

B.Sc.(Hons) in Built Environment Studies BEN 1101 – Design Workshop

Unit Co-Ordinator:

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Tutors: Prof Antonio Mollicone Perit Mark Borg Perit Monica Audrey

Specific Instructions: Date Assignment Set: 01.10.2024 Presentation Date: 05.02.2025 Deliverables: Printed presentation, physical models, constant weekly tutorials Credits Assigned: 6ECTS Method of Assessment: 100% Design Project

Description of Assignment:

Architecture is a Verb

Juhani Pallasmaa

The architectural theorist, Juhani Pallasmaa, describes that "Architecture is a verb"¹, a background to the daily life that takes place within it. Architecture in this sense is a vessel within which life occurs. In this workshop we will be exploring the vessel of architecture, we will begin by focusing on the building blocks of architecture, to understand context and users. The verbs we shall focus on are *see-ing, look-ing, observ-ing*. These verbs are at the core of the architecture profession as we observe the world around us to understand its needs, but what does an architecture designed as a response to these verbs look like? How can our understanding of these verbs create architecture?

¹ Juhani Pallasmaa, Eyes of the Skin (John Wiley & Sons Inc., 2012), 68.

The workshop is designed for you to begin a relationship with the rigour of research and design. The tasks of the workshop are designed as a framework within which you are to create your own response to the question. The tasks scale up so as to encourage you to take what you have learnt so far and begin to apply it to an architectural project.

The design process is a non-linear action which cycles from concept to a developed design, that you will present at the end of the semester. This process involves several different skills which you will be developing over the course of this workshop. Communication of your ideas is at the core of a design project, throughout the workshop, you will be introduced to techniques to understand complex geometry and represent it. This forms the basis of understanding spatial organisation, which in increasing scale moves from the way rooms fit together, to form buildings which respond to each other and to respond to an urban/rural context. The built environment industry is multifaceted, with the skills of design and communication at the core of all disciplines.

This is your workshop, you are responsible for its exploration, analysis, experimentation and outcome, but most importantly enjoy it!

How to participate in a design workshop.

The design workshop is a core component of architecture education, internationally and historically. The studio space is reserved for you on Mondays and Thursdays, and you are strongly encouraged to use it. Through your working within the studio, you are encouraged to collaborate and discuss with each other. These values are at the core of the architecture profession.

In addition, you are divided into 6 groups (see attached document), each of which will have one weekly tutorial session with an attached tutor. During these sessions, you will be guided through this brief, through weekly learning outcomes and milestones. These sessions will take the shape of lectures, class discussions, presentations of your work (pin-ups) and feedback sessions.

Rigour within a design workshop entails that no design decision taken is arbitrary. You are expected to add to the weekly tutorials with your own research and thinking. This includes what you have learnt in other academic disciplines, and through lectures with additional information as needed but more importantly from your own personal research.

During each tutorial, you will present the point within the design process you are in, through weekly milestones which you have to carry out. This is to be presented in the form of handdrawn or printed material (minimum 3A3s per week or as stated) and physical working models. At no point will discussions take place on a computer screen. Part of the rigour of the studio is critical discussion. Criticality involves an open discussion with tutors and your colleagues to help you improve your design. During these sessions, you will present your work and gain feedback. We highly encourage you to be open to ideas and comments whilst taking full ownership of your work. You are expected to attend and participate in all tutorials (attendance is mandatory and will be taken). Your lack of attendance will be represented in your final outcome and ability to deliver the required level.

The workshop culminates in an architectural crit. This is a presentation of your work, which is then open to critical debate. The crit is one step in a continuous cycle of work and debate and therefore is representative of your continuous effort and work throughout the entire workshop.

Together with the weekly design workshops you will have presentations/lectures by Professor Antonio Mollicone. These will be held on Tuesdays between 8am and 10am. These are compulsory and form an integral part of the course.

Outcomes Envisaged / Assessment Criteria:

<u>Study Unit Aims</u>

- 1. Understanding the components of a design process which cycles from concept, analysis, experimentation and presentation.
- 2. Developing research rigour and applying it to design as a form of research, focussing on the ability to critically analyse a brief and architectural space. This will include the use of case studies.
- 3. Understanding the needs of an architectural project and its users. This includes the understanding of context through site analysis, as well as ergonomics and the needs of users.
- 4. Developing skills for architectural communication and representation. This will include basic skills of architectural drawing and modelling. Through understanding the basics of descriptive geometry including two-dimensional representation of three-dimensional forms.

Learning Outcomes

The goal of this workshop is for you to be able to form an understanding of the role of an architect in the design of contextual (both site and user) spaces. This workshop shall encourage the development of ideas and the ability to communicate these ideas, both as a process and as a final representation.

- 1. Ability to understand a brief and propose an appropriate design which responds to the site and users.
- 2. Ability to communicate your idea of a three-dimensional form into a twodimensional drawing. This includes the ability to use drawings (especially orthographic projections, perspective and axonometric).
- 3. Ability to present your ideas using appropriate techniques.

Assessment Criteria

The main assessment criteria are your ability to communicate your design proposal which responds to the context and user. This will include the development of your architecture thinking and reasoning. The development of technical drawing skills will give you the ability to present your ideas concisely.

Grading percentage: 100% Design Project

Including progress and participation, concept, architectural response to brief, communication of idea, presentation

All the deliverables are to clearly reflect the learning outcomes. Below is a link to the University of Malta's grading system:

https://www.um.edu.mt/media/um/docs/services/administrativesupport/apqru/Undergrad uate_Assessment_Regulations.pdf

Tasks:

What is a Design Project?

In this workshop, you shall be designing an observation tower. An observation tower can be for birdwatching, for viewing, as a lighthouse, bell tower, etc.

A design project is composed of multiple steps, three of which can be defined as: 1. Design Research 2. Concept and Design Development 3. Presentation. This workshop is designed as several small tasks, to help scaffold these three steps which culminate in the presentation of your design project. It is mandatory that you follow all the tasks so as to be able to complete the workshop to a satisfactory level.

All the submissions of these tasks are mandatory and will be presented in the weekly studio workshops. These will be either through pin-ups or group discussions. All work must be uploaded to a Google Drive which everyone will have access to. *The Architectural Design of an Observation Tower* will also be uploaded to VLE on the eve of Day 1 of the final presentation (date TBC). For further details on weekly deadlines and deliverables please refer to the attached document.

 Design Research Week 1-5

Research is at the core of a design project. Through your research, all your design decisions are studied and not arbitrary. Therefore, good research is the guide for the entire design development and will lead to the creation of your concept and design decisions. Although this step is the main focus at the beginning of a design project, it will continue throughout the workshop.

Research takes many forms, including thematic research, case studies and site analysis. The design process itself and the search for form can also be classified as research.

Task 1: What does see-ing, look-ing, observ-ing mean?

Week 1

In this task, you are each to present 2A3s of what the words see-ing, look-ing and observ-ing mean to you. In this task, you are to use found images, photographs, sketches, collages, painting, models, text, etc. Use this exercise to be as creative as you can, there are no correct answers.

The goal is for you to begin to develop a relationship with research. Your understanding of the terms can be used to help develop a concept at a later stage in the design process.

Task 2: Orthographic drawings of the place where you live

Week 2, 3

In this exercise, you are to survey the place where you live. This will first include sketches to begin to form an understanding of the space. You should use the sketches as a means to mark out the dimensions which you will then use as a base to your orthographic drawings. This must include a staircase. You are strongly encouraged to carry out your own research so as to create an understanding of correct drafting techniques, which will form the basis for the rest of your architectural education.

Drawings to be included are:

- 1. Plan 1:20
- 2. Section 1:20

Drawings must include:

- 1. Line weights
- 2. Appropriate hatches to show materials
- 3. Dimensions

Task 3: Understanding the Site

Week 4

In your groups, you are to carry out a site analysis of your listed sites (see attached document). To carry out a site analysis you must visit the site at a minimum of one time and carry out a study of it. There are many ways in which to carry out a site analysis, for this workshop we shall focus on a technical approach.

For a technical site analysis, you must understand:

- 1. Access to the site (incl. Pedestrian, vehicular which are to be represented through an understanding of the materials and dimensions)
- 2. Climate conditions (incl. sun paths, shade, wind, water runoff, etc.)
- 3. Visual analysis (understanding the surrounding area visually)
- 4. Community (understanding who uses this site and the needs of the proposed users)

A site analysis must also include a physical model of the site to fit onto an A1 (scale to be discussed with the tutor).

Task 4: Case studies

Week 5

Case Studies must be like the project in scale and use. You need to further analyse a case study so as to understand how it functions, understanding why you have chosen it as a case study beyond the image. You must use a case study as inspiration and any direct copying will be considered as plagiarism and appropriately dealt with.

In this week you are to select a minimum of one case study and sketch it. Through your sketch you must communicate an understanding of the scale of the case study, its relationship to the surroundings and its users. This must be an analysis beyond the visual.

2. Concept and Design Development

Week 6-12

A concept is an abstract form of thinking which leads to an idea. In the classical sense an example of a concept is *sitting* which then leads to the idea of a chair, sofa, stool, etc. This workshop is already defined through the concepts of *see-ing*, *look-ing*, *observ-ing*, which we will explore within the first weeks. You must then take these concepts and introduce your own design concept.

In this workshop we will use the term design concept, which can be described as a framework within which all other design decisions are taken, an overarching theme. You will find your concept through the research you will be undertaking, it is important to let the research direct your thinking and trust the process.

The design concept will become the scaffold within which the design development will take place. Your experimentation within the design process will lead you to the creation of ideas. During the design development phase you are continuously challenged by the duality inherent within architecture of functionality and creativity. It is the balancing of this relationship which leads to architecture. Throughout the design process, all of your decisions must be well documented and grounded in research and reasoning. For this workshop the design process is to be carried out through physical working models, sketches, visuals, collages, etc. These will allow you to continuously develop the functional, aesthetic, environmental, communal, structural, etc aspects of your design.

The focus is on physical communication and design tools and therefore computer aided software is NOT allowed at this stage.

Task 5: What does See-ing, Look-ing, Observ-ing mean on site?

Week 6

In this one week charette, you are encouraged to experiment with what these words mean on the site. You are to use any tool you feel most comfortable with e.g. sketching, painting, models, text, photographer, video, etc. to be able to communicate and experiment with these words. What aspect of these words do you want to use as your design concept? Which action? What means of *see-ing, look-ing, observ-ing* will you use as a generator for your design?

Task 6: Architectural Design of an Observation Tower

Week 7, 8, 9, 10, 11, 12

The design task for this workshop is the design of an observation tower. The function of this tower is for each student to decide, which must be appropriate to the site given. This tower will be located in the site designated per group (see attached document). The aim of this tower is to be a minimum of 3m tall, include a staircase and platform and within this tower you must also include a small WC, designed as an integral part of the tower. The design of this tower must act as a visual landmark, respect its context and functionally respond to the needs of the users.

During this task, you shall take everything you have learnt during the previous weeks and begin to apply it to a form. You are highly encouraged to use physical working models, sketches, visuals, collages, etc. and you must be able to work in three dimensions. These tools will allow you to continuously develop your design. These tools are encouraged as they allow speed and imperfection which at this stage are of utmost importance to allow you to continue developing your ideas. Therefore, computer aided software is NOT allowed at this stage.

3. Presentation Development & Submission

Week 13,14

The design presentation is a key component of the design process. The ability to communicate your ideas through drawings is an important skill throughout the profession of architecture. The project presentation needs to be self-explanatory, being able to condense complex thoughts into concise and clear information is a skill which you have to develop throughout the course.

You must treat the presentation as an example of graphic design and you should give it the required time and attention. During the final weeks of the workshop, you will be encouraged to create mock-ups to test your presentation ideas.

Final Crit Deliverables

All work carried out throughout the workshop should be brought to the final presentation showing the build-up of thinking throughout the semester. Tasks 1-5 are to be presented through sketches, photographs, texts, working models, etc.

During the final Crit you will be presenting Task 6/7, use this formal presentation as a means to test your ability to communicate an idea. This will include a presentation board, working models and oral communication. The list below is a minimum requirement unless stated otherwise.

Presentation Board

Maximum of 3A2 boards which will include:

- Technical drawings: Block plan (1:200, 1:500), Plans (1:20, 1:50), Sections (1:20, 1:50), Elevations (1:20, 1:50).
- 2. Imagery: Sketches, renders, collages, photographs

Working Models

Working models are an integral part of the design process. Each group shall construct a model of their site (scale to be discussed with tutor, to fit to an A1). In this white model you shall each place your individual models to understand how they fit within their context. Your working model can be made of any material; multiple models of different scales and materials are also encouraged.

Oral communication

You are to present your design project to your colleagues and an examination panel. This is an important skill for built environment practitioners, and we therefore encourage you to use this to practice. The date for this will be communicated at a later stage.

Suggested Further Reading:

Reference Design Guidelines:

Architects' Data by Ernst Neufert

Metric Handbook: Planning and Design Data by Pamela Buxton

Architectural drawing:

Architectural graphics by Francis D. K. Ching The details of modern Architecture volumes 1 and 2, by Edward R. Ford Architects' Working details edited by David Jenkins and Louis Dezart Architectural Sketching and Rendering Techniques for Designers and Artist by Stephen R.Kliment

Sketching and Rendering Interior Spaces by Ivo Drpic

Architectural design (books):

Architecture: Form, Space, and Order by Francis D. K. Ching

Elements of Architecture: From Form to Place by Pierre von Meiss

Architecture Now! Vol. 1-9 by Philip Jodidio

10x10x3 ed. by Shumon Basar, Mercedes Daguerre, Luis Fernández-Galiano, Bart G., et al Mediterranean Modern by Dominic Bradbury

Architectural design (periodicals):

Architectural Review (AR) Architecture A.I.A A&U Architecture and Urbanism Architecture d'aujourd'hui Architectural Design Architectural Record Domus C3 Detail Architects' Journal (AJ) Websites:

http://www.archdaily.com

http://www.dezeen.com

http://www.yatzer.com

http://www.domus.com

https://www.e-flux.com