

ARCHDES 300 | DESIGN 5 | TOPIC OUTLINE | SEM 1 2019

Design 5 presents an introduction to complex architectural thinking. It examines both conceptual and exceptional spaces and develops an understanding of corresponding architectural methodologies and systems. Topics will explore the cutting edge of architecture, with an individual emphasis on the theoretical, contextual, architectonic, communicative, material, spatial, sociological or topographical.

Frances Cooper and Michael Milojević

PUENTE HABITABLE / INHABITED BRIDGE

019-SS / Seville Studio



Hubert Robert [1733-1808] *Demolition of Houses on the Pont Notre-Dame* 1786

[source: https://commons.wikimedia.org/wiki/File:Destruction_of_the_houses_on_Pont_Notre_Dame_in_1786_by_Hubert_Robert_1733_1808.jpg]

GENERAL COURSE INFORMATION

Course : Design 5 ARCHDES300

Points Value: 30 points

Course Director: Sarosh Mulla: s.mulla@auckland.ac.nz

Course Co-ordinator: Uwe Rieger: u.rieger@auckland.ac.nz

Studio Teachers: Frances Cooper and Michael Milojević

Contact: m.milojevic@auckland.ac.nz frances.cooper@aucklanduniv.ac.nz

Hours: Monday and Thursday 1:00-5:00pm

LA PUENTE HABITABLE ESTUDIO SEVILLA / THE INHABITED BRIDGE SEVILLE STUDIO

This design paper concerns itself with ideas about transitions and crossings, about the recovery of historical urban fabric, about landscape urbanism, and about the urban monument.

The siting of Seville, based on that of Roman Hispalis and Italica and the successor Visigothic and Almoravid cities, is on the wide shallow Rio Guadalquivir [derived from the Arabic *al-wādi al-kabīr* literally 'great valley'] which flows from the Sierra de Cazorla into the Atlantic just north of Cádiz.

A sixteenth century map shows the walled *casco antigua* [old shell] following the meandering course of the east bank of the river as well as a *puente barcanas* [boat bridge] as the only fixed crossing across the deep muddy embankments and the river itself. All the colonial shipping from the Americas moored to the south of this bridge; to the north, beyond the *puente barcanas*, lies Cordoba, the earlier/medieval capital.

The city of Seville lies on a low plain, and is prone to extensive flooding and consequently the course of the river was incrementally diverted to the new western edge of the city in the twentieth century. Additional bridges served the urbanizing Triana suburb on the west bank of the Guadalquivir; the 'original course' [it has undergone a multitude of engineered transformations in the last century] of the river was canalised as the Canal of Alfonso XIII. Today, there are twenty-three bridges which cross both the Rio and Canal and these have extrapolated some pre-existing vehicular and pedestrian urban trajectories westward.

The design of the city walls, gates, embankments, roads and bridges have particularised the experiences of transition. It is proposed that each student in the studio selects their own bridge/crossing and consider the riverscape as a zone of inhabitation as well as crossing. It is intended that the studio consider, simultaneously, the ecological recovery of the river landscape as well as its urbanization, and develop architectural continuities by engaging streets [*calle*] and *barrios* [suburbs]. Both the urban bridge as monument and the bridge as inhabitable place are longstanding traditions throughout history. We propose a city of twenty inhabited bridges which enhance or replace the architecture of the current crossing in order to give the city high quality public spaces which sensitively link the river to the city, and connect the two embankments with a mix of public, semi-public and private spaces.

The studio pedagogy steps through precedent studies and interpretive modelling tasks as outlined below in the preparatory meeting 4 to preparatory meeting 8, which explore bridging and sets up the first three week Auckland stage where an esquisse project develops preliminary thoughts about flow and siting [in the river, on the embankments, and in the city] and occupation into a scheme explained in a poster and model [whole or fragment of the whole].

In the first Seville stage of the studio in early April, these projects will be reviewed by Prof Javier Terrados and the Escuela Tecnica Superiore de Arquitectura de Sevilla tutors, who will follow up with three days of group tutorials bringing specific on-location insight to individual projects. During the three week Moroccan and Spanish architecture study tour, bus crits will progress your design thinking through three presentations [one per week] of three architecturally-relevant photographs and three architectural sketches related to your evolving project design thinking. In the second Seville stage of the studio in later April four days of group and individual tutorials will prepare you for the mid-semester crits on our final day at ETSAS. On returning to Auckland on 29 April there is a month of tutorials to develop your project for the final project reviews on 6 June.

TOPIC STRUCTURE AND CONTENT

SPECIAL NOTE: This section of 019-Seville Studio is fully subscribed

Preparatory Meeting 1 / 20 September: introduction to 019-Seville Studios

Preparatory Meeting 2 / 20 October: introduction to D5 topic and discussion

Preparatory Meeting 3 / 20 October: D5 group studio precedents [handouts of premodern and modern precedents] discussion

Preparatory Meeting 4 / 7 November: 'crossing and transitions: modelling the experience of thresholds and surfaces' > studio exercise 1 & < Moroccan Architecture > presentation

Preparatory Meeting 5 / 14 November: 'Routes and Occupancies: modelling the dynamic of water-land intersections' studio exercise 2 & < Andalucian Architecture > presentation

Preparatory Meeting 6 / 21 November: 'bridge buildings: modelling habitable public spaces on the river' studio exercise 3 esquisse project development and < Spanish Architecture > presentation

Preparatory Meeting 7 / 20 February: 'Subaquatic, Terrestrial, Flotational and Aeriality: modelling spatial tectonics' studio exercise 4 and esquisse project development

Preparatory Meeting 8 / 27 February: 'Materials Assemblages: modelling transitional land-water constructions' studio exercise 5 and esquisse project development

Week 1

Mon 04.03.2019 > esquisse project presentation

Thu 07.03.2019 > all architecture meeting > esquisse project re-presentation

Week 2

Mon 11.03.2019 > esquisse project design interim review

Thu 14.03.2019 > esquisse project design final review

Week 3

Mon 18.03.2019 > final review esquisse project poster and model presentation

Thu 21.03.2019 > assemblage esquisse project posters and models

Week 4

Sat 23.03.2019 - Sun 31.03.2019 > Moroccan architecture study tour

Week 5

Mon 01.04.2019 > 10:00-18:00 esquisse project reviews reviews at ETSAS

Tues 02.04.2019 > 10:00-18:00 morning individual studio project site visits; afternoon ETSAS design project tutorials

Wed 03.04.2019 > 10:00-18:00 ETSAS design project tutorials

Thu 04.04.2019 > 10:00-18:00 ETSAS design project tutorials

Fri 05.04.2019 > Seville urban, suburban, canal and river contexts sites visit tour

Sat 05.04.2019 - Sun 21.04.2019 > Spain architecture study tour [bus crits]

Week 6

Mon 22.04.2019 > 10:00 -18:00 ETSAS design project tutorials

Tue 23.04.2019 > 10:00 -18:00 ETSAS design project tutorials

Wed 24.04.2019 > 10:00 -18:00 ETSAS design project tutorials

Thu 25.04.2019 > 10:00 -18:00 mid-semester reviews at ETSAS
Fri 2 06.04.2019 > 10:00 -18:00 mid-semester reviews at ETSAS
Sat 28.04.2019 > Abu Dhabi and Dubai architecture study tour

Week 7

Mon 29.04.2019 > Auckland arrival
Thu 02.05.2019 > cross-crits

Week 8

Mon 06.05.2019 > final project development
Thu 09.05.2019 > final project development

Week 9

Mon 13.05.2019 > final project development
Thu 16.05.2019 > final project development

Week 10

Mon 20.05.2019 > final project development
Thu 23.05.2019 > final project development

Week 11

Mon 27.05.2019 > final project development
Thu 30.05.2019 > final project development

Week 12

Mon 03.06.2019 > final project presentation
Thu 06.06.2019 > final project presentation

Design 5 Final Studio Reviews

REQUIRED PRODUCTION

Process models for each preparatory stage in November and February are required.

An A0 poster and a final esquisse model is required to be presented on 1 April at ETSAS.

At least three photographic images and three A3 sketches from Morocco are required to be presented at the ETSAS esquisse review on 1 April and the same on each of the two Spanish bus crits.

At the final ETSAS reviews on 25th and 26th of April, a developed design is required.

Re-presentation at the UoA cross-crits on 2 May is required to register the mid-semester review comments made at ETSAS .

The final review materials must contextualise the design in order that it is unmistakably sited in Seville and in a specific architectural context whether on the Canal de Alfonso XIII or Rio Guadalquivir.

A location plan at 1:500, a detailed site plan at 1:200, and architectural plans, sections and elevations at 1:50.

A design report in the form of a workbook documenting the design iterations supported by titles and captions.

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 300 Design 5 Course Outline (on Canvas).

LEARNING OUTCOMES

General Course Outcomes:

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

- **Theory:** Show evidence of engagement with selected / prescribed areas of architectural theory and knowledge. Further, to show evidence of the exploration of the possible influence of this upon the development of architectural propositions.
- **Architectonics:** Demonstrate abilities to project, explore and develop the tectonic characteristics of the project through the creative engagement with material, structural or constructional propositions.
- **Programme:** Show evidence of engagement with identified cultural, social and functional positions as they might inform speculative architectural propositions.
- **Performance:** Show abilities to advance conceptual thinking through engagement with environmental and contextual conditions that could bear upon the project, and to examine the way in which the architecture may affect those same conditions in return.
- **Form and space:** Demonstrate abilities to develop speculative three dimensional architectural form and space.
- **Media:** Display skill in the communication and development of design propositions through the considered use of architectural media.

Specific Topic Outcomes:

This studio topic will engage the general course outcomes in the following ways:

- **Theory:** Research of particular cultural typologies, urban histories and regional traditions; these must inform your project which in this particular case involves the Andalucian *medina* and *barrio* as well as the bridge and inhabited bridge.
- **Architectonics:** Demonstrate how bridging is developed tectonically and materially and how this/these material/s relate to the conditions of bridging: the hydrological, terrestrial and aerial. Articulate how the tectonic and material decisions enhance the idea and reality of your project.
- **Programme:** Use the design narrative to develop your specific program as evidence of engagement with identified ecological, cultural, social and functional positions of your bridge-building.
- **Performance:** Demonstrate specific environmental performance and ecological connectivity of your bridge-building.
- **Form and Space:** Articulate how the typological sources of your bridge building have been understood, and perhaps challenged, in relation to the pre-existing bridge on your site or the entirely new project.

- **Media:** In your design report include the most informative and relevant architectural precedences and present your own project in a media which is determined by these as well as by specific intentions around context, atmosphere, and materiality.

RESOURCES

All 019-SS D5 students have, in addition to the 019-SS general information handouts detailing the rationale for international studios, the rationale for studying at ETSAS and Seville, and the group itinerary and budget, design studio topic outlines, precedents lists for buildings [from the last millenium and from the last century] you will have the opportunity to visit, have been given **lists of inhabitable bridges, bridges of the last millenium and bridges of the last century** and are all available in the 019-SS Google Folder.

Inhabited Bridge and other especially Relevant Bridge References

- Max Bill, *Robert Maillart: Bridges and Constructions 1908-1994*. London, Pall Mall P. 1969.
 David P Billington. *Robert Maillart: Builder, Designer, and Artist*. Cambridge ; New York, NY, USA : Cambridge University Press 1997.
 Lucy Blakstad. *Bridge. The Architecture of Connection*. Birkhauser
 Remy Bougennec. *Ponts et merveilles: ponts habite en Europe*. Landernau 1992
 Steven Brindle and Dan Cruickshank. *Brunel: the man who built the world*. London : Weidenfeld & Nicolson Illustrated 2005.
 Dan Cruickshank. *Dan Cruickshank's Bridges*. Heroic Designs that changed the World. London: Collins 2010.
 Jean Dethier and Ruth Eaton. *Inhabited Bridges/Ponti Inhabiti = Rassegna 48* [special number]. Bologna-Milan, 1991
 Miron Mislím. *Die uberbauten Brucke: Die Pont Notre Dame; Baugestalt und Sozialstruktur*. Frankfurt, 1982.
 Elizabeth Bauer Mock. *The Architecture of Bridges*. New York, Museum of Modern Art, 1950.
 Peter Murray and Mary-Anne Stevens. *Living Bridges. The inhabited bridge, past, present and future*.
 Spiro Pollalis. *What is a Bridge: The Making of Calatrava's Bridge in Seville*.
 Joan Roig. *Nuevos Puentes / New Bridges*. Barcelona: Editorial Gustavo Gili, 1996.

An **image bank on habitable bridges** is extensive and is available in the 019-SS Google Folder.

Moroccan, Andalucian and Spanish architecture Powerpoint presentations geared to the various 019-SS year level topics are available on Canvas.

An extensive **image bank on architectural practices in Morocco and Spain** is available in the 019-SS Google Folder.