

Information:

- 17th - 27th Jan 2017
- Credits: 3 ECTS

People:

- Isabel Dominguez
- Rodrigo Muro
- Jan Ejhed
- Merete Madsen
- Marja Lundgren
- Malin Alenius

Structure:

- 5 lectures
- 1 exercise
- 2 tutoring
- 1 presentation

Topics:

- Daylight perception & inspiration
- Daylight character
- Daylight and space
- Windows and openings
- Daylight zones
- Daylight qualities
- Architecture and daylight
- Daylight in the urban realm
- Daylight in the indoor environment
- Daylight & Location
- Daylight tools
- Scale of daylight



Introduction:

Daylight and architecture are intimately correlated and dependent of each other. The perception of a space, the understanding and shaping of the volumes, planes and materials that conforms the architecture are shaped naturally by the interplay of light and shadow which daylight makes possible. An architect able to foresee and plan accordingly the desired daylighting effect has an unquestionable skill that students must get into.

Objectives:

The focus of this orientation course is to learn to plan architecture with daylight as a design tool. The student will be given knowledge on different aspects of the complexity that the relationship architecture-daylight conveys. Different qualitative methods will be explained to be able to tackle the task at this orientation course.

The final goal is for the students to be able to grasp the complexity and create awareness of the relationship between daylight and architecture and its potential as a space generator. The task that allows to plan considering different scales or the built environment, and what influences each of them; the urban realm, building and room scale. The main orientation course task intends to provide basic tools for designing architecture based on Daylight considering the different scales of design.

Questions:

- How can daylight and its use as a material be considered an instrument as a form giver?
- How can daylight transform the spatial configuration and be a design tool?
- How can daylight influence the perception, performance and experience of the user?
- How orientation and location can determine the influence of solar radiation and shadow mapping in the different scales of architectural design?
- How can a building by means of daylight design inspire the users to socialise, contemplate, focus or enjoy in the urban, building and room scale?
- How solar radiation, sky component and time factor influence architectural design with daylight focus?

Scheme of the activities at the orientation course:

Face to face			Workshop
Lectures	Tutoring	Presentation	Independent: group wise
5 speakers	2 days	1 day	5 persons each group
11 hrs	2 sessions/seminar	10 mins. each	4 complete days available for work + the time where each group is not tutoring



TASK

Focus:

- Space for Daylight Contemplation
- Each project should represent 3 different “qualities of light”
- The project should contemplate 3 main areas: access, main room and exit.
- Important to reflect on the transitional spaces between the 3 main areas.
- Reflect on the use of natural light within day/time/seasons/weather variations.
- Consider to use daylight as a guide, reference, zone, materiality or experiential situation.
- Clear out the perspectives/points of view you will generate according to the experience/atmosphere you want to achieve.

Description:

- In a given plot (fig.3) students will accommodate a building/envelope, which needs to allocate a Space for Daylight Contemplation, solving all the encountered problematics related to daylight.
- As part of the task, students should analyse the location, orientation and urban morphology of the surrounding context of their plot (figs. 1 & 2).
- The plot is presumed empty, free of any construction and with 0% pendent.
- The surrounding is fixed with no possibility to be modified.
- The plot boundaries are fix with no possibility to be altered.
- There are no restrictions of what needs to be built in the plot. This means free of height or any kind of restrictions or compliances.
- Each team should be able to demonstrate the use of the tools given to design their day lit space (light zones, solar watch, typology of windows). Time and seasonality should be part of the analysis and design objectives.
- Time and seasonality needs to be documented in at least 3 dates e.g. June 21st/Dec 21st/other.
- Daylight character, usage and connection to experience need to be defined and characterized in the model according to design intentions.
- The exercise should include in its analysis and development the consideration of different scales of design:
 - **urban scale:** influence of the surrounding elements in the given plot. Influence of the proposal to the surroundings. Perspectives and influence of the volume in the urban fabric.
 - **building scale:** material, proportion, shape, configuration, voids, openings, orientation
 - **room scale:** window, view, material, proportions, dimensions, orientation, detail, daylight quality, character and atmosphere.
- The process of task will be solved by research and model making with simple materials, but carefully selected according to the character and properties to match daylight impressions.



- The deliveries are:
 - o A physical model at 1:50.

Model: In order to be able to visually evaluate the atmosphere and daylight qualities inside the model, you must make sure to provide the possibility to “peak” into your model. Make sure that the hole, hatch, removable side etc. that is provided to do so, has a minimal impact on the daylight intake of your model. Please see examples on page 8 and 9.
 - o a printed A1 with the registration of time-daylight variations, concept description and daylight qualities description.
 - o an electronic file of their presentation.
- The end of the orientation course will be marked by a students ‘presentation of their work to all classmates and course responsible and exhibited at the Dome of Visions on Friday 3rd of February.

Structure:

- Divide all participants in groups of 5.
- There will be time for tutoring every ½ hour where 3 teams simultaneously will be accommodated in a seminar style. Each of the 3 groups must have their material available to be criticized and where each group will prepare their questions. Each group will need to sign in for the tutoring. Check the schedule for tutoring dates.
- One member of each team will be appointed by their fellow team members to build together with the other appointed members a model of their plot (neighbouring buildings and streets), to be shared with the other 10 groups. Scale 1:50. 3 site models will be the result.
- At least one member of each team should be present at the tutoring sessions.



SITE:

Location:



Fig. 1 - Urban context

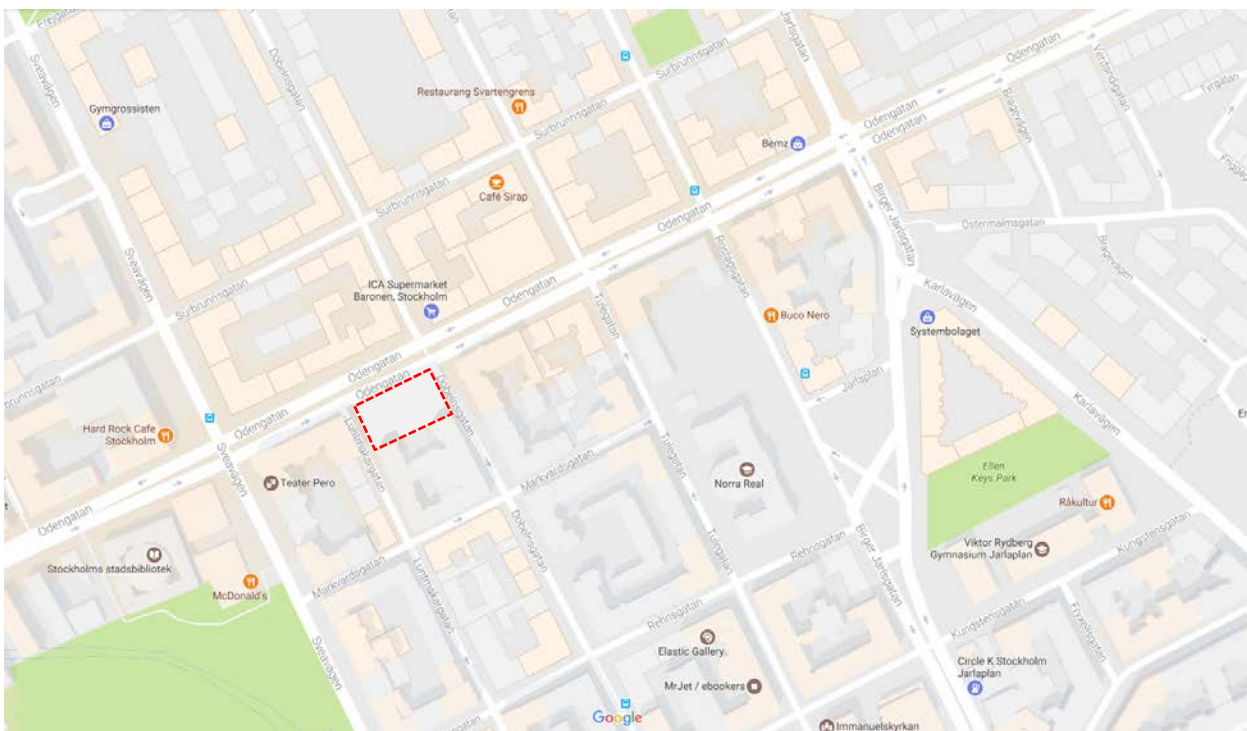


Fig. 2 - Location of the plot

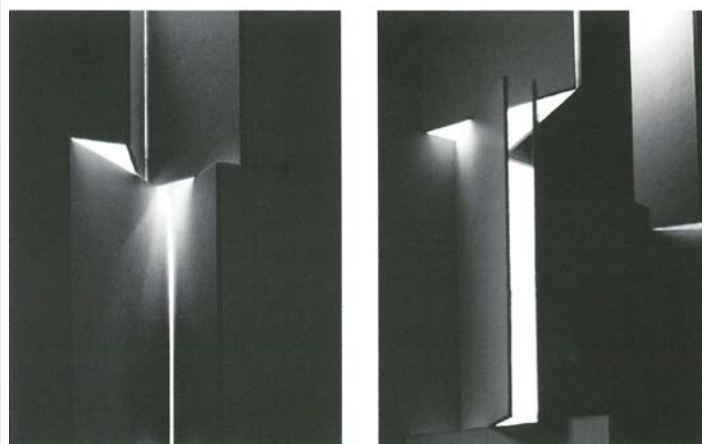
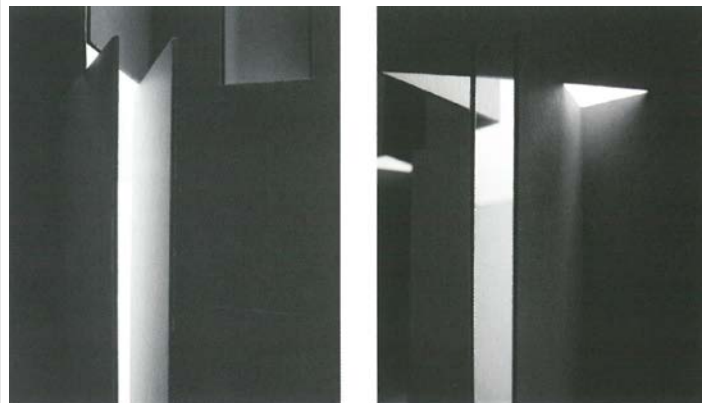
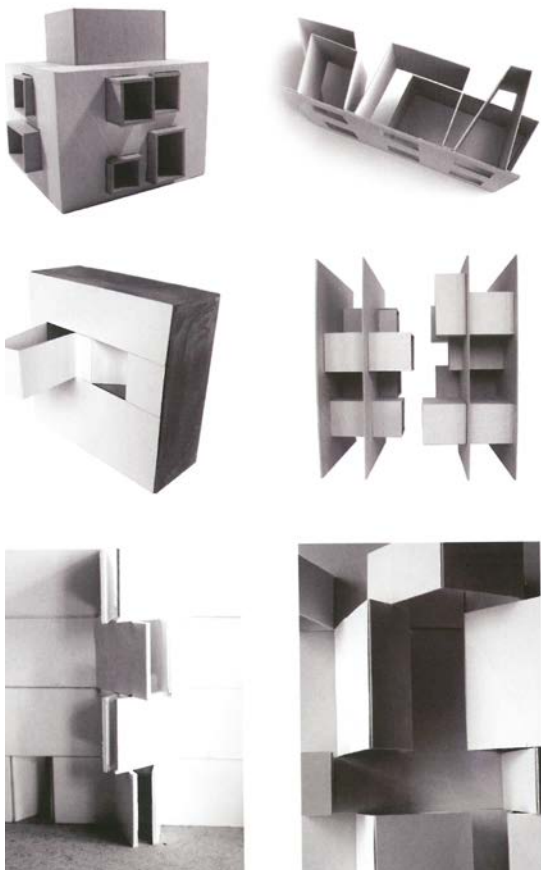
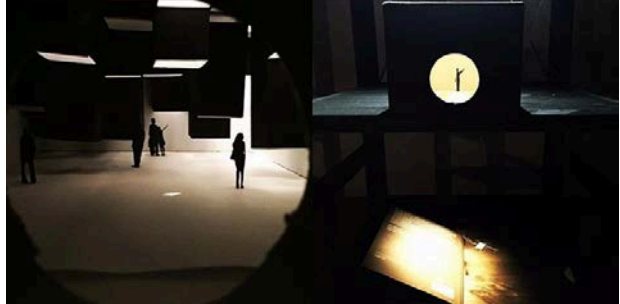
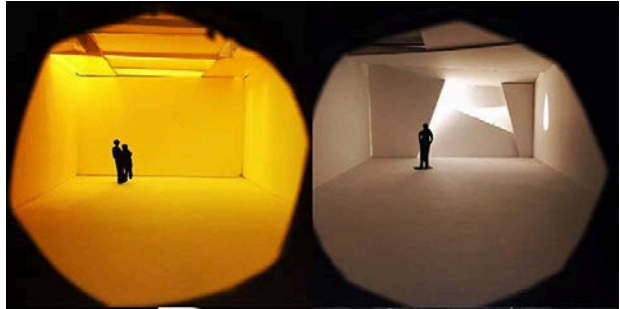


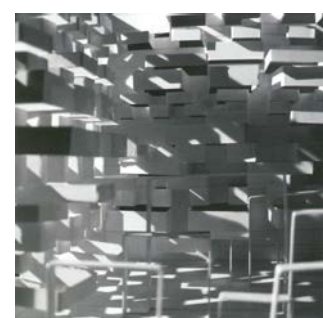
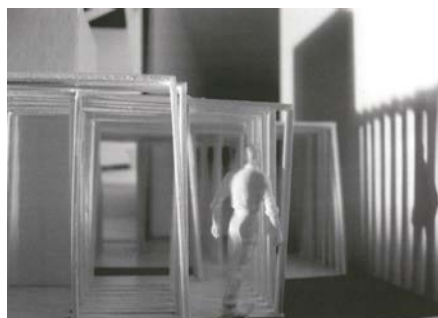
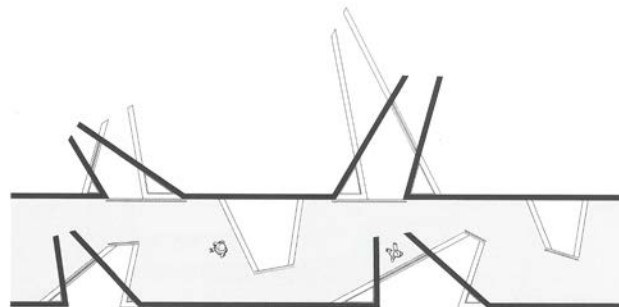
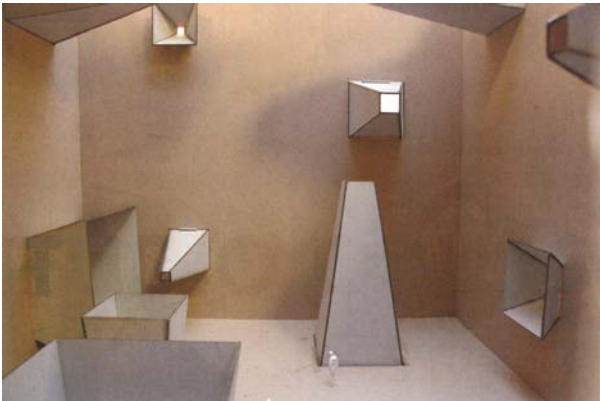
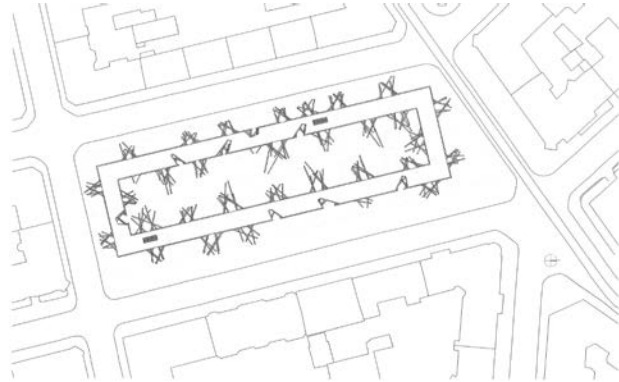
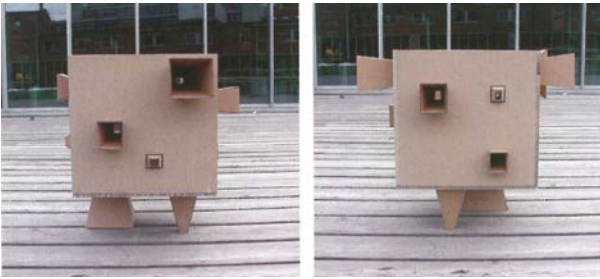
The plot:



Fig.3 - Plot

*Cad drawing will be delivered with the information of the height of the neighbouring buildings





Imgs: Generator, Research by design. AHO 2008.



Calendar

Week 3:

den 16 januari 2017 - den 20 januari 2017		januari 2017					februari 2017								
		må	ti	on	to	fr	lö	sö	må	ti	on	to	fr	lö	sö
	den 16	måndag	den 17	tisdag	den 18	onsdag	den 19	torsdag	den 20	fredag					
09:00					Lecture 3: Daylight Qualities Architecture School A123 / Merete Madsen		Personal Work: Exercise		Personal Work: Exercise						
10:00															
11:00															
12:00			Lunch		Lunch		Lunch		Lunch						
13:00			Intro A108		Seminar course Introduction Architecture School A123		Personal Work: Exercise		Personal Work: Exercise						
14:00			Lecture 1: Daylight Inspiration Architecture School A108 / RM - JD												
15:00					Lecture 4: Daylight tools Architecture School A123 / Rodrigo Muro										
16:00			Lecture 2: Daylight Character Indoor / Window Typology Architecture School A108 / Jan Ejhed												
17:00					Lecture 5: Daylight in the Urban Environment Architecture School A123 / Maja Lundgren										
18:00					SUM UP										
19:00															

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2016-12-21 14:30

Week 4:

den 23 januari 2017 - den 27 januari 2017		januari 2017					februari 2017								
		må	ti	on	to	fr	lö	sö	må	ti	on	to	fr	lö	sö
	den 23	måndag	den 24	tisdag	den 25	onsdag	den 26	torsdag	den 27	fredag					
09:00		TUTORING 1	Personal Work: Exercise		TUTORING 1		Personal Work: Exercise		Presentation						
		TUTORING 2			TUTORING 2										
10:00		TUTORING 3			TUTORING 3										
		Break			Break										
11:00		TUTORING 4			TUTORING 4										
		TUTORING 5			TUTORING 5										
12:00		Lunch	Lunch		Lunch		Lunch		Lunch						
13:00		TUTORING 6	Personal Work: Exercise		TUTORING 6		Personal Work: Exercise		Presentation						
		TUTORING 7			TUTORING 7										
14:00		TUTORING 8			TUTORING 8										
		Break			Break										
15:00		TUTORING 9			TUTORING 9										
		TUTORING 10			TUTORING 10										
16:00															
17:00															
18:00															
19:00															
		08:00 - 08:30 TUTORING DAY 1 9:00-16:00			08:00 - 08:30 TUTORING DAY 2 9:00-16:00										

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