

Dalhousie University
School of Architecture

ARCH 3501: B1 REPRESENTATION

Practice / Synthesis

3 Credit Hours

Instructor

Daniel Dickson / dn690947@dal.ca

Office Hours: By appointment.

Class: Monday 9:30–12:30, Fall 2023

Location: B102, B015 Auditorium

Website: dal.brightspace.com

Teaching Assistants

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Aerocene, Arachnophilia, Rosa Matteucci, Hans Ulrich Obrist, Filipa Ramos, Heidi Ballet, David Zeitlyn, Stavros Katsanevas, Marco Isaia, Alex Jordan, Rudy Favaro, Boštjan Perovšek, and Lukas Feireiss. "Tomás Saraceno at the Venice Biennale 2019." Studio Tomás Saraceno, February 15, 2022. <https://studiotomassaraceno.org/tomas-saraceno-at-the-venice-biennale-2019/>.

Academic Information

Calendar Description

This course studies fundamental concepts, techniques, and applications of architectural representation. Classwork involves freehand drawing, orthographic drawing, model making, and photography. Drafting and modelling equipment are required.

Format: Lecture/Studio. **Restrictions:** Year 3 BEDS students.

Additional Description

DEFINITION

Representation is an expressive cultural form developed in distinct practices in many global societies. Its end is to create an 'objective' documentary description that primarily refers to what can be experienced in a shared world. It may be juxtaposed with its antithesis **abstraction**, a 'subjective' documentary description that does not primarily refer to experiences in a shared world.

APPROACH

The course will endeavour to introduce and develop a synthetic critical systemisation of architectural representation. It will interweave anthropology, aesthetics, and media studies to offer a **taxonomic framework** to disentangle and (re)orient architectural representation.

First, the framework will link representation to its inextricable partner, abstraction. While the aims of these cultural forms may be opposite – to specify what is apparent or what is hidden – they are both necessary to communicate the complexity of our worlds with nuance through documents and traces. A third cultural form, a **visualisation**, is an intermediary: it attempts to create a document that renders what is hidden apparent to the eye. Everything students produce in the course will be, to some degree, a representation, visualisation, or abstraction.

Second, the framework will survey the specific practice and tradition of **architectural representation**. The practice will be broken down into a series of **types** (what is done), each with its **tools** (with what is it done) and **techniques** (how is it done). Meanwhile, the course will acknowledge that, through complex and uneven globalisation, this specific practice can too easily be conflated as *the* practice of spatial representation. Students will be asked to recognise, reflect on, and draw with other representational practices thoughtfully and productively.

Thirdly, each type will be characterised as maintaining particular qualities and potentials suiting differing ends or affects; each has a **telos** (why is it done). Here, the course will regularly zoom in and out from the theoretical to the practical to discuss what other extremes are engaged and synthesised by each representational type: world and idea, subject and object, space and time, static and dynamic...

Through studying the types, tools, techniques, and telos of architectural representation while more broadly questioning the role of the abstract and subjective, the hope is that the framework and course will serve as a representational basis. It will offer students one way of *synthesising a practice while practising* that is flexible enough to be modified with expanding ways of knowing.

METHODS

The course will use **tasks** to put the framework to creative work. On a standard course day, a lecture introduces and discusses a type before enacting it through a task begun in class. Over the semester, students will develop a proficient use of these types in studio and at home towards their synthesis and remixing in an increasingly complex and personal architectural representation practice.

The instructor and students will develop and extend the framework iteratively through two textual documents to further the course work. A **lexicon** will compile and organise relevant representational keywords and their definitions. The instructor will add keywords and their definitions to this expanding list weekly, roughly by the weekly class topics ('types'). These will then be open-sourced such that imprecision can be questioned and edited, and missing terms added towards the representational literacy of the class. Meanwhile, A **bibliography** will cite various sources to extend the representational study. The instructor will explain the value of a source, and students will be welcome to ask questions and add their own helpful or inspirational resources to the growing list.

IMPETUS

We are at a turning point in representation. The entangled challenge of climate change and the slow violence it perpetuates is engulfing, yet we glimpse this reality only obliquely. On the one hand, we are led by the boggling objectivism of data science and, on the other, by the subjectivism of a barrage of phenomenal images. These non-relational, non-synthetic modes of representation – as pure documentation or mimesis – struggle to render and communicate the simultaneous depth and breadth of our climate's turmoil.

Meanwhile, the art world pursues concept art that often abandons representation for pure abstraction, experience, or performance to communicate complexity, while the art of the everyday – movies, marketing – has become even more representational in the retreat to the digital and algorithmic, propagating flat mirrors reproducing and rebranding wanton consumption. Albeit a generalisation, the spaces of high or low art narrowly engage with representation as a cultural form that might be emancipating, agentive, or creative.

This course believes that architects can and must synthesise these extremes or binaries through their primary practice: architectural representation. Working from a position between objective data and subjective experience and between the markets of art and development, architects are positioned to renew the purpose of representation. They can deploy representation not only to document what exists at many scales but also to imagine what might come and how it might become.

Learning Objectives:

This course aims to develop understanding and ability in the following:

- representational terminology
- freehand line and tone drawing
- orthographic drawing (manual and digital)
- diagramming ideas and information
- construction of models (sketch and analytical)
- multimedia narrative illustration and collage
- photographic documentation and digital processing
- basic graphic design principles and composition
- integrating course principles and topics into your term design work

Rationale for the Course

This course is the first in a suite of representation courses that aim to provide students with an overview of the representational strategies particular to architecture and design.

In B1 Representation, while focusing on fundamental representational types like drawing, multimedia, and graphics, students will be asked to consider why and where representation is needed. In B2 Representation, students will build on B1 foundations alongside complementary representational types with increasing complexity and engagement with digital tools. In B3 Representation, students will explore how B1 and B2 Representation types can engage with digital fabrication. By the end of the year, students will be literate in and able to further designs through an up-to-date array of representational practices.

Weekly Format

The course will consist of weekly lectures, tutorials, workshops, pin-ups, and discussions per the schedule below. Workshops and tutorials on project assignments and software support will be arranged during class time and through teaching assistant office hours.

For this 3-credit-hour course, an average of 9 hours per week is expected for all course-related activities, including classes. If most students are spending substantially more time, please notify the instructor.

Schedule

Week	Class	Type		Task	%	Ching	Due
1	11-Sep	Drawings	Sketch	Scale 1: Local	10	C.1-4	
2	18-Sep		Projection	Scale 2: Global	10	C.5-7	
3	25-Sep		Diagram	Scale 3: Place	15	C.9-10	Scale 1–2
4–5	No Class	Truth And Reconciliation; Thanksgiving					
6	16-Oct	**	Display	Forum	5	–	Scale 3, Forum
7	23-Oct	Multi-media	Model	Materiality 1: Textural	10	–	
8	30-Oct		Illustration	Materiality 2: Flat	10	–	
9	06-Nov		Collage	Materiality 3: Layered	15	–	Materiality 1–2
10	No Class	Fall Reading Break					
11	20-Nov	Graphics	Photo	Composition 1: Static	10	–	Materiality 3
12	27-Nov		Text	Composition 2: Dynamic	10	C.11	
13	04-Dec		Document	Composition 3: Ordered	5	C.12	Composition 1–3

The Student Learning Experience Questionnaires (SLEQ) will be scheduled during class time in the last two weeks.

Required Resources

The primary text for this course is:

Ching, Francis D. K., and Steven P. Juroszek, *Design Drawing*. Third ed. Hoboken, New Jersey: John Wiley & Sons, 2018. NA 2708 C49 2018.

It is available online through Amazon and other sellers.

Further Resources

The bibliography notes further academic resources to complement and extend the course's main areas of study. Various additional scholarly and popular sources will be compiled throughout the semester.

The School of Architecture maintains a web resource about representation. This site includes information on materials, tools, drawing modes, techniques, exercises, and examples of student work: <https://dalus.sharepoint.com/sites/mydal/dc/acad/arch-plan/rep/Home.aspx>.

The School has also made several software tutorials available, including for Photoshop and Rhino: <https://www.dal.ca/faculty/architecture-planning/current-students/inside-building/design-software-tutorials.html>.

Required Tools

While materials will be specified where relevant during the course for exercises and assignments, students should have access on the first day of class and at all course times to drawing tools, including:

- Sketchbook or unlined notebook;
- Drawing pencils in a range of hardnesses;
- Technical pencils and pens;
- Erasers (vinyl, gum/rubber, and/or kneaded).

The course will also gradually introduce software. Students will need access to:

- Rhinoceros (6 or 7) with evaluation or student license. The instructor and TAs will be unable to troubleshoot pirated software versions adequately.
- Adobe Suite (Photoshop, InDesign, Illustrator) or equivalent image processing, graphic design, and vector drawing software.

Assessment

Components

The course will discuss three types, each with three subtypes: Drawings (Sketch, Projection, Diagram), Multimedia (Model, Illustration, Collage), and Graphics (Photograph, Text, Document). Each type will have a **task** where students produce the type while investigating a key concept in representation: *scale* through drawing, *materiality* through multimedia, and *composition* through graphics. Each task will be broken into three **subtasks**, correlating to a thesis, antithesis, and synthesis. Because of its synthetic complexity, the third task will be weighed more heavily.

There will be a brief in-class constructive critique on the due dates of the first two subtasks of scale and materiality. This will promote the development of ideas for the third subtask.

For the third task, composition, all subtasks will be due for the final class, where they will be displayed in a more formal gallery-style presentation.

One assignment lies apart: the **forum**. This will relate to the fourth lecture on display and require a brief piece of writing.

Evaluation

The instructors will evaluate all work with advice from the course assistants. Individual tasks are assessed numerically. Feedback will be a combination of oral and written. The equally rated criteria are:

TOOLS. knowledge, use, resourcefulness. How well and diversely do you employ the task's representational tools?

TECHNIQUES. skill, precision, synthesis, care. How competently do you perform the task's representational techniques?

TELOS. intent, strategy, clarity, communication. How discursively and critically do you make the task's representational telos?

Mid-term Standing

Students will receive a grade by mid-term for the first tasks. Standing will more comprehensively be evaluated at the first process portfolio review, scheduled for mid-October.

Guidelines for Citing Sources

While there will not be extensive citations in this course, should they be necessary, please use the Chicago Manual of Style: Author-Date Style. For details, see:

Chicago quick guide: <https://tinyurl.com/quick-author-date>

Chicago Manual complete guide: <https://tinyurl.com/full-author-date>

Submission of Assignments

Project reviews will occur in locations specified in the Course Schedule, typically the Exhibition Room or HB4. Assignment submissions will be in the format of a digital upload to the course Brightspace page, due before the start of class.

Grading Format

All assignments are completed individually. All work is evaluated by the instructors, with advice from the course assistants. Individual exercises are assessed numerically. Feedback will be a combination of oral and written.

University Standards for Individual Assignments

Your final letter grade for the course will be based on the Dalhousie University Undergraduate letter grade to numerical score equivalence chart.

Letter	Percent	Definition	Description
A+	90–100%	Excellent	Considerable evidence of original thinking; outstanding capacity to analyze and synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.
A	85–89%		
A–	80–84%		
B+	77–79%	Good	Evidence of grasp of subject matter, some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.
B	73–76%		
B–	70–72%		
C+	65–69%	Satisfactory	Evidence of some understanding of the subject matter; ability to develop solutions to simple problems.
C	60–64%		
C–	55–59%		
D	50–54%	Marginal pass	Evidence of minimal familiarity with the subject matter; minimal analytical and critical skill.
F	0–49%	Fail	Little evidence of understanding of the subject matter; weakness in analytical and critical skills; limited or irrelevant use of the literature.
INC		Incomplete	(counts as zero in GPA calculation)
W		Withdrew after deadline	(neutral in GPA calculation)
ILL		Compassionate reasons, illness	(neutral in GPA calculation)

Course-Specific Policies

Due Dates and Late Submissions

Deductions for late submissions encourage time management and fairness among students.

Task	Due date	Late	Deduction per Day*	Deadline	Repercussion
Scale 1–2	Sep. 25	yes	4%	Sep. 29	receives 0% and no comments
Scale 3	Oct. 16	yes	4%	Oct. 20	receives 0% and no comments
Forum	Oct. 16	no	–	–	receives 0% for unpreparedness
Materiality 1–2	Nov. 06	yes	4%	Nov. 10	receives 0% and no comments
Materiality 3	Nov. 20	yes	4%	Nov. 24	receives 0% and no comments
Composition 1–2	Dec. 04	yes	4%	Dec. 08	receives 0% and no comments
Composition 3	Dec. 04	no	–	–	receives 0% for unpreparedness

* For example, if an assignment is evaluated at 75% before applying a 4%-per-weekday deduction, it would receive 71% for being 1–24 hours late, 67% for 25–48 hours late, etc.

N.B. The following School policies take precedence over course-specific policies:

- No late assignments are accepted after the last day of weekly classes (the Friday before review week).
- With a Student Declaration of Absence (maximum two per course), an assignment may be submitted up to three weekdays late without penalty. An SDA cannot be used for the final assignment.
- With a medical note submitted to the School office, a course assignment (including a final assignment) may be submitted more than three weekdays late without penalty. The number of weekdays depends on how long you were unable to work, as indicated in the medical note. If more than one course is affected, you should consult with the Undergraduate/Graduate Coordinator to set a new schedule of due dates.
- A student with an accessibility plan that allows deadline extensions does not need to submit an SDA.

Attendance

Students are expected to be present for the entirety of class. While there is no penalty for missed classes, information will only be explained or assignments reviewed outside of the scheduled times if the student can provide a *Student Declaration of Absence*.

Academic Integrity

The instructor will use plagiarism software to check written assignments. Students are expected to use citations liberally and submit these with tasks where relevant.

Lecture Notes

The instructor will provide lecture slides on Brightspace. Students may only record lectures if given express permission by the lecturer.

Support

Please contact your TAs for assignment questions and technical advice. Reserve contact with the instructor for broader course questions. In both cases, contact by email. The instructor will also be available to talk briefly after class and to arrange a further meeting if necessary.

To mitigate miscommunication and disdain, a student representative will be elected during the first class to promptly bring class concerns to the instructor's attention.

Faculty Policy

Equity, Diversity, and Inclusion

The Faculty of Architecture and Planning is committed to recognising and addressing racism, sexism, xenophobia, and other forms of oppression within academia and the professions of architecture and planning. We, the faculty, are working to address issues of historic normalisation of oppressive politics, segregation, and community disempowerment, which continues within our disciplines today.

CACB Student Performance Criteria

The BEDS/MArch program enables students to achieve the accreditation standards set by the Canadian Architectural Certification Board. They are described at:

<https://tinyurl.com/cacb-spc-2017> (pages 14–17).

This Dalhousie ARCH course addresses the CACB criteria and standards noted on the “Accreditation” page of the School of Architecture website: <https://tinyurl.com/dal-arch-spc>.

University Policies and Resources

This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate. For university regulations, go to:

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=82&chapterid=4741&loaduserredits=False>.

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General

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Drawings

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Multimedia

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Knoll, Wolfgang and Martin Hechinger. *Architectural Models: Guide to Construction Techniques*. New York: McGraw-Hill, 1992.

Shields, Jennifer A.E. *Collage and Architecture*. United Kingdom: Routledge, 2014.

Graphics

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