathering and preparation of existing site information.</p>
Week 8 DEVELOPED DESIGN	Tue 24.9	<p>Learning Centre concept development in small & large groups. Integration of Learning Centre & Urban Living Room ideas.</p> <p>-----</p>
	Fri 27.9	<p>Cross-crit, rm 311</p>
Week 9 DETAILED DESIGN	Tue 1.10	<p>Ongoing development.</p> <p>-----</p>
	Fri 4.10	<p>Ongoing development.</p> <p>1:1 model – discussion with tutor and selection.</p> <p>Each group to provide tutor with 100 words approx. outline of project. To explain the main themes of the project, how this has drawn on work from previous exercises etc. This is intended to serve as a means of focusing the students collective attention in regards to what the key aspects of the project are and where the ideas have derived from so that these can be succinctly communicated during the final crit.</p>
Week 10 PRESENTATION	Tue 8.10	<p>Final developments and presentation.</p> <p>-----</p>
	Fri 11.10	<p>Final developments and presentation.</p>
Week 11 PRESENTATION	Tue 15.10	<p>Final developments and presentation.</p> <p>-----</p>
	Fri 18.10	<p>Tutor feedback on project outline.</p>
Week 12	SUN 20.10 MON 21.10	<p>Pin up Sunday 20 Oct, time TBA</p> <p>Final Crit: 9am</p>

RESOURCES

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

Websites:

- The Wall Between Inside & Outside: a Concept
<https://architecturedesignprimer.wordpress.com/2016/01/06/the-wall-between-inside-and-outside-a-concept/>
- If These Walls Could Talk: Deconstructing Architecture of Separation.
<http://futurearchitectureplatform.org/projects/d6d841ff-8198-4a09-89b8-7be9cb097ae7/>
- Inhabit the Wall
<https://architecturedesignprimer.wordpress.com/2016/01/06/the-wall-between-inside-and-outside-a-concept/>

Architectural References:

- Kimbell Art Museum, 1966-72, Louis Kahn
- Notre Dame du Haut (Ronchamp), 1950, Le Corbusier
- 100 Walls Church, 2013, CAZA
- KAIT building, Junya Ishigami Associates

REQUIRED PRODUCTION

Physical modelling in the form of study/development models will form a core component of this studio, as a means of discovery and to advance developments in the design process. These models will serve as a record demonstrating key design iterations in the design process.

Digital scrapbook – Each student will keep a scrapbook throughout the semester. This will document the process of ‘making’, and should include failed attempts, drafts, tests, and successes. Students are asked to reflect on this process through simple captions and comments, and while this document may have overlaps with the content of your team mates, it is intended to capture your individual perspective. This is not intended to be a large piece of work, but rather a non-fussy and energetic record of process.

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).

Mid-semester Crit Output

- Exercise 1: Field recordings, drawings & cardboard models;
- Exercise 2: Site analysis drawing & model;
- Exercise 3: Series of drawings / models;
- Exercise 4: A physical model at 1:50 (or at a scale agreed with tutor).

Final Crit Output

- Plans, sections, elevations (at a scale specified during the semester);
- Physical models – site, exploratory;
- Physical model – 1:1
- Illustrations and/or renders communicating the atmospheric qualities of the design proposal;
- Other material such as relevant to the design proposal and to communicate the development of the design from initial thoughts through to final outcome – capturing critical design iterations during the process;
- Material from Exercises 1-4;
- Print out of digital scrapbook for each student.

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: Demonstrate an engagement with the themes of the studio – ‘wall’, ‘time/history’, ‘materiality’ – through development exercises and the architectural proposition.

- *Architectonics*: Demonstrate abilities to develop the tectonic characteristics of the project through the making of material, structural and constructional propositions.

Architectonics: Students are to demonstrate an engagement with architectonics through the exploration and integration of the selected masonry or other heavyweight material in their project.

- *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: Demonstrate how the design proposal can suitably perform as a focused centre for learning as well as a place of inclusion and connection for the University as a whole.

- *Form and space*: Show evidence of conceptual and developed design skills in terms of three dimensional formal/spatial composition.

Form and space: Demonstrate an ability to conceptualise and develop three-dimensional architectural form and space that appropriately responds to the functional requirements of a learning centre within the university and carefully considers the associated site constraints.

- *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: Demonstrate an ability to work with analogue and digital media as a means of experimentation, exploration, discovery and development through to a cohesive design outcome.

