

Academic year 2016-2017 architecture

campus Ghent – campus Bxl – campus Gent & Bxl

AOB Studio Anatomy

Studio assignment

semester	2
startweek	W1
aantal weken	14
reviewweek / indienmoment	W14
studiepunten	15
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Title

Moratorium Space: bricks (stone) and the full scale window detail(s).

Moratorium: a temporary prohibition of an activity (<http://www.oxforddictionaries.com/definition/english/moratorium>)

Anatomy: a study of the structure or internal workings of something. (<http://www.oxforddictionaries.com/definition/english/anatomy>)

Objectives / General objectives

Studio Anatomy (Academic Design Office) connects research in/on architecture with architectural education and architectural practice. Through the vertical section, an act of cutting, Studio Anatomy traces socio-historical layers, starting from the topography (i.e. geology, the vertical section) and stretching as far as the full scale architectural (constructive) detail (i.e. the section, again). This cutting aims to interrogate connections between *poetics* (the deeply personal, the subjective and the emotionally loaded in architecture) with *technics* (its materialization, construction practice) by intensely interweaving both in the research process from the very beginning, hence covering the full stretch from *poetics* to *technics* in architecture in order to produce an architecture that is humanly more complete.

Studio Anatomy looks at architecture beyond its outer appearance, beneath the skin, and critically questions the too speedy nature at the surface of the things we see (in architecture)—the superficiality of the world—by cutting into and under the skin of things (architecture). Alberto Pérez-Gómez suggests that the section is of a foremost importance in the architect's work, as a prediction on the casting of shadows, pointing at the anatomic nature of the section that, applied by the architect, "break[s] the skin of things in order to show" (Pérez-Gómez 2006), completing his argument with Merleau-Ponty, "how the things become things, how the world becomes a world" (Merleau-Ponty 1964). This cutting into substance is resistant, hence it slows down our acting and intensifies our thinking. *Slowing* instead of *speeding*. Because *slowing* permits one to perceive, absorb and embody longer, better, deeper, so as to discover the depth of architecture. Depth is the first, not the third dimension in architecture (Van Den Berghe 2012), hence in Studio Anatomy. Designing and thinking in Studio Anatomy also starts from the strong presence of substance and bodily experience (Pallasmaa 2009). This cutting implies that the architecture under investigation is being anatomised and better understood, and by doing so, new embodied knowledge emerges.

References:

- Merleau-Ponty, M. (1964). *Eye and Mind*, in: *The Primacy of Perception*, Northwestern University Press, Evanston, Ill., US, p. 181.
- Pallasmaa, J. (2009). *The Thinking Hand, Existential and Embodied Wisdom in Architecture*, John Wiley & Sons, Chichester, UK.
- Pérez-Gómez, A. (2006). *The Space of Architecture: Meaning as Presence and Representation*, in: *Questions of Perception: Phenomenology in Architecture*, Steven Holl, Juhani Pallasmaa, Alberto Pérez-Gómez, William Stout Publishers, San Francisco, US, p. 22.
- Van Den Berghe, J. (2012). *Theatre of Operations, or: Construction Site as Architectural design*, Ph.D Dissertation, SmallBook 2, RMIT University, Melbourne, Australia, pp. 71-74.

Objectives / Specific objectives (ECTS)

1. The student can generate a relevant design starting from different spatial scales and the dimension of time.
2. The student can generate a relevant design starting from a conceptual-programmatic logic.
3. The student can generate a relevant design starting from the concern for qualitative comfort and sustainability.
4. The student has an advanced knowledge and understanding of fundamental differentiations of structure.

Objectives / Specific learning objectives (additional to ECTS)

1. The student can provide a relevant presentation of his/her design project in reference to the themes addressed in the design studio (section, anatomy, moratorium, construction (detail), patent, ...).
2. The student applies studio specific approaches in design through the use of expression tools in building physical models and drawing. The student has to apply cross section drawing, annotated drawing and the central perspective, in combination with the following drawings the student has to create:
 - a Chronological Drawing;
 - an X-Ray-Drawing,

Research question, theme and programme

The most precious things in life deserve an appropriate space, hence a most respectful access to it, designed with characteristics that encourage slowing as opposed to our daily hastily speeding. An access that works as a spatial time machine of deceleration, or a temporal composition of space, that makes us savor architectural space, its constitutive substance and its meticulously designed architectural detail.

The research theme of this assignment is the creation of a most carefully designed series of spatial transitions that is postponing (hence: moratorium) the access (prolongation) by making the latter very gradual. These transitions carve their way through and into an architectural mass (brick, stone) so as to finally penetrate into an imagined new space (hence: *Moratorium Space*). This space then has to be found, created, made and constructed for something extremely precious, i.e. Michelangelo Buonarroti's *Madonna of Bruges* (1501-1504)¹. This *Moratorium Space* has to be made in the architectural body of the *Church of Our Lady* in Bruges (13th, 14th, 15th Centuries).

¹ This sculpture by Michelangelo stands as a symbol of 'something extremely precious', and acts here as a tangible and concrete case in this research assignment. It also acts as a metaphor for the vulnerable and erotic character of the most beautiful aspects of life, things that need a most cautious and courteous approach to withstand the hideous shortcuts of its prostitudinal and pornographic opposite.

Hence, closely looking at the postponed access through the design of spatial transitions, this investigation inevitably will also have to confront making (an) incision(s) into an architectural mass of brick and/or stone—which inevitably includes creative structural interventions and the full scale door/window detail(s)—as key research themes.

These investigations have to be done through discipline specific actions and procedures, which mainly include making architectural drawings and scale models that may start from the scale of the fragment (1/50, 1/10), from where the design actions try to grasp the scale of the whole (1/100, 1/50, 1/20) and aim to penetrate as deep as the scale of the architectural detail (1/10, and reaching as far as the full scale architectural detail 1/1). Drawing constitutes the core of the method of Studio Anatomy. We have called it *Critical Sequential Drawing* (CSD)², and it continuously resonates with in depth reflections on construction practice, art, structural engineering, architectural history and theory. These working components constitute the core of Studio Anatomy's ways of researching and making space.

These investigations also include all the other media at hand (film, photography, 3D-modeling, ...) which can add to the insights, clarification and communicability of the anatomy of *Moratorium Space* in architecture. The investigation of the whole, the fragment and the detail will focus on the structural and technical aspects of the envisaged interventions which in their turn have to be situated in the context of architectural history, the arts, and science through rigorous referencing (author, year, title, editor, place) that has to be incorporated in the course and the final output of this research through images and/or text.

This research takes the *Church of Our Lady* (Bruges) as its starting point and field of operations. There, the strong presence of both the *Paradise Portal* at the church's northern facade (one might say: a postponement of access through the designed prolongation of access into a *Moratorium Space*), and Michelangelo's marble Madonna (one might say: something worthwhile of making a *Moratorium Space for*), are the inspirational starting points for the aforementioned research theme.

This research can be seen as a threefold:

(1) it is a reflective observation of 'the access' in architecture, based on an investigation of an enfilade of spaces (or spatial experiences) and its potential as a 'prolongation machine' (literally, figuratively, historically, imaginatively). This investigation will mainly be done through design (Research through Design), that mainly will go through the investigative architectural drawing.

(2) it is a qualitative technical study that goes beyond the secular field of quantitative and normative thinking in designing and making architecture, more specifically in both 'carving' in stone (or taking away bricks)(subtractive intervention with substance) and 'amassing' (or constructing with) brick or stone (additive intervention with substance). It is a qualitative technical study through designing and developing different window and door details together with designing and developing different concepts of the column, the beam, the lintel, the arch, the vault, the slab, ...

But this process needs quantitative investigations as well though, aiming for dimensional precision that must encompass both the technical and emotional level. It takes emotional precision to identify what needs to be expressed. It takes technical precision to translate that what needs to be expressed into substance. Consequently, a further developing technical precision may give rise to the discovery of new and unsuspected emotional precisions that otherwise might remain hidden but which are becoming explicit through the meticulous exploration and comparison of the technical possibilities. This is the production of new knowledge through design, by making detail drawings on scale 1/10 and 1/1 and beyond. Research through Design.

(3) For Studio Anatomy drawing is also a way of questioning the architectural construction and its mediation. It is an exploratory journey into depths of unveiling perspectives of the architectural drawing and the craftsmanship of the architect beyond today. Although indispensable to anatomise, drawing sections is not limited to the common vertical section. It includes fascination drawing

² *Critical* as a way of constant and critical (self) assessment in and during the drawing session itself, *sequential* as an attempt to make a better version of the previous drawing after the (self) assessment. It is a way of constant improvement in the way Ranulph Glanville describes it in his paper *Doing the Right Thing: the Problems of ... Gerard de Zeeuw, Academic Guerilla* (Glanville 2002), where Glanville elaborates on de Zeeuw's concept of improvement: how to turn observations into high quality observations by turning these observations, in a second round of observation, into an observable in its own right, so as to go for improved observations that generate improvement of action.

(embodying and perceiving), cinematic drawing (detection of points of (p)reference), proposition drawing, section drawing, X-ray drawing, chronological drawing, anatomical drawing ... n-drawings, applied to explore meanings by drawing or in drawings and the new gateways and avenues drawing can generate for normative architectural drawing and its risk of stagnation.

The research starts with a rigorous reading of the site and its surroundings. The student will do this topographic observation and analysis of the layered nature of the site and the landscape by tracing vertical sections through the topography (the whole). Coming forth from this analysis, the student will identify (a) point(s) of (p)reference (the fragment) as the place of architectural intervention. Subsequently, and situated within this/these point(s) of (p)reference, the student will create an access through designing a series of 'patient spatial transitions', going as far as the full scale architectural detail, a patient access that finally penetrates into *Moratorium Space* into which one finds a dignified designed presence of Michelangelo's marble Madonna.

Studio Anatomy proposes (among others) three ways of investigating and making spaces:

A. The (vertical) section occupies a central position in this research, in order to anatomise substance and space. Substance and space will have to coexist in the architectural drawing (which includes the scale model). The vertical section will be the subject of further in-depth investigations through its combination with the (central) perspective³, that will add (spatial) depth to the process and in which the student explicitly will have to situate his/her eye level (the level of the horizon) as the cardinal level of observation, and through which a direct connection with the physical appearance and the dimensions of the designing human body is established. The cutting edge of the (vertical) section investigates and demonstrates the anatomy of the material construction of the architecture under investigation. The incorporated (central) perspective investigates and demonstrates the anatomy of space⁴.

The (central) perspective also brings hight as the alledgedly accepted third dimension to the fore. In Studio Anatomy, the plan is the derivative of the vertical section, and not the other way round.

This results in the following process of reasoning:

Normative thinking:	Length (1st dimension) x Width (2nd dimension) x Height (3rd dimension)
shifting into :	Height (1st dimension) x Width (2nd dimension) x Length (3rd dimension)
then:	Height (1st dimension) x Width (2nd dimension) x Length (3rd dimension)
subsequently	Depth (1st dimension) x Width (2nd dimension) x Length (3rd dimension)
Innovative thinking:	Depth is the first dimension in architecture, allowing for thinking anatomically.

B. The student practices live model drawing. This is meant as an attempt to understand the direct relationship between the construction, the dimensions and the scale of the human body, and the potential of accurate observation of construction and proportion. The (nude) human body will have to be drawn both in motion and at rest. This methodical approach is based on the conviction that a more humane architecture also needs a better understanding of the human body. Every student has to observe the human figure, its anatomy and its movements in everyday life. In trains and bars. At night. In light and shadow (depth, again). Every student has to exercise this through his/her sketchbook that always travels with him/her.

In this live model drawing, as in the investigations on architecture (see above), the student will pay attention to the exercise of the whole, the fragment and the detail. For instance: the human body, the head and the face, the expression and the look in the eye(s).

C. Camera techniques and editing procedures will be exercised and applied. This is another gate of entry into *the postponed access* in architecture (see above). It is also a meaningful exercise in choosing specific places in a spatial context, finding (a) point(s) of (p)reference from where to observe the world and where to intervene as an architect in an existing situation. By using the *storyboard*, among other techniques, the student has to explore and generate a consistent walk, a physical movement through the site.

³ Preferably hand made, because this allows for a slow build-up of the perspective through which the image comes gradually to the surface of the drawing and into the experiential sphere of the drawing person, which more likely would generate embodiment through the merging of the drawing hand and mind of the drafts(wo)man.

⁴ The student combines annotated drawing with making these sections in order to make his/her consistent process of reasoning explicit and communicable.

Transitions between spaces are key elements in the construction of this storyboard/walk, in the creation of spaces and in the invention of windows, vistas, window details etc... Out of the topographic whole, and through close observation of anatomical actions (making sections) the student will select fragments (points of (p)reference). Subsequently, the student will deeply elaborate on the (full scale) architectural detail. The physicality of the architecture, its selected fragments and the architectural detail will occupy the centre of the student's focus.

Questions of Content

The element of TIME plays a key role in the investigation the access and/into *Moratorium Space* (postponement is by definition time related). Time as an instrument to intensify the human EXPERIENCE (the human being as participant. Empowerment) as an antidote against architecture as an OBJECT (iconic architecture, the human being as audience. Disempowerment) in the actual architectural practice and discourse (RESISTANCE in architecture) is crucial here.

How does the student translate his/her consciousness of objective time (mechanical metrum) versus subjective time (organic fluidum) into an architectural creation, more specifically in the conscious creation of transition (passage, access, transition, window) as a way to give space to time, and time to space?

How can SUBSTANCE (to make) be the generator of EXPERIENCE (to dream), starting from the inspiring substance situated on the (historical) timelines, spaces and paradoxes (see above) of the site of the *Church of Our Lady*, the *Paradise Portal*, and Michelangelo's marble *Madonna* in Bruges?

In his/her design the student also will have to think about the meaning of conservation and restauration of a historical site, and of an actual architectural intervention in it. Which (kind of) perspective—literally: the anatomy of a viewpoint in the drawing—do we want to develop for the (materialised) reflection on (a) heritage? How do we deal with memory and its architectural translation or re-establishment? What are the actual restrictions in architecture (e.g. insulation calculations), and how can we overcome them? Or would we permit ourselves to neglect them as one form of cultural resistance?

Timing en operation

PHASE I : W1 - W3 ANALYSIS & PRODUCTION:

Analysis of the site through the reflections on a reference document: make a thorough analysis of the spaces and observation techniques in Andrej Tarkovsky's film *Nostalgia* (https://www.youtube.com/watch?v=C6_kBg3_g10)

Site investigations: topography and data collecting: measurements, photography, drawings, ... This phase focuses explicitly on the scale of the whole. The site has to be made as a plan and a scale model on scale 1/100. In a parallel line of research, every student makes a personal 'atlas', of which the format may be a book, a set of maps and/or a film.

For Phase 1 the 'atlas' has to contain: 1/ the formulation of critical reflections around the given themes, contextualised in a landscape of references. 2/ the registration of research and creation processes, and the critical reflections on them.

PHASE II : W4 - W7 ARCHITECTURE & MONTAGE, START PROJECT & DETAIL:

The student traces a trajectory (sequence) on the site by making use of the drawing (section) and the scale model on scale 1/100, and through 'the eye of the camera, contextualised in the theme. This sequence has to be translated in a 'film' of about 2 or 3 minutes. The student produces series of design proposals for *access and Moratorium Space* during Phase 2.

For Phase 2 the 'atlas' has to contain: 1/ the annotation and imagination of the chosen sequence (trajectory) through the site, making use of the technique of the storyboard (photo, film, drawing, ...) and the architectural drawing (vertical section).

PHASE III: W8 - W10 PROJECT & THE DETAIL:

Rigorous design process of *access and Moratorium Space* as a coherent sequence of spaces, by (mainly) making use of the vertical section, the vertical sectional scale model and other media depending on the nature of the ongoing production. This design process is the continuation of the choice of the point of (p)reference in the context (the whole), 'out of which' a series of spaces, transitions, ... has to be designed organically (the fragment), in order to finally reach the full scale architectural (window)detail.

For phase 3 the 'atlas' has to contain: the spaces and the architectural detail, 'patented' in words and images.

PHASE IV: W12 -W13 THE JOURNEY & THE PRACTICE:

After an intense design process, the student completes his/her personal 'atlas' of the past processes. The student synthesises his/her stance in a reflection book (book, film, ...) as architectural designer. The project now has to be finalised and embedded in contemporary architectural practice and discourse.

PHASE V: Jury and exhibition.

WORKING

The students work in groups (max. 2/3). The regular studio sessions alternate with specific exercises and independent work sessions. There will be a registration of the state of the process 'before' and 'after' each session. External tutors and critics will be invited. Different presentation formats will be tested: in the studio and on location.

References

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- <http://articiviche.blogspot.fr/>

Evaluation format

Generally: see icts and competention matrix;

Specifically: the output will be presented on a weekly basis by the student, and in intermediary exhibits in the presence of the whole group (reviews, vertical studio) and evaluated. For the reviews, see the planning calendar.

The reviews will be: peer review, up-liner review by guest critics and academic review by the professors. There will be a final presentation with a public exhibition in week 14 for a jury of internal and external critics.

Format output: each group of students produces two components and presents these in an effective and dignifying way as an installation in a public exhibit. These two components are:

1. the architectural drawing: the vertical section(s). Each group of students makes sets of vertical sections (including the central perspective) of the design proposals. These sections have to end up in a Chronological Drawing and an X-Ray-Drawing (see above). In all these sections/drawings, the concept of annotated drawing has to be included.

2. the architectural scale model: the vertical section(s). Each group of students makes sections as scale models, including the real depth (on scale), and makes photographs and/or films of these cut-open spaces as central perspectives, with a specification of the eye level and focal distance of the section.

Next to this, the students also hand in all the documents that were required during the different stages of this project (atlases, ...).