

B.Sc.(Hons) in Built Environment Studies BEN 3102 – Design Workshop Occurrence C – Reimaging Urban Open Spaces

Unit Co-Ordinator:

Dr Sarah Scheiber

Tutors:

Dr Sarah Scheiber, Mr. Antoine Gatt, Prof. Elisa Cattaneo

Specific Instructions:

Date Assignment Set: 20th November 2024

Submission Date: 14th January 2024 **Presentation Date:** 15th January 2024

Deliverables: Presentation in digital (Powerpoint) format; 3No. A1 panels

Credits Assigned: 3 ECTS

Method of Assessment: Design crit (100%)

There is a formal crit for this project, and the presentations should logically tell the story of your analysis and how that has informed your proposed interventions. The final presentation will be a group presentation. Groups will be made up of 2/3 people. It will comprise a digital (Powerpoint) presentation that should be concise and as graphical as possible, using the minimum text to explain the analysis and present your strategy – in other words, to tell the story. This presentation should be submitted in digital format. It will also be accompanied by three physical A1 panels containing the master/spatial plan and key visuals in relation to the design interventions.

Description of Assignment:

Wouldn't it be great if the open spaces where we live and work were "greener" provided for recreation AND helped address urban challenges?



If spaces like this....



Image Source: Google

Where more like this....



Image Source: PhD Research, Sarah Scheiber

And spaces like this....



Image Source: Google

Where designed to provide benefits such as these....

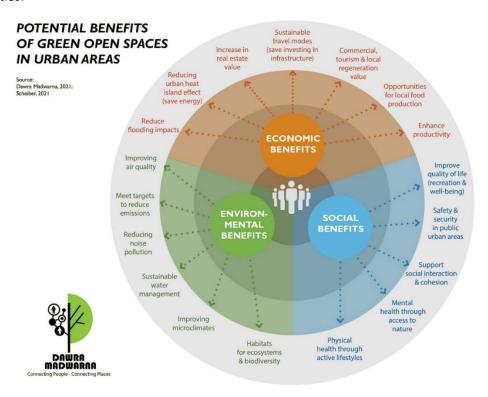


Image Source: Masters in Architecture and Urban Design project by Katrina Grech Mallia & Adapted for Dawra Madwarna

This workshop gives you, as students the opportunity to look at an urban open space and think about how these challenges can be addressed. It is an opportunity to rethink the way we design our urban open spaces and the way we prioritise and allocate space for different functions. As Guattari (1989) defined in his book "The Three Ecologies", the natural, social and individual needs has to be related in a new definition of the environment in which we live. We will be adopting a people and ecological multi-centered approach to design as well as a mobility pyramid which promotes and facilities sustainable mobility where people, micro mobility and public transport are given priority together with ecological and biodiverse logics.

The philosophy is that with the right studies solutions to transform and adopt such an approach will be found. This workshop is an opportunity to learn the skills necessary in adopting such an approach, and take a moment to step back and allow ourselves space to think otherwise and design and visualise what could be and showcase what the real potential of our urban open spaces are!

In Malta, both the National Environmental Policy (NEP) (GoM, National Environment Policy, 2012)¹ and the Strategic Plan for Environment and Development (SPED) (GoM, Strategic Plan for Environment and Development, 2015) identify the need to move towards sustainable development. According to the SPED the increase in densities has "had a number of negative effects manifested to different degrees in certain localities with impacts on the quality of streetscapes and public open spaces, social and community facilities, increased traffic flows and on residential amenity and the general upkeep of the environment". Additionally, the low provision of urban green spaces does not encourage healthy lifestyles. Factors such as congestion, pedestrian safety, air and noise pollution, have reduced the amenity and quality of life. This has led to the gradual erosion of the degree of social integration within communities.



Dawra Madwarna, a local organisation striving to drive the transformation of open spaces in Malta state the following: "Putting people at the centre of design is what will eventually lead to inclusive and functional spaces...To do so, is to understand the needs of people and the environment in relation to

each other. A part of this solution is to design good quality open spaces which are planned and designed such that they contribute to sustainable development. A decadent public environment contributes highly to a widespread dissatisfaction with urban life and leads to unsafe environments for people...We, therefore, need to think in terms of creating inclusive and culturally-sensitive 'places'. For this it is essential that the approach considers not only the physical and environmental aspects but also the social and political economic dimensions of public space. If all dimensions are considered and inform the planning and design processes, then open public spaces have the potential to contribute to a number of benefits."

This project will be carried out in groups of 2 or 3. You will be required to select a small urban open space which you are familiar with. This may already provide an element of pedestrian or green space however it **should not** be an established park or garden. It may be a surface car park or left-over space relating to road infrastructure which you wish to transform. As a guideline spaces could be about 1000-3,000sqm, larger sites may be chosen but ideally not larger than 4,000sqm so as to keep the design at hand manageable. You will be required to assess the area as outlined in the method below culminating in a SWOT. With this in hand you will be required to design a master plan for the chosen area keeping in mind principles of ecological, landscape and sustainable design. You will need to think of the integration of vegetation and sustainable water drainage systems. You will need to think of connectivity in terms of the wider context and the potential role of the space as part of a wider network, as well as the proper design of the space in terms of pedestrian infrastructure and other forms of mobility as may be required. The multi-functionality of the space will also need to be considered. How does the space relate to its context? What is its character? What activities and which users does it provide for? Is it climatically comfortable to use? Does the design encourage use and social interaction? Does the use of water and vegetation maximize the potential benefits and functionality of the space? How is waste managed? Finally, the principle of social inclusion also needs to be considered. How does the design provide for the community? Have existing users been considered? Does the design promote social inclusion? Through this project, the design sensitivity and principles necessary in dealing with urban space and the public realm, will be obtained which will be very relevant to your future careers.

The theoretical and methodological framework underlying the assignment will be that of landscape ecology and its evolution into the principles of landscape urbanism and ecological urbanism, as disciplines capable of defining new approaches and new forms for the spaces we inhabit.

Tasks:

Analysis

The 'Placecheck' method² should be used to analyse the space in detail. This first exercise is meant as an initial 'brainstormer' and should be carried out together. Spend time in the space and observe the users, their activities and movement patterns (pedestrian and vehicular and ecological). Look at the space's current physical characteristics – what works and what does not? How do the individual elements work in isolation and as a whole system? Analyse the space in terms of the different visual stimuli that are contained therein – the different materials, urban furniture, landscaping typology. Are they adequate and do they serve their purpose well? Can they be rethought?

In parallel, you will need to understand the "invisible space of ecology": mapping temperatures, pollution, soil analysis, and existing species, in order to read both the social and ecological space, to think in a transdisciplinary manner about the design of contemporary space: a place habitable by multiple living beings; a prototype for a new way of collectively living in the world we inhabit.

² Information available at: http://placecheck.info/en/21-questions-for-the-placecheck.info/en/extra-prompts/ and https://placecheck.info/en/extra-prompts/

In particular, you will be introduced to methods and topics of landscape ecology, landscape urbanism, and ecological urbanism; hyper objects and the taxonomy of contemporary ecological design; suburbanism and molecular spaces; the codes and representations of contemporary landscape; spaces vs times; the main landscape architects; and the representation of contemporary landscape; ecology and its invisible forms; the transition from the fixed figures of urban design to the dynamic ones of landscape; the multiple timelines of landscape and its inhabitants.

Subsequently divide the following work and carry out these exercises:

- 1. <u>Figure/ground plans</u> accompanied by a brief historical analysis: combine these two techniques, producing figure ground plans for three points in time in order to study how the urban morphology of the space has changed along the years. Limit the historical discussion to those salient aspects that have contributed to the urban development of the space.
- 2. A <u>land-use analysis</u> of the site and its surrounding context: take a radius of 250m for this analysis (using the centre of the space as the centre of your circle), highlighting any vacancies and redevelopment opportunities. Carry out this analysis separately for the individual floors of the surrounding buildings, if this is relevant to your study.
- 3. Analyse the <u>other open spaces</u> within the 250m-500m radius what is the nature of these ancillary spaces and can they form part of a comprehensive open space network with the space being considered?
- 4. <u>Invisible shapes</u>: Analyse the environmental elements which act upon the site and characterize the space. Observe and record the microclimate in the different areas of the site (sun vs shade, windy vs sheltered locations, noise conditions), ground characteristics, geology, and record them as these will influence the design stage. Identify other aspects which need to be recorded.
- 5. <u>Vegetation inventory:</u> Vegetation can be classified according to height: ankle height, knee height, waist height, eye level and beyond eyelevel. All have a role to play in shaping and characterizing the value of a space. Carry out a survey of the existing vegetation heights found within the selected space and how such vegetation links to other green areas in the vicinity. Use this to determine how the vegetation adds value and character to the space.
- 6. <u>Functional aspects:</u> Observe how other functional aspects are working / not working. How is waste managed? Is the space well-kept or are their issues of maintenance / cleanliness? Map out the site levels. How is the topography working?
- 7. <u>Stormwater management and watershed:</u> What happens to rain water? Is it collected and discharged? Does it collect on the space or impact other areas in terms of flooding? Is there the potential to collect and re-use?
- 8. Carry out <u>social surveys and observations</u> in the space. How are people using the space? What do people think about the space? What do they like / dislike? Is the space pleasant and comfortable to spend time in? What do they miss in their neighbourhood?
- 9. Carry out a <u>movement analysis</u>. How does the space provide for different transportation modes? How does the current infrastructure work or not work? Are their existing conflicts? How do people move within the site? Is there a clear hierarchy of paths? Is it easy to orient yourself in the space? Is the space legible?
- 10. Carry out a <u>visual analysis</u> of the site. What are the impressions on approaching the site? Are the entrances easily identified? Do they attract users? Observe and record the views into and out of the site, and within the site (both pleasant and unpleasant).
- 11. As a final conclusion, a <u>SWOT analysis</u> will be undertaken to further understand the nature of the area and consolidated the conclusions from the above analysis. Limit yourself to the immediate context for this analysis. This should be your concluding analysis and should be carried out together.

Tutorials will be held in order to explain and discuss the above analyses.

Research Component: Landscape as multi-voice

In landscape science, the redefinition of the notion of "living" is fundamental. If "Plants are the everopen wound of the metaphysical snobbery that characterises our culture. If they are the return of the 'removed' 4, landscape thinking is breaking away from twentieth-century biocentrism towards a centrality of *bio-diversity*: that is, the value of plurality and differences. A concept, that of biodiversity (etymologically defined as "variety of life"), which is expressed in all its genetic and salvific, as well as imaginative, capacity in at least three conditions for contemporary landscape science:

- 1. The first, in its being a resource in relation to the 'new climate regimes' and contemporary ecological problems. Understood as a resource and good, it is logically intertwined with a question of necessity, in particular its 'salvific' power in relation to the dynamics of 'planetary urbanisation', i.e. man's action as a ferocious consumer of the earth's resources.
- 2. The second, as a category that presupposes a right of nature to an autonomous existence as a living subject in itself capable of self-regulation.
- 3. The third, as an openness to new interpretations and 'constructions' of the world, both landscape and aesthetics to be explored, not yet fully knowing its potential and codes.

The construction of the urban landscape as multi-voice is still in an experimental phase, in an attempt to identify a new *theoretical* potential (as an opening to new 'living'), *methodological* (as a non-metaphorical strategy of opening to new dynamics and *legacies*), and *linguistic* (as the construction of new languages).

In this experiment, landscape becomes the discipline replacing the classical urbanism and planning: the search for a new dimension in the world of design that could wedge itself into new relations between man and nature, the concept of **co-evolution** is one of the main principles, capable to generate new design figures towards a *relational* dimension of the parts, as borrowed from Latour and his concept of Gaia.⁶

You are required to research and familiarise yourselves with the concept of landscape as infrastructure and as green infrastructure in light of this experimental approach, and how these "infrastructures" may be used in the design approach for designing open spaces which contribute to sustainable development. Introductory lectures on the topics mentioned throughout this brief will be given.

Design

Finally, you will be required to design a masterplan for the space, in a design coherent with a clear and identifiable language.

The design will need to illustrate how the following aspects have been considered / provided for:

- Ecological and landscape shapes
- Times and spaces
- Vegetation structure and landscape habitats
- Water systems
- Community Involvement / Needs

³ E. Coccia (2018), *Plant life. Metaphysics of mixing*, Il Mulino;

⁴ E. Coccia Op. Cit;

⁵ B. Latour (2020), *The Gaia Challenge. The new climate regime*, Meltemi;

⁶ B. Latour: http://www.bruno-latour.fr/ and see Terra Forma: Manuel de cartographies potentielles;

- Contextual Relationships
- Connectivity
- Character and Form
- Activities and Functionality
- Accessibility and Movement
- Waste Management

Work Program:

Throughout Week 1, you are requested to, as a minimum requirement:

- Choose your space and email the tutors with chosen space for confirmation
- Carry out the 'Placecheck' while on site, asking yourselves the most pertinent questions such that your observations and attempt some of the analysis tasks.
- Study the ecological shapes and develop codes of representation

In week 3 you will have an interim presentation where you will be required to present the analysis and the SWOT as a final conclusion of your analysis, together with some initial concept ideas for the space. You will then commence work on the design of the space. As a group, you will be required to prepare a proposed master/spatial plan together with both sketches (as appropriate, including conceptual sketches to illustrate your strategy) and 3D visuals to explain the nature of your proposals. Examples from well-suited and relevant case studies may be used as a supplementary means to illustrate the essence of the proposals and to help you develop your concept further, but will <u>not</u> be accepted as a replacement thereof.

Timetable

Tutorial 1 – 20/11: Introduction

8:30 am: Briefing, familiarisation with, and explanation of brief.

9:15 am: Talk Prof. Elisa Cattaneo: Codify ecology. Tools and methods.

10:00 am: Talk Dr Sarah Scheiber: Observing space and carrying out social surveys.

10:30 am: Group formation and Site Identification

Tutorial 2 – 27/11: Analysis Tasks

8:30 am: Talk Dr Sarah Scheiber: Benefits of open spaces in urban areas, designing for sustainability & green infrastructure.

9:15 am: Talk Prof. Elisa Cattaneo: Sub-urbanism and molecular spaces

10:15 am: Group Tutorials

<u>Tutorial 3 – 04/12: Interim Presentation and Workshop: Analysis Conclusions / SWOT; Research Component and Design Objectives – Spatial Development</u>

8:00 am: Talk Prof. Elisa Cattaneo: Spatial Ecology, landscape urbanism and ecological urbanism/ Hyperobjects and the taxonomy of contemporary landscape design

9:00 am: Group Presentations

1:00 pm: Group Tutorials / Design Workshop

<u>Public Lecture – 05/12:</u> Prof. Elisa Cattaneo - LC217 (Lecture Centre)

Tutorial 4 – 07/12: Full Day Workshop – Masterplan Concept Ideas and Further Development

8:30 am: Talk Prof. Elisa Cattaneo: Landscape between art and science

9:30 am: Group Presentations

1:00 pm: Group Tutorials / Design Workshop

<u>Tutorial 5 – 11/12: Masterplan Design Development</u>

8:30 am: Talk Prof. Elisa Cattaneo: Representation of contemporary landscape

9:30 am: Group Tutorials

Tutorial 6 – 18/12: Masterplan Design Development

8:30 am: Group Tutorials

Tutorial 7 – 08/01: Presentation Tutorial

8:30 am: Group Tutorials

14/01: Submission (TBC)

15/01: Design Review (TBC)

Outcomes Envisaged / Assessment Criteria:

The design workshop applies basic urban design principles in practice by first exploring approaches to analyse the character of a chosen built environment. Subsequently, to design a practical proposal aimed at improving the overall quality and liveability of both the chosen urban space and its surroundings and exploring its potential to provide the potential benefits relating to sustainable development.

The envisaged outcomes for the project are:

- Developing a critical perspective to a current urban space and defining problems clearly
- Developing a deeper understanding of the three-dimensional environment that surrounds you, through undertaking in-depth site analyses/appraisals
- Generating a master/spatial plan which adopts principles of design which allow urban open spaces to contribute to sustainable development
- The ability to work within a small team in order to address a practical urban problem and share ideas
- Communication skills [graphic, writing, presentation] to communicate results, thoughts and design ideas in an effective and interesting manner

As a result, assessment criteria are sub-divided as follows:

- Depth of analysis and research component carried out and carrying forward lessons from analysis to the design phase of the assigned space (20%)
- Problem identification informed by analysis (10%)
- Formulation of design strategy together with a well-thought-out design concept, informed by analysis (20%)
- Development of bold and creative design solutions (35%)
- Clarity and comprehensiveness of presentation using the appropriate means to communicate design thought and comprising master/spatial plan, sketches, sections, 3D visuals (15%)

Suggested Further Reading:

ARENAS A., F. Ait-Touati, A. Gregoire, B. Latour (2022): *Terra Forma: A Book of Speculative Maps*, The MIT Press.

AUSTIN, G., 2014, *Green Infrastructure for Landscape Planning, Integrating human and natural systems*. London & New York: Routledge.

BEATLEY, T., 2012, Green Urbanism: Learning from European Cities. Washington D.C.: Island Press.

BENTLEY, I., ALCOCK, A., MURRAIN, P., MCGLYNN, S., and SMITH, G., 1987, *Responsive Environments: A manual for* designers, Butterworth Architecture

CARMONA, M., TIESDELL, S., HEATH, T. and OC, T., 2010, *Public places – urban spaces*, 2nd Ed. Architectural Press

CULLEN, G., 1996, *The concise townscape*, Architectural Press (shortened version of the 1961 edition of *Townscape*)

DAWRA MADWARNA, 2021, Networks of Green Open Space in Dense Urban Areas, https://issuu.com/dawramadwarna/docs/ma-dwarna_proposal_final

GEHL, J., 1987, Life between buildings: using public space, Van Nostrand Reinhold

GEHL, J., 2003, New City Spaces, Danish Architectural Press

GEHL, J., 2010, Cities for People, Island Press

HANSEN, R., RALL, E., CHAPMAN, E., ROLF, W., & PAULEIT, S., 2017, *Urban Green Infrastructure Planning: A Guide for Practitioners*. GREEN SURGE.

HOMES AND COMMUNITIES AGENCY/LLEWELYN DAVIES YEANG, *Urban design compendium*, web resource

HOYER, J., DICKHAUT, W., KRONAWITTER, L., WEBER, B., 2011, Water Sensitive Urban Design, jovis Verlag GmbH

KRIER, R. (1979). Urban Space, Academy Editions

LYNCH, K., 1960, The image of the city, Technology Press

MOUGHTIN, C., 1992, Urban design: street and square, Butterworth Architecture

TIBBALDS, F., 2001, Making people-friendly towns, E. & F. N. Spon

Additional specific readings will be assigned after each lesson

References

- Banister, D., Watson, S., & Wood, C. (1997). Sustainable cities: transport, energy, and urban form. *Environmnet and Planning B: Planning and Design*, Vol 24, 125-143.
- Bell, S. (2012). Landscape Pattern, Perception and Process. Oxon: Routledge.
- Costa, J., Figueira de Sousa, J., & Silva, M. (2014). Climate Change adaptation and urbanism: A developing agenda for Lisbon within the twenty-first century. *URBAN DESIGN International*, 19, 77–91. doi:10.1057/udi.2013.15.
- EEA. (n.d.). *European Environment Agency*. Retrieved January 23, 2017, from http://www.eea.europa.eu/themes/urban
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- GoM. (2012). *National Environment Policy.* Malta: Ministry for Tourism, the Environment and Culture.
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- Lafortezza, R., Davies, C., Sanesi, G., & Konijnendijk, C. (2013). Green Infrastructure as a toll to support spatial planning in European urban regions. *iForest Biogeosciences and Forestry*, 6: 102-108.

- Lehmann, S. (2010). *SAPIENS*. Retrieved August 10, 2016, from Green Urbanism: Formulating a Series of Holistic Principles: https://sapiens.revues.org/1057
- Richardson, H. (1995). Economies and Diseconomies of Agglomeration. In H. Giersch, *Urban Agglomeration and Economic Growth.* Berlin: Springer Verlag.
- Stiles, R. (2009). Central Europe: Cooperating for Success. Retrieved September 20, 2014, from UrbSpace Joint Strategy: A Guideline For Making Space Available Online: http://www.central2013.eu/fileadmin/user_upload/Downloads/outputlib/Urbspace_Guideline for makingSpace.pdf
- Thompson, C. (2002). Urban open space in the 21st century Catharine Ward Thompson. *Landscape and Urban Planning*, 60: 59-72.
- TPPI. (2008). *The Today Public Policy Institute*. Retrieved March 31, 2016, from http://www.tppi.org.mt/dir/wp/wp-content/uploads/2016/06/Towards-A-Low-Carbon-Society-The-Nations-Health-Energy-Security-And-Fossil-Fuels.pdf
- TPPI. (2015). The Today Public Policy Institute. Retrieved March 31, 2016, from The environmental dimension of malta's ill-health and action to prevent obesity, diabetes, cardiovascular disease and dementia: http://www.tppi.org.mt/dir/wp/wp-content/uploads/2016/06/The-Environmental-Dimension-of-Maltas-ill-Health-and-action-to-prevent-Obesity-Diabetes-Cardiovascular-Disease-and-Dementia..pdf