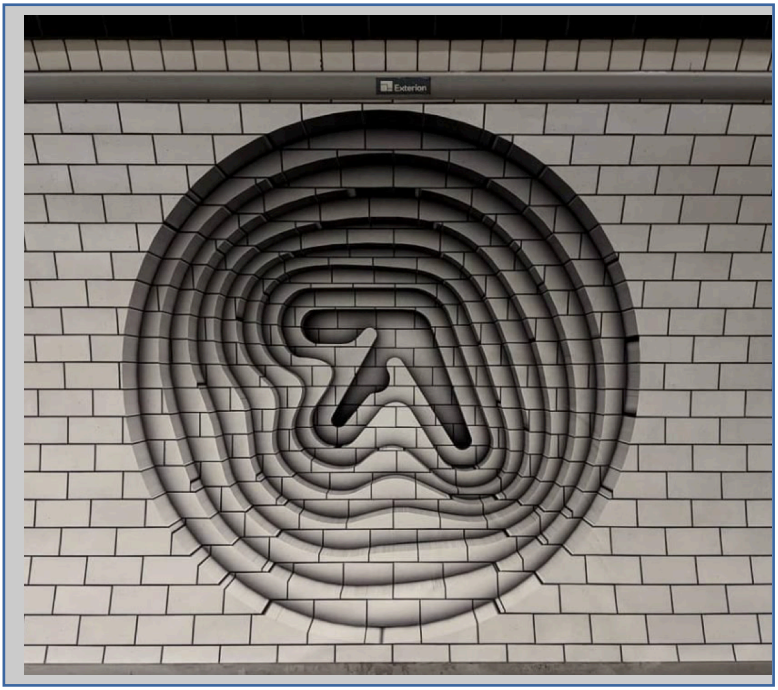
ARCHDES 701 | ADVANCED DESIGN 2 | TOPIC OUTLINE | SEM 2 2019

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.

Dr. Emilio Garcia

Co-existing with social and environmental collapse



EP Collapse by Aphex Twin. Cover Design: Weirdcore
http://weirdcore.tv/2018/08/07/aphex-twin-collapse-ep-poster-teasers/

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:	Dr. Emilio Garcia
Contact:	e.garcia@auckland.ac.nz
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.

Co-existing with social and environmental collapse

Problematic

This is not a studio about the end of the world or hopeless apocalyptic scenarios. This is a studio about understanding critical changes in a context of social and environmental crisis and how this could be instrumental for taking future decisions about our habitat. The concept of collapse is investigated and used as a framework to analyse the transition of contemporary built environments into scenarios that may diverge largely from the current promises of progress and development made by capitalism.

When we look at the latest environmental reports of the impacts of climate change at the poles, the need to reduce 70% of our carbon emissions in 11 years, and the growing disproportional environmental impact between a rich minority and the rest of the world; concerns about upcoming radical changes for our societies and habitats are not unreasonable. Moreover, it is the first time in our history that the habitat of humanity is clearly identified with urban landscapes and concentration of people around cities. This increases the dependence of cities on rural areas to obtain a continuous supply of food and exposes millions of people living in coastal cities to the threat of sea level rise. Regardless of these facts, cities keep on developing and growing fast, investing more energy and resources in their built

environments without accounting for the complexity generated nor the social and environmental costs of doing it.

The scale of the present environmental and social crisis and the complexity of contemporary built environments have exceeded our capacity to control them, becoming a global threat to all organisms and habitats, people and cities included. Therefore, efforts to save our habitats should be focused on better understanding how we will live in collapsing or collapsed environments. However, this does not mean that we should give up and commit ecocide. It means that there might better ways to coexist with collapse if we learn more about it and commit to rebuild our civilisation.

The aim is to use the study of critical changes in the built environment to contextualize and visualise what collapse looks like and if it is possible to buffer its effects in places already collapsing and to develop some resilience after collapse. In this studio we will use built environments as the unit of analysis and the concept of collapse as a framework to explore the breaking point of our civilisation, why it is happening and how we could cope with its results.

Hypothesis
Cities are presented as problem-solving artefacts that are trapped in a vicious circle. The current solutions to the problems that cities generate with their developments encourage economic growth, which at the same time creates greater demands for energy and resources to keep on developing bureaucracies and new technological advances. In this way, the more effort and resources cities invest in fixing the problems that they create with their developments, the closer they step into their own collapse. This hypothesis goes against all the precepts and paradigms learned and exercised by governments, professionals and schools of architecture who still believe that it is possible to increase the complexity of cities endlessly without any consequences.

Research question
The planning and design of built environments have been tools to materialize unjust habitats that are predators of resources far beyond their political and geographical boundaries. Could this process work the other way around to produce less complex, more equal and less harmful habitats that are built to deal with radical

changes like collapse? What would it be the role of design in a context of social and environmental collapse? How would it look like?

TOPIC STRUCTURE AND CONTENT

Since this course is a transition to the final thesis, students will be encouraged to do research about the subject of collpase and also to develop a viewpoint that will be materialized in a concrete design proposal consistent with the theorethical content of the workshop.

The studio uses real case studies and problems that are analyzed using an evidence-based research approaches. Students will need to define their way of approaching the topic and to tackle a concrete problem that is happening in a particular place where the design will be developed.

Students are encouraged to develop their design projects in any place in the world. Problematics can be linked (but not limited) to inequality crisis, climate change refugees, ghost cities, sea level rise, densification and economic degrowth between others. The design could propose responses to problematics at architectural, urban or landscape architectural scale. Students will be encourgaed and support to present their work in international competitions.

The studio is structured into two parts: understanding and problem-solving.

- First part (understanding and reacting). This is linked with the first 6 weeks of the semester. It is about understanding the theory of collapse and how to use it to the design the built environment by avoiding busines as usual approaches. This part includes choosing a specific topic related to the past, ongoing or potential collapse of exisnting built environments and developing a conceptual proposal at one or multiple scales.

- Second part (problem solving). This is linked with the second 6 weeks of the semester. It is about developing a conceptual proposal into concrete and specific design interventions in the built environment by avoiding busines as usual approaches. This part includes: developing a full architectural or urban project including details and models.

Week	Date	Event
Week 1	Mon 22.7	12:00 All architecture meeting, rm 311 3:00 AD2 staff presentations and studio ballot
	Tue 23.6	AD2 Studio classes commence. Discussion about expectations, structure of the workshop, modality of the research, and the topic of the studio.
	Fri 26.7	Brief presentation about the theory of collpase, different viewpoints, case studies and possible streams.
Week 2	Tue 30.7	Students presentation of possible case studies and problematics.
	Fri 2.8	Development of problematics and their relationship with the built environment. Site analysis.
Week 3	Tue 6.8	Analysis of precedents. Definition of design principles based on the literature review.
	Fri 9.8	Research question and design methodology
Week 4	Tue 13.8	Presentation of multiple design concepts at different scales.
	Fri 16.8	Presentation of multiple design concepts at different scales.
Week 5	Tue 20.8	Poster presentation including problematic, analysis, research question, methdology and urban/ architectural/ landscape design approach.
	Fri 23.8	Review of conceptual design iteration
Week 6	Tue 27.8	Review of conceptual design iteration
	Fri 30.8	AD2 Mid semester crits. Poster presentation of problematic, site analysis, research question, methdology and urban/ architectural/ landscape design approach. The presentation will include plans, sections, elevations, physical model, sketches and perspectives.
		MID-SEMESTER BREAK

Week 7	Tue 17.9	Presentation and acknowledgement of the crits
	Fri 20.9	Architectural development of focal scale and relationship with urban problematic.
Week 8	Tue 24.9	Architectural development of focal scale.
	Fri 27.9	Architectural development of focal scale and relationship to smaller scales.
Week 9	Tue 1.10	Design of outer spaces and landscaping
	Fri 4.10	Design of envelop. Materials, technologies, construction details.
Week 10	Tue 8.10	Design of in-between spaces. Walls, windows, doors..
	Fri 11.10	Materials, technologies, construction details. Socio-ecological devices. Materials, technologies, construction details.
Week 11	Tue 15.10	Reviewing criteria for graphic
	Fri 18.10	design of posters. Fine tunning
Week 12	Tue 22.10	5-6pm pin-up in Exhibition Space
	Wed 23.10	10-3pm, final Studio Review

RESOURCES

This is a list of general readings that will be used to develop and understand the theory of collpase and its relationship with the built environment. Specifc readings will be suggested depending on the angle, approach, and case study chosen and develop by each student.

https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/

https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report

Garcia, E. J., & Vale, B. (2017). *Unravelling sustainability and resilience in the built environment*. London; New York: Routledge.

Tainter, J. A. (1995). Sustainability of complex societies. *Futures, 27*(4), 397–407

Tainter, J. A. (1988). *The collapse of complex societies*. Cambridge; New York: Cambridge University Press

Tainter, J. A. (2000). Problem solving: Complexity, history, sustainability. *Population and Environment, 22*(1), 3-41

REQUIRED PRODUCTION

Mid semester critique:
Site analysis. Illustration of empirical evidence and data. Mapping. Plans. Large cross or long section, 2x interior drawings, sectional modeling and drawing, concept and design development as relevant.

Final Presentation:
Introduction and research question. Key empirical evidence. Site Plans, Plans, Models, interiors at multiple scales. 2X Perspective section with one or two points (longitudinal and transversal). 2 elevations. Details. Physical model.
A work book that documents the justification of case study, problematic, research question, methodology, design iterations, findings and conclusion.

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).

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: students will be able to take a critical and creative standpoint towards utilising critical thinking around the question of collapse.

- *Architectonics*: Demonstrate abilities to advance conceptual thinking and design propositions through identifying and addressing issues of materiality, structure and construction.
  Architectonics: Explore materiality and structural requirements that will be appropriate to define a built environment that can coexist with radical social and environmental transitions.

- *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: Demonstrate an understanding of the environmental and social performance of the design across a range of scales, from architectural to urban to landscape architecture.

- *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 alternative architectural proposals with lesser complexity could influence the way of developing new urban and architectural types.

- *Media*: Display skill in the communication and development of conceptual, preliminary and developed design propositions through the strategic use of architectural media.
  Media: develop unique media approaches that suit the polemic question of collapse.