

Manchester School of Architecture
MArch Group 2022: Architecture & Technics
Fadi Shayya (fadi.shayya@manchester.ac.uk)

Synopsis

This group looks at the architectural as an expansive field of body-machine-environment relationships. Instead of *established* Politics and Social Structures, our group looks at relational practices of making and re-making things and processes. We study the technical thought (i.e., technics) of enclosing/inscribing/associating bodies with their environments in the figures of the building, the city, and the vehicle. We explore these mediating figures as technical objects that embody humans' technical thought and stabilize their relationship with nature. There is scope for dissertations interested in how human bodies and machines co-exist and their relations evolve within complex notions of space, infrastructure, and built environment.

Scope for dissertations includes:

- The architectural associations of vehicles such as car, bus, train, airplane, and ship (see link with RMW11 Mobile Architectures 2021/22).
- Less-studied sites such as construction sites, shipyards, airports, factories, train depots, and infrastructure hubs.
- Evolving machine-human space (such as workshops in architectural schools and factories, and 3-D Printing/Additive Manufacturing in construction sites)
- Breakdown of technical-human relations in “smart cities” (such as surveillance, citizenship, and automation).
- Changing sociotechnical considerations with post-COVID architecture (such as ventilation requirements, service capacity, and distancing layout).

Abstract/Starting Point

The shipyard, like the technical ensemble, can be temporary: it is no less a shipyard constituting an ensemble. Even today similar temporary technical ensembles still exist, sometimes even highly developed and complex ones, such as the construction sites of buildings; others are provisional while being durable, like mining facilities or the drilling rigs for oil exploration. (Simondon [1958] 2017, 77)

The work of philosopher Gilbert Simondon is profound to understand how technical objects evolve in relation to humans, nature, and the advanced functions required by modern society. Simondon's technical objects are not the products that we refer to as tools. However, they are the mechanical and electronic functions and synergies that make-up machines and connect us in a highly networked social mode. Written in the mid-twentieth century and translated to English recently, the philosophy of Simondon has been employed in science and technology studies and the social sciences but not widely explored in architectural theory. One way to employ such a philosophy of technology in architectural and urban studies is to connect technical objects with architectural and urban qualities to an expansive field of body-machine-environment

relationships. This allows us to think of (post)humans and their activities as enclosed/inscribed/associated with their environments, be they buildings, cities or vehicles.

This dissertation group discusses how Simondon understands the *technical object* through his theory of individuation, specifically focusing on the concepts of *concretization* and the *techno-geographic milieu*. We will then connect this line of thinking to theorize the architectural as types of associations. There is a broad scope for individual dissertation proposals interested in studying how human bodies and machines co-exist and their relations evolve within complex notions of space, infrastructure, and built environment.

Keywords:

Architectural Associations; Technical Objects; Actor-Network Theory; Philosophy of Technology; Qualitative methods

Set Reading: 4+1 ([here is the updated list online](#))

- Combes, M. (2012) 'Afterword: Humans and Machines', in LaMarre, T. (tran.) *Gilbert Simondon and the Philosophy of the Transindividual*. Cambridge, MA: MIT Press, pp. 71–108.
- Horn, E. (2018) 'Air as Medium', *Grey Room*, 73, pp. 6–25.
- Simondon, G. (2017) 'Introduction + Chapter 1', in Malaspina, C. and Rogove, J. (trans.) *On the Mode of Existence of Technical Objects*. 1st edition. Minneapolis, MN: Univocal Publishing, pp. 15-51.
- Yaneva, A. (2010) 'The "Architectural" as a Type of Connector: A Realist Approach to Architecture', *Perspecta*, 42, pp. 141–145.
- Yaneva, A. (2017) 'Introduction + Chapter 1', in *Five Ways to Make Architecture Political: An Introduction to the Politics of Design Practice*. New York: Bloomsbury Academic, p. 1-32.

Further Reading: 7 books

- Colomina, B. (2019) *X-Ray Architecture*. Zürich: Lars Müller publishers.
- Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- LeCavalier, J. (2016) *The Rule of Logistics: Walmart and the Architecture of Fulfillment*. Minneapolis, MN: University of Minnesota Press.
- Murphy, M. (2006) *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*. Durham, NC: Duke University Press.
- Osman, M. (2018) *Modernism's Visible Hand: Architecture and Regulation in America*. Minneapolis, MN: University of Minnesota Press.
- Shayya, F. (2021) *Politics of Survivability: How Military Technology Scripts Urban Relations*. PhD Thesis. University of Manchester.
- Yaneva, A. (2021) *Bruno Latour for Architects*. London: Routledge.

The overall schedule (TBC):

Please submit on Fridays by 4:00 pm to receive feedback by the following Tuesday

1. Tue 16 Nov 21 – Tutorial 1: Introduction to Simondon, Realism, & Pragmatism
2. Tue 30 Nov 21 – Tutorial 2: “Technical Equality” + Initial Research Proposal
3. Tue 11 Jan 22 – Tutorial 3: draft Literature Review (~ 2,000 w + bibliography)
4. Tue 25 Jan 22 – Tutorial 4: final Literature Review + draft Methodology (~ 1,500 w) + Ethics (if any issues) + updated Research Proposal Pro-forma (not an assessment)
5. Mon 7 Feb 22 – Tutorial 5: finished Data Collection (including secondary sources, interviews, mapping, ethnography, etc.)
6. Mon 28 Feb 22 – Tutorial 6: draft First Empirical Chapter (~ 2,000 w)
7. Mon 21 Mar 22 – Tutorial 7: draft Second Empirical Chapter (~ 2,000 w)
8. Mon 25 Apr 22 – Tutorial 8: draft Conclusion (~ 1,500 w) + draft Introduction (~ 1,000 w) + revised Aims and Objectives

Final Submission through Moodle, via Turnitin, on Friday 6 May 22

Dissertation sections and word count:

The word count is indicative and could change in different dissertations

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|-----------------------|-----------------|
| ▪ Introduction | ~ 1,000 |
| ▪ Literature Review | ~ 2,000 |
| ▪ Methodology | ~ 1,500 |
| ▪ Empirical Chapter 1 | ~ 2,000 |
| ▪ Empirical Chapter 2 | ~ 2,000 |
| ▪ Conclusion | ~ 1,500 |
| ▪ Total | ~ 10,000 |

General Guidelines:

- All submitted files must have your NAME and STUDENT NUMBER
- All submitted files must be properly formatted and paginated PDF files
- All data collection must abide by [MMU Research Ethics](#)
- All bibliography and referencing must follow [MMU Harvard Style](#)
- Refer to the [Academic Phrasebank](#) for guidance on proper academic writing
- Refer to this [MMU Library video](#) for guidance on avoiding plagiarism