“All and everything is naturally related and interconnected.”
- Ada Lovelace

Our situation is in constant state of flux.

Our planet originally formed by gas left over from the creation of the Sun spins on its north-south axis, one complete rotation over a twenty four hour period creating a distinction between day and night. The Earth rotates one oscillation per year around the Sun at a fixed but continuous speed, informing a pattern of seasons distinct to each particular location on the Earth’s surface. This rhythmical exposure to the Sun’s energy has created a more or less predictable global climatic conditions and weather patterns, as well as a fixed and constant sensation of time to which life on Earth has evolved to.

Life itself is also in a state of flux. Its form has evolved to a combination of set principles as well as environmental conditions and constraints which have informed continual changes in behaviour, population size and migration patterns. Patterns of life are both chaotic and unpredictable, and also rhythmical and predictable.

“Out there” there is no light and no colour. There are only electromagnetic waves. “Out there” there is no sound and no music. There are only periodic variations of air pressure. “Out there” there is no heat and no cold. There are only moving molecules with more or less kinetic energy…”
- Heinz von Foerster

Taking cues from Foerster’s cybernetic observations Unit 1 will commence its first year by considering an architecture that is self-aware. We are interested in the processes in which architecture is able to sense, interpret, adapt and respond to altering situations. We will investigate performative architecture; an architecture with embodied behaviours, structures that evolve and mutate. We will interrogate context in relation to an identified aspect in flux at all scales from the macro to the micro, at all times of day, week, month and year.
UNIT METHODOLOGY

“The ability to build assumes the knowledge of all architecture and construction forms, as well as their development. To build means to advance this process, to investigate, and to make. The development of buildings began over ten thousand years ago and has reached an extremely high level, but is in no way a closed process. There are still an infinite number of open possibilities, infinite discoveries to make.”
- Frei Otto

Our interests lie in reality and in the processes of realising our concepts into reality. We will nurture a design process where the drawn and speculated are swiftly realised through the making, testing, and prototyping of scaled or 1:1 components of our proposals, to be re-imagined on site as part of the built whole. Knowledge gained from the event of making the drawn will then feed back into drawing, aiding the iterative design process. We are not interested in drawings simply as the only method of the representation of ideas. All proposals should be realised through making.

Our design process will be supported by our close industry links as we aim to collaborate at various points within the year. The Unit’s computer aided programme will teach digital time-based modelling helping you to imagine, develop, and animate your building as a tool for your design processes. We will support interdisciplinary connections. We will look further afield to the arts, philosophy, the pure sciences and sciences to help inspire, support and develop our proposals.

PROJECT 1 (i)

Students are to investigate an infill site or passageway max. 500m diameter from the Bartlett to identify, observe, measure, and map a spirit of that place which is in flux and is of interest to you. Responses can be mixed media 2D or 30 stills or animations.

**PROCESS:** Experience + observe [site] > Identity / map + record aspect [site] > Document [studio space]

**DURATION:** 2 weeks

PROJECT 1 (ii)

Students are asked to design and make a site specific device or an installation that will respond to the identified aspect in flux, or will enhance the experience of that aspect. We expect you to adopt a making based approach during this project, using the workshop as a place to test, prototype and develop designs. We encourage you to look beyond your current knowledge sphere to research, investigate and embrace new techniques, materials, technologies.

Students are asked to install the completed devices and installations and record its response over a period of time.

**KEY WORDS:** static / active / reactive / interactive / adaptive / automata / responsive / driven / performance / behaviour / analogue


FIELD TRIP

This year we will be travelling to Lyon, France. Lyon played a significant role in the history of cinema: it is where Auguste and Louis Lumière invented the cinematographe. It is also known for its light festival, the Fête des Lumières, which occurs every December, earning Lyon the title of Capital of Lights.

The trip will encompass visits to inspiring buildings such as Calatrava’s Gare de Lyon Saint-Exupery, le Parking des Celestins, Musee de Confluences, Lyon-Saint Exupery Airport and a stay in Le Corbusier’s Sainte Marie de la Tourette monastery. We will explore the city’s regions which provide it with its UNESCO status, discover its ancient traboules, visit the 200+ automated puppets housed in the Musee des Automates, and dissect its streets whilst travelling on the elevated funicular railways.

PROJECT 2

Whilst in Lyon students are asked to apply their knowledge gained from Project 1 to discover the programme and site for the main building project. Unlike the predominantly formal and static forms architecture can take, we will be more concerned with developing proposals that respond, evolve, or interact over time, whether to its situation or to its inhabitants. Proposals will be innovative, sensitive, site-specific but small to moderate in size. Proposals will be highly refined and resolved, encouraging and supporting strong links with the Design Technology course from an early stage in the design investigation. Your work should develop through the unit’s agenda of part-realising the speculated through making, testing, and prototyping. Final proposals are to clearly convey the building’s transformation through methods pertinent to its design, such as motion or transformation based model-making -both analogue or digital-, animations or time-based 2D drawings.


A few references: Peter Zumthor, Diller + Scofidio, Olafur Eliasson, Jeppe Hein, Ned Kahn, Christian Moeller, Jason Bruges Studio, Usman Haque, Arthur Ganson, Jean Tinguely, Joyce Hinterding, Random International, UVA, Troika, Magritte, Bare Conductive