

Studio Sergison
Autumn Semester 2013

Low-rise, high-density 5



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Aerial view of north Burgenland

Introduction



During the course of this semester we will continue our investigations into the manner in which density can be managed to meet the needs and demands of the contemporary European city. On this occasion we will consider a number of existing rural settlements in the area to the east of Vienna known as the Burgenland. We will consider the capacity of these established towns and villages to absorb part of the growing population of the Austrian capital city.

The 'New Towns policy' adopted in the United Kingdom in the 1940s and 50s as a way redressing overcrowding in a number of industrialised cities, particularly London, will be explored as a historical reference. While Vienna is not comparable to London in terms of population size, the measured densification and expansion of the smaller existing settlements that are already well connected to the metropolitan area could provide a viable strategy for preserving the quality and character of the city centre and limiting pressure to expand outwards.

Our objective is to propose a strategy plan for the existing settlements we have selected. This exercise will be undertaken in small groups. Once the strategy plan has been agreed, projects for single houses will be developed on an individual basis. This exercise is intended as a typological investigation, and you will be asked to develop projects that respond to contemporary needs, while building upon the knowledge of existing historical models.

As in the past, the studio will be supported by lectures and reviews by experts and invited critics. A study trip to Austria will take place at the beginning of the semester.

A street bordered by barns, Osip

The work undertaken during previous semesters in London, Zurich, Naples and Bucharest considered low-rise, high-density urban development in city centres. We considered strategies for managing density by making concrete proposals for sites in contested locations. In these urban investigations great efforts were made to understand the forces at play and the needs of particular sites and to take them into account. We recognise that working in the European city we are dealing with an inherited cultural patrimony we have a responsibility to take care of. The cities of Europe are the result of historical interventions and constant additions and it is highly improbable that our work as architects will ever involve us in realising a new city. Instead, we should embrace the possibility of adding another layer to the rich and particular characteristics of the places we work in.

This semester our approach to the city will be more detached. We intend to explore the potential for growth of the Austrian capital by considering how it might develop. Rather than looking at ways of densifying the centre of the city - which is highly protected and to some extent 'complete' - or expanding the periphery of the city, we will consider the possibility that the settlements that lie in close proximity to Vienna might grow and densify. This proposition is based on the recognition that the numerous villages and small towns to the east of Vienna are currently well served by public transport infrastructure and that for many people living in close proximity to nature is preferable to living in an urban or suburban area.

During the course of the semester we will reflect on the nature of settlement, and what it means to reside within an existing urban structure. We will consider strategies for managing growth and densification reasonably and with a high level of conceptual ambition, without sacrificing the essential qualities and characteristics of a place.

Consideration will be given on a case-by-case basis, to identify where development can occur within and beyond the existing built territorial limits of a settlement. To assist us in understanding the issues involved, we will refer to successful case studies of the way these demands have been met in the work of other architects and urban thinkers.

Much of our work will focus on understanding different development strategies, the way circulation is arranged, what public amenities are provided, how hard and soft landscape can contribute to a general atmosphere and sense of place. In addition to this, we will explore the role a house plays in the overall composition of a settlement, and the development of ideas for houses will be a core component

Donnerskirchen
Barns forming the boundary of the
village



of the work we will undertake during the semester. This typological investigation will draw upon existing examples that can be adapted and re-interpreted to serve contemporary needs. In addition to the numerous examples that have emerged in recent architectural history, we will study the highly specific and particular traditional housing type in the villages our work will focus on, and carefully consider its cultural significance.

The making of a house is a core aspect of human civilisation. It comes with great responsibility and has important cultural association. Throughout history mankind has made homes as a result of need, as a practical response to a particular place and to specific circumstances and as a reaction to reflect wider cultural views. In the absence of a known future resident, the design of a house needs to consider the capacity how it can support contemporary domestic uses.



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Houses and barns, Schützen

2
Donnerskirchen, seen from the church

3
View of the Neusiedler See, Mörbisch

Context: Burgenland



The youngest province of Austria, Burgenland was annexed to the Federal Republic in 1919. The name derives from the four predominantly German-speaking border districts or *comitats* of western Hungary: Preßburg/Bratislava, Wieselburg/Moson, Ödenburg/Sopron and Eisenburg/Vasvár (originally the name “Vierburgenland” - land of four castles - was proposed).

Natural topography

Burgenland is a relatively narrow strip of territory along the Austro-Hungarian frontier, extending from the Danube in the north to the Yugoslav frontier in the south, occupying the eastern slopes of the Leithagebirge around the Neusiedler See and the intricately patterned upland region which extends south and southeastwards from the foothills of the Wechsel range and the hills of eastern Styria.

It is the most easterly of the Austrian Länder, and consists of two quite different territories. To the east lie the great plains of the puszta, extending over the Hungarian frontier to the Carpathians; in this area is Europe's westernmost steppe lake, the Neusiedler See. The southern part of the Burgenland is a region of wooded hills, the eastern foothills of the Alps, with many castles built in what was for centuries a frontier area, occupied by the Romans and later exposed to successive attack by the Huns and the Turks. It is now a region of pastureland, fruit orchards and vineyards.

Economy

Despite increasing structural and marketing problems in recent decades, Burgenland is still predominantly agricultural, and wine-growing plays a major economic role. In 2005 the area of productive vineyards amounted to 13,812 ha (which represents 30.2% of the total area of vineyards in Austria). In 2003 arable land represented the largest (51.9%) of the total area used for farming and forestry. Since the 1970s tourism has become an increasingly important sector, especially in the Neusiedler See area and what is known as the Thermenregion, a reference to the thermal baths established in the region since Roman times.

History

The history of Burgenland, reflected in the pattern of its castles and towns, was conditioned by its geographical position on the border between two different worlds. Culturally a part of western Europe, it was constantly exposed to pressures from the east.

The prehistoric Amber trading route, later a Roman imperial route from Aquileia to Carnuntum passed through the region. In the time of the Romans this

Map of north Burgenland, circa 1872

was the heart of the province of Pannonia, occupied by Illyrians, Celts, Roman settlers and later Ostrogoths and Slavs. German settlers came to the region around 800 AD but were exposed to fierce onslaughts from the Avars and later the Hungarians. The region was fought over so brutally and for so long that after the Turkish invasion of 1529, settlers from Croatia were brought in because the so few of the local inhabitants had survived.

During the fifteenth century the Hungarians conquered the region several times; in 1459 Burgenland became part of Austria, but after the Treaty of Ödenburg (1462) King Matthias Corvinus united it with Hungary again. After his death, King Maximilian won it back for Austria, but in 1647 the Emperor Ferdinand III gave it up to Hungary.

Through history, Burgenland has shared the fate of most border areas: territorial disputes, invasions, migrations and neglect by the central administration. The boundaries of the Burgenland as an Austrian federal state were defined in the treaty of Saint-Germain in 1919, after the First World War and the collapse of the Austro-Hungarian Empire, and in 1921 it became a separate Austrian federal state. Since then it has existed as an independent, uniformly administered region within the Republic of Austria.

In 1989, the Foreign ministers of Austria and Hungary cut the Iron Curtain in the village of Klingenbach in a symbolic act with far-reaching consequences. The border at Nickelsdorf (Austria) / Hegyeshalom (Hungary) was also opened by the Hungarian border patrol and allowing thousands of East Germans to flee to the West. This is often referred to as the starting point of the German reunification.

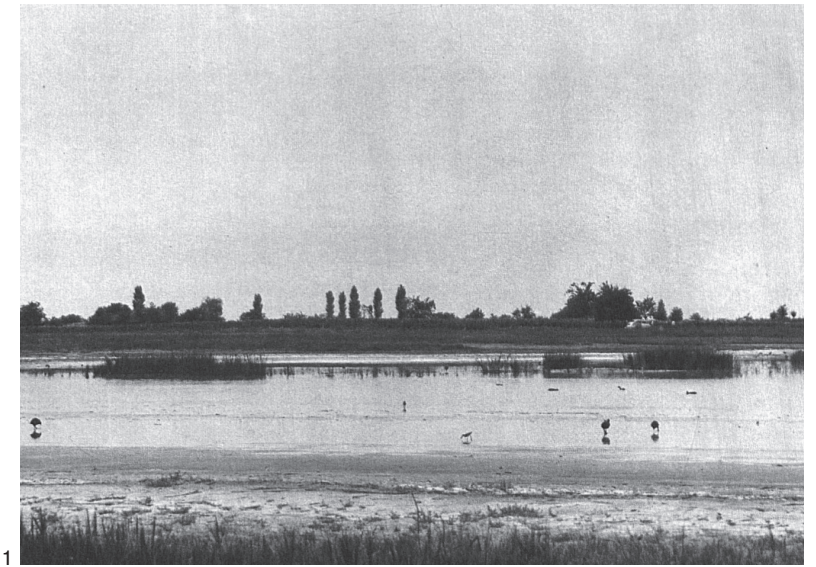
After 1990 Burgenland regained its traditional role as a bridge between the western and eastern parts of Central Europe. Cross-border links were strengthened when Hungary, Slovakia and Slovenia joined the European Union in 2004. All three countries became part of the Schengen zone in late 2007 when border controls finally ceased to exist in the region.

Local autonomy

In 1926 the province of Burgenland was given its own constitution, which preserved many Hungarian principles in the fields of ecclesiastical law, marriage law and compulsory education, which differ in certain respects from the constitutions of the rest of Austria. Even though Burgenland had never been a homogeneous entity in the past, the population of the province soon developed a strong Austrian identity (they stopped calling themselves *Heanzen*, a name designating the German-speaking population of southern and central Burgenland and of peripheral areas of Hungary, and adopted the name *Burgenländer* instead).

A law regulating the education of ethnic minorities (1937) establishes the provision of education either in the Croatian or Hungarian language as well as bilingual primary education in the autochthonous areas.

At municipal level, the *Amtmann*, an institution dating from Burgenland's Hungarian past, is entrusted with administrative duties by the Mayor of a municipality.



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Historical photographs

1
The Neusiedler steppe lake

2
The importance of agriculture:
vineyards and barns in
Donnerskirchen

3
Narrow streets and yards between
low rise houses, Osliip

Historical village structure

After the destruction during the Turkish invasions of 1529 and 1532 most of the villages in northern Burgenland were rebuilt and laid out in a rigidly planned scheme. The most common village structures are the *Strassendorf* (linear village) and the *Angerdorf* (village built around a green), the dominant house types are the *Streckhof* and the *Hakenhof*. The appearance of the village reveals a remarkably strict order: houses of similar dimensions, floor plans and made of similar materials, almost always with two-bay windows, set slightly apart, laid out in parallel, with their gables facing in the same direction and the door and gateway facing onto the street, while a barn closes off the yard at the rear. Often these barns formed a continuous boundary to the open land beyond, protectively separating the villages from the fields.

Street width varies according to function – there are streets bordered by barns, small residential paths between the houses, and the village main street or the village green as the centre of the community. Residents traditionally gathered under the trees in the evening in this large, communal space. The centre of larger village communities was a wide village green on which a large religious building usually stood, whose scale contrasted with the small, uniform houses.

These typologies developed out of local needs and resources: the requirements for running a farm and the associated economic and social functions. Local building materials were used – originally soft reed thatch or dark clay tiles for the roofs above whitewashed walls. White was regarded not only as a colour but also as a means of maintaining cleanliness. Each year at Easter the facades were whitewashed by the women of the village. The steps and stone benches in front of the gateways, the base of the tree trunks and sculptures were also whitewashed, so that eventually they were covered by numerous thin coats of lime whose abstract white colour was further heightened by contrast with the dark blue, terracotta-coloured or green plinths. White also afforded protection against the heat, as evidenced by the folding shutters in front of the windows which were painted white on the outside and dark green on the inside.

The yard, which was always clearly seen as a kind of interior space, an area for farm work as well as domestic life, with trees that provided a protective canopy, was characteristic of the traditional Burgenland house. The houses directly bordered the street, without fences or railings. Together with the streets they defined a shared space where work was carried out communally and celebrations were held.

Changes to the Burgenland village structure

In the decades after the Second World War the image of Burgenland was of a backward border region – the special qualities of the landscape and the old villages were seen as 'romantic', but hopelessly at the mercy of changes in the economic and social structure and of a modernisation that was generally carried out with little sensitivity. The great change that radically altered the structure and appearance of the villages began in the late 1950s and early 1960s. Up until then most of the village dwellers lived off agriculture and animal husbandry. With the start of the economic recovery in the 1960s this changed suddenly. Crop farming became concentrated in just a few businesses that owned the necessary tractors and agricultural machinery and the number of livestock declined dramatically. In contrast, wine-growing became more and more important, until in the 1980s the discovery that some producers had adulterated wine by adding toxic diethylene glycol caused the collapse of the wine industry. Through a change of paradigm from quantity to quality from the 1990s onwards wine-growing in Burgenland has been re-establishing its reputation, and it now represents an important economic sector.

The great rural exodus began in the late 1960s. The plot structure dating

from preindustrial times and the shape of the farms it produced was generally unsuitable for working with modern machines and tractors, as the plots were too narrow. Many worked their farms as a sideline and commuted to work in different professions, generally outside the village. The modernisation of agriculture and the associated increase in the amount of traffic not only changed the house type but also the appearance of the street and the village green that had traditionally formed the space for social life in the village. Through infrastructural measures – from drainage works to asphaltting and felling of trees – the quality of these places was gradually lost and as a result people abandoned the traditional houses.

The parcelling of land beyond the original village green was now organised on the basis of zoning and development plans and, in contrast with the dense urban pattern of the existing villages, called for single-family houses. This encouraged sprawl at the edges of villages and had disastrous consequences for their structure and their vulnerable building fabric; some houses were left to decay, others were remodelled by additions and extensions. In the 1970s Modernism of a particularly provincial kind blossomed, with ill-considered interventions that broke with the scale of existing buildings disturbed or destroyed the historic ensemble.

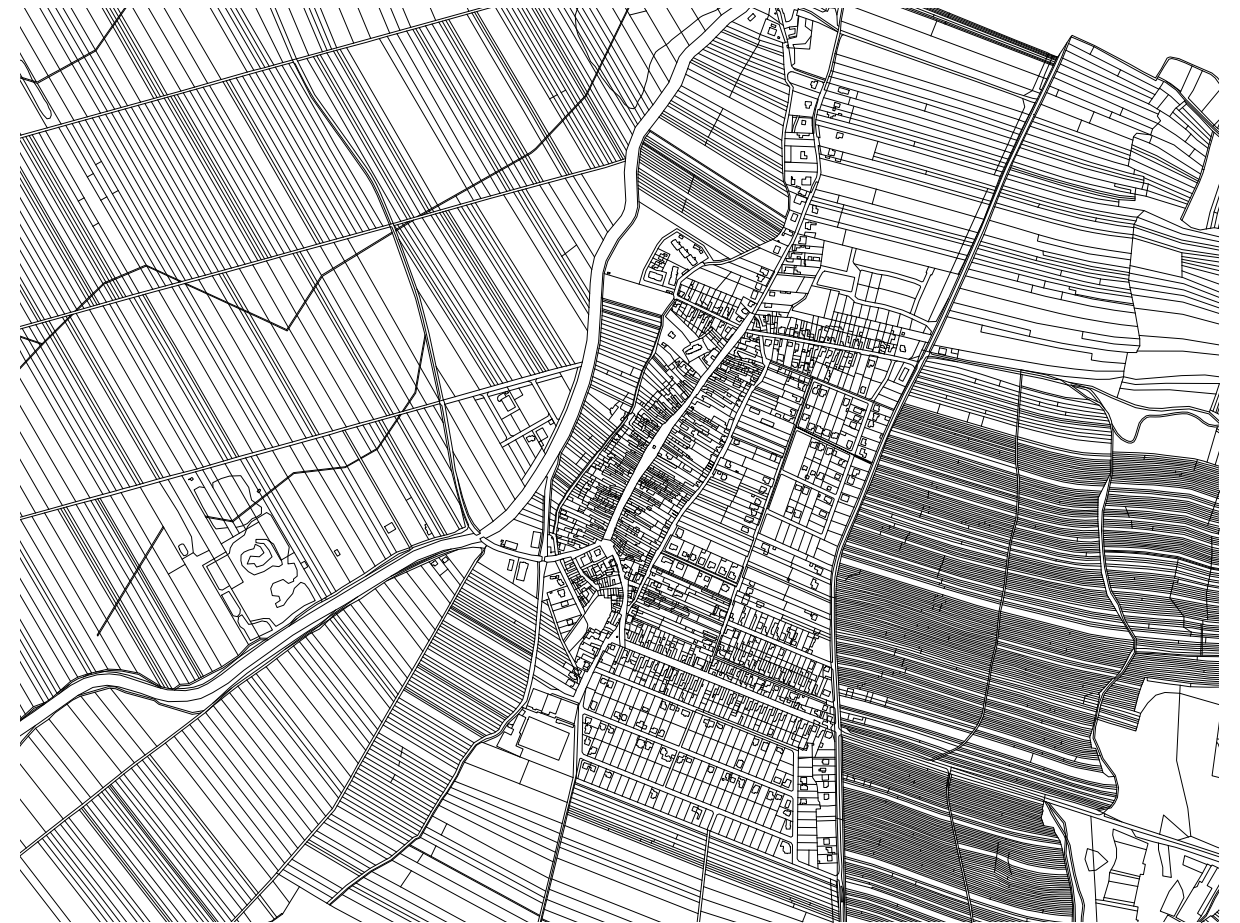
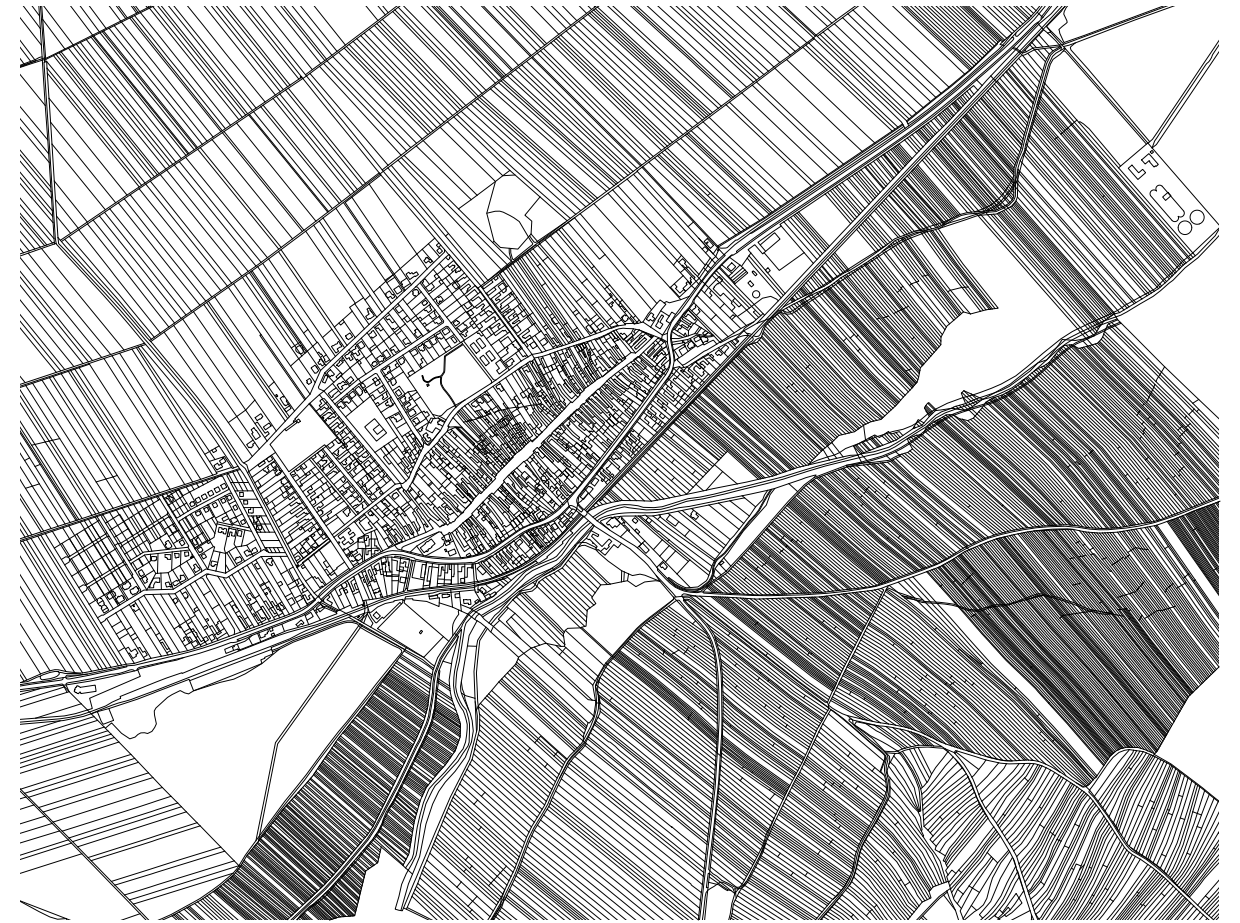
Today the increasing pressure exerted by the growth of nearby cities such as Vienna, Bratislava and Győr and the opening of the borders between Austria, Slovakia and Slovenia - a formerly economically cohesive area – has led to the gradual re-establishment and re-organisation of the village structures. Sites along the Austrian-Slovak border are increasingly being bought by Slovak citizens, while Hungarians cross the border to attend educational institutions in Austria, and Austrians acquire building and farming land in Hungary.

The pressure exerted by the outward expansion of the cities is evident. Whereas areas of increased density in central and peripheral urban areas are generally reserved for higher income groups, the attractiveness of the more remote villages surroundings cities is partly due to their affordability and can be read as a possible way of accessing property ownership.

The improvement in transport connections between rural surroundings and urban centres is leading regions that do not suffer from a shortage of land to offer building plots for minimal prices (from 25 to as little as 1 Euro per square metre) on account of their less favourable location. In certain cases this has led local authorities to zone land several times the size of the historical villages as building land for the future. The nature of the zoning regulations and the low price of land have generally favoured the free-standing single-family house, with the consequent destruction of landscape by sprawl and the dissolution of traditional forms of settlement.

Project sites

- 1 Donnerskirchen
- 2 Mörbisch
- 3 Schützen
- 4 Oslip



page 18-19
Small, narrow fields characterise
the landscape of north Burgenland





1 2



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3 4



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1 Main street defined by houses, Donnerksirchen

2 A street bordered by barns delimiting the village and the fields, Donnerksirchen

3 Path from the Neusiedler See towards Mörbisch

4 Main street, Mörbisch

5 View from a grassy yard towards the main street, Schützen

6 Main street, Schützen

7 A wide main street surrounded by singlestorey houses, Oslip

8 Rural road and barns, Oslip

First exercise: Strategy plan

The first component of the work to be undertaken this semester requires you to develop a strategy plan. This can be understood as a typological exercise. The principal tool to assist you in this exercise will be a 1:500 model. This will be made collectively and will encompass the wider area of the settlement in which your project is located, rather than just the immediate site.

We ask you to begin by exploring numerous solutions to ensure that the site you are studying can be developed in a reasonable way. The density of your proposals should be calculated in each case and each option you propose should be recorded. These options should then be developed further, and eventually refined or discarded.

This work should be understood as an iterative process through which you will develop the idea for the project you will work on throughout the semester. The study trip to Burgenland should be used as an opportunity to verify the ideas you have developed for a strategy plan.

A lecture will be offered to introduce this piece of work.



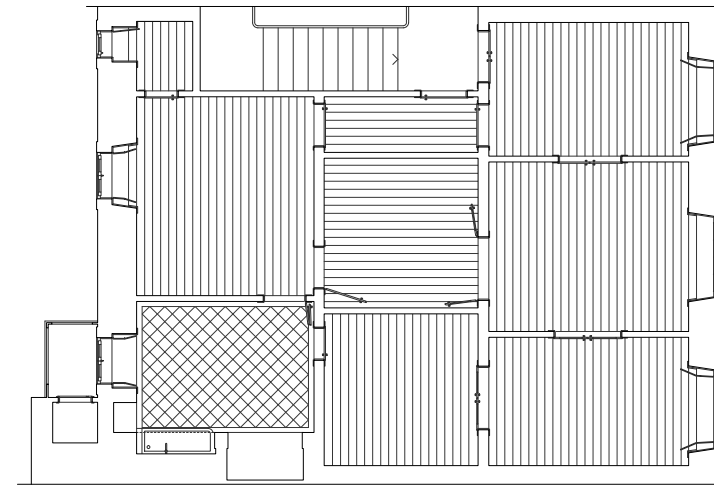
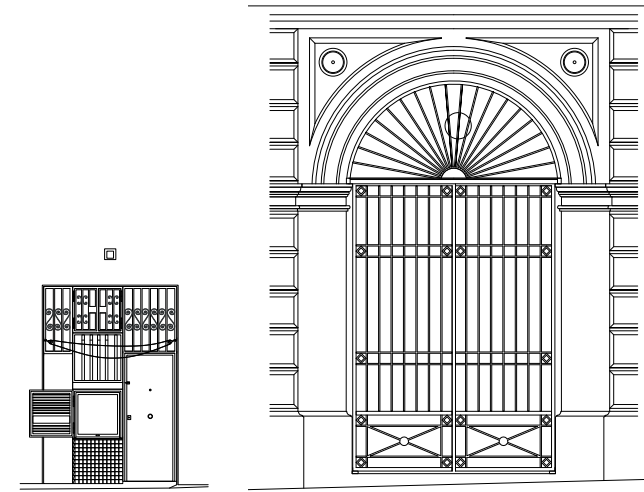
Álvaro Siza
Sketch of Quinta da Malagueira,
Évora, Portugal

Second exercise: Survey

In this studio we hold the position that invention is a necessary ambition in architecture, but it rarely emerges through a spontaneous intuitive impulse. Typically an architect can only make a truly unique proposal after many years of study and reflection. It is even debatable whether true originality is achievable. To aid your understanding of the task you are attending to this semester we would like you to undertake a survey of a building or buildings in Burgenland. We believe that by doing this you will gain insight that will inform your work later.

You should consider the plan organisation of a house or collection of buildings and will be expected to describe it clearly and analytically, employing diagrams where necessary. You should concentrate on understanding the quality and arrangement of a facade by drawing a measured survey of an existing series of elevations. This will require you to look very carefully at buildings, making sketches and taking photographs as a way of recording their condition. We also ask you to make a precise photographic portrait that conveys the atmosphere of the building or buildings you are studying and the manner in which they are situated in the settlement. You might also make a photographic portrait of an internal space and record the relationship of the building's interior with the territory outside.

A lecture will be offered to introduce this piece of work.



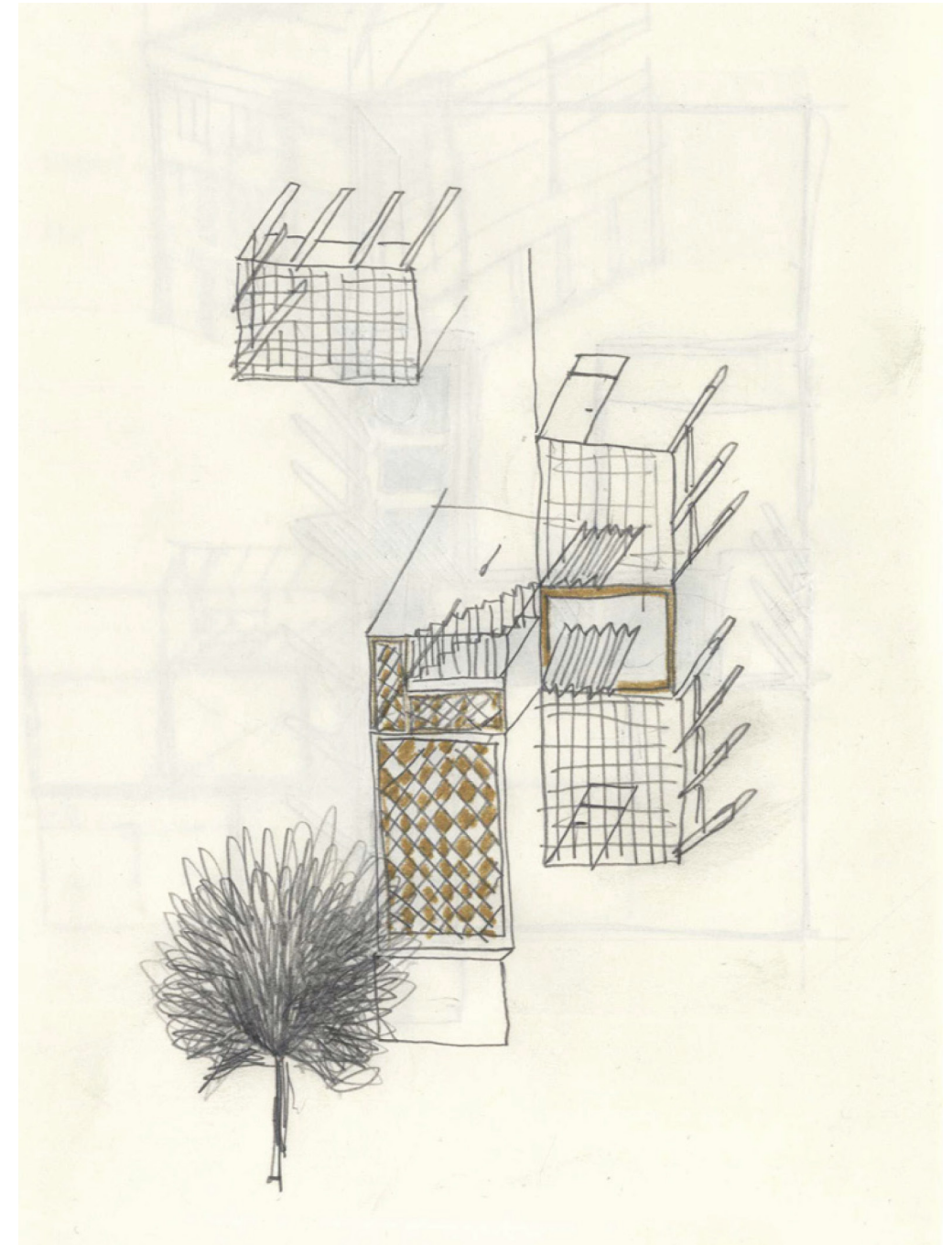
Survey drawings by students of previous semesters

Third exercise: House concept

The next piece requires you to develop a concept for a house. You should be able to explain how your house idea can be understood as a type and how it stands in relation to the examples of houses that can be seen within the region, and how it might differ.

The presentation of your ideas for a house should employ a model constructed at a scale of 1:100 and plans, sections and elevations at the same scale. When you are working on this task it is important to ask yourself what the role of a house is, how it can be inhabited and how flexible its organisation might be. You should also consider how the house would be situated within the strategy plan you have developed. Drawings and models should be produced at a scale of 1:200 to explain this.

A lecture will be offered to introduce this piece of work. At this stage in the semester your work will be subject to an intermediate review.



Sketch of a house in Palau by Michael Stettler and Lucrezia Vonzun, Spring semester 2011

Housing references



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4



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1
Brick Leaf House, London
Jonathan Woolf architects,
1999-2003

2
Pilotengasse housing, Vienna
Herzog & de Meuron, 1989-1992

3
House, Cadaqués, Spain
Sergison Bates architects,
2008-2011

4
Quinta da Malagueira, Évora,
Portugal
Álvaro Siza, 1977-1997

5
Housing settlement, Distomon,
Greece
Dimitris and Suzanna Antonakakis,
1969

6
Stazzo Pulcheddu, Palau, Sardinia
Alberto Ponis, 1975-1982

Date	Event	Details	Assignments
19 September	Studio introduction		
20 September		Jonathan Sergison (JS) presents studio and spring semester. Introduction by Corinne Weber (CW) to the sites, site model and text seminar Lecture by Sarah Maunder (SM) on Burgenland housing typologies	Allocation of sites Book tickets for Vienna Start 1:500 site model
26-27 September	Tutorials	Lecture by SM/CW on survey CW Introduction to study trip	1:500 site model First ideas for a strategy plan
3-6 October	Study trip to Vienna and Burgenland	Please see separate programme for detailed information	
10-11 October	Seminar and review	Presentation of survey studies Text seminar with Irina Davidovici Lecture by SM on settlement	Survey work Presentations of texts
17-18 October	Review	Revision of survey studies and review of strategy plan Lecture by CW on ideas of houses	Strategy plan 1:500 study models
24-25 October	Tutorials	First concept for a house Lecture by JS on houses	1:500 model 1:100 study models References
31 October 1 November	1st intermediate review	Project reviews with guest critic Lecture by Jan Peter Wingender	Ideas for a strategy plan and concept for a house 1:500 model 1:100 model of a house 1:100 plans, sections and elevations
7-8 November	Tutorials	Study of houses Lecture by Georg Nickisch	1:500 model 1:100 study models of houses 1:100 plans, sections and elevations
14-15 November	Tutorials	Construction studies	1:100 model 1:50 study models 1:20 construction section

Date	Event	Details	Assignments
21-22 November	2nd Intermediate review	Project reviews with guest critic Lecture by Marco Zünd	1:500 model 1:100 model of a house 1:50/1:20 study models 1:500 strategy plan 1:50 plans, sections and elevations 1:20 construction section
28-29 November	Tutorials	Review of project	1:500 model 1:50/1:20 model 1:500 strategy plan 1:50 plans, sections and elevations 1:20 construction section
5-6 December	Review	Review of final drawings	1:1000 roof plan 1:500 strategy plan 1:50 plans, sections and elevations 1:20 construction section Start final model
12-13 December	Tutorials	Submission of final drawings and model discussions	1:50/1:20 final model Prepare project presentation
19-20 December	Final reviews	Invited critics	1:500 model 1:50/1:20 model 1:1000 roof plan 1:500 strategy plan 1:50 plans, sections and elevations 1:20 construction section Project presentation (pdf or ppt)

Álvaro Siza. *Writings on Architecture*
Antonio Angelillo ed., Skira 1997

Critical Regionalism: modern architecture and cultural identity
Kenneth Frampton, in *Modern architecture, A critical history*,
Thames and Hudson (1980) 2007

Collected Essays in Architectural Criticism
Alan Colquhoun, Black Dog Publishing, 2009

Dichte / Density
Archithese, Niggli Verlag, no.3 2011

Die Stadt im 20. Jahrhundert. Visionen, Entwürfe, Gebautes
Vittorio Magnago Lampugnani, Wagenbach Verlag, Berlin, 2010

Forme forte
Martin Steinmann, Birkhäuser, 2003

Louis Kahn: Essential texts
Robert Twombly ed., W. W. Norton & Company, 2003

Papers 2
Jonathan Sergison and Stephen Bates, London, 2000

The grid and the pathway. An introduction to the work of Dimitris and Suzana Antonakakis
Liane Lefaivre and Alex Tzonis
in *Atelier 66. The Architecture of Dimitris and Suzana Antonakakis*,
Kenneth Frampton ed., Rizzoli International 1985

The English house
Hermann Muthesius, Frances Lincoln, 2007

Anonymes Bauen, Nordburgenland
Roland Rainer, Institut für Städtebau an der Akademie der Bildenden Künste,
Wien, 1995

Baugesinnung in Niederösterreich, Ansätze zur Dorferneuerung
Roland Schachel and Johann Kräftner, Amt der Niederösterreichischen
Landesregierung, 1977

Katalog baulicher Merkmale im nördlichen Burgenland
Wolfgang Kaitna, Rüdiger Reichel, Kurt Smetana, 1978

Village Texture
Studio András Pálffy, Institute of Architecture and Design, Vienna University of
Technology, 2013

Álvaro Siza. Complete Works
Kenneth Frampton, Phaidon Press, 2000

Álvaro Siza. Private Houses 1954-2004
Alessandra Cianchetta and Enrico Molteni, Skira 2004

Atelier 66: The Architecture of Dimitris and Suzana Antonakakis
Kenneth Frampton, Rizzoli New York, 1985

Herzog & de Meuron 1978-1988
Gerhard Mack, Birkhäuser Verlag Basel, 1997

Buildings
Sergison Bates architects, Quart Verlag, Lucerne, 2012

Storie di case e ambiente
Alberto Ponis: *Architettura in Sardegna*
Sebastiano Brandolini, Skira, 2006

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