ARCH – P7123 / Architecture, Image & Media / Module I

Analysis, Systems & Composition

Teachers: Denis Derycke (coordinator), Michel Lefèvre Invited lecturers: Uri Wegman, Julien Rippinger

The *Analysis*, *Systems and Composition* module considers architectural composition as an operation primarily based on principles that are inherent to architecture itself, devoid of any form of contextualization, function or ideological content. It assumes that the purpose of architecture mainly lies in the shapes and spaces through which architecture reveals itself, as well as in the graphic means – drawings and models – through which architecture is designed, which are often its only mode of existence. In such an approach, the design is no longer meant to produce a concrete output; the creation of exploratory composition processes becomes an end in itself.

The *Analysis*, *Systems and Composition* module requires students to analyze a phenomenon – natural or human-made – from which they can extract recurrent rules and principles. Those rules and principles will be transcribed into a spatial environment so as to set up a system susceptible to generate numerous different formal outcomes. The whole process will be undertaken exclusively by the use of a set of graphic tools chosen by the students, analog and/or digital: hand drawing, axonometric projections, 3D modeling, 3D printing, computer coding, etc. Then, students will explore the potentialities of the system they have created by using it to deliver a few formal configurations, sometimes unexpected.

The module aims to challenge the classical notion of "parti architectural", or function-oriented design, through a method of composition guided by production, sensitivity and serendipity, rather than intellectual and rational reflection. If the module is mainly based on hands-on production, it is also nourished by lectures about some post-moderne architecture trends, as well as lectures about analog and digital graphic tools, so as to use means of representation according to their specific features. Eventually, this teaching intent to tickle students about a part of history of artistic and architectural composition of structuralist inspiration that foresees computational architecture.

More specifically, this teaching unit addresses the following aspects of the *Masters in Architecture* program profile:

- "to develop a reflexive attitude that enhances the theories and the practices of architecture"
- "to produce and deploy a spatial expertise by using knowledges acquired in the fields of representation and communication.

Learning activities

<u>Lectures</u>: A few talks will be organized so as to give guidance about methodology, some background in terms of history and theory of the structuralist trend in architecture (1960s to 1990s), as well as some fundamentals about graphic representation tools and conventions.

<u>Hands-on Seminars</u>: Students follow the teacher's instructions to learn how to use a 3D modeling software, a 3D printer, a plotter, etc. The seminars' topics will be partially defined according to the needs of the various projects.

<u>Studio work</u>: As in an architectural design course, students present their work in progress to the teachers at every session.

<u>Practical work</u>: Students develop the technical aspects of their work with the assistance of the teachers.

Assessment

Assessment is based on the students' project (students are invited to work in pairs). Projects are reviewed by a jury at the end of the module. The grade depends mainly on the jury's final review. Midterm reviews and participation in studios are also taken into account.

<u>Please note that this module does not requires 3D or digital fabrication skills as a prerequisite</u>. However, the teaching of this module is mainly based on students' work. The production of documents is constant all along the semester; it is therefore time-consuming, and full commitment is required in order to fulfill the expectations. This module is mainly taught in English (B2 level recommended). Studio conversations can be in French & English.

Examples of students productions and working sessions at AlICe lab









