

Studio Sergison
Autumn Semester 2012

Low-rise, high-density 3



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Aerial view of Naples



Introduction

This semester the studio will continue its investigation of density and the manner in which it can be managed in the contemporary European city. In this instance Naples has been chosen as the location for our studies.

In previous semesters the studio considered sites in central London, the largest Western European city, and arguably the one facing the greatest pressure to generate a vast number of new dwellings without compromising quality. Last semester our attention was turned to Zurich, a city that was recently deemed to be the most agreeable city in the world to live in. Nevertheless, it too has something of a housing deficiency and our work tested the capacity for development on a number of sites.

Naples is a very different kind of city from London and Zurich. It is economically disadvantaged despite its exceptionally rich architectural culture, particularly that of the Baroque period. Today the tension between the need to preserve the city's architectural patrimony and the financial constraints involved is palpable.

Our work will consider the historic city centre as an inherited urban tissue and propose precise architectural projects to repair and complete a number of voids or ruptures that have resulted from earthquakes, war damage, or simply neglect and decay. We will resist the temptation to raze to the ground existing neighbourhoods that operate in a socially complex and fragile urban condition.

As in the past, the emphasis of our work will be an overarching interest in density and normative architectural programmes.

A street to the north of the historic centre

In this third component of the studio's on-going investigation of strategies for managing density in the European city we will consider an extremely dense existing urban fabric. This will require us to address notions of legacy and for this to be meaningful we will need to survey existing sites and assess the value of the inherited urban condition.

The sites chosen for projects lie in the historic centre of Naples, recognisable by the still legible Roman urban plan. It should be noted that the city predates Roman times and was firstly a Greek settlement.

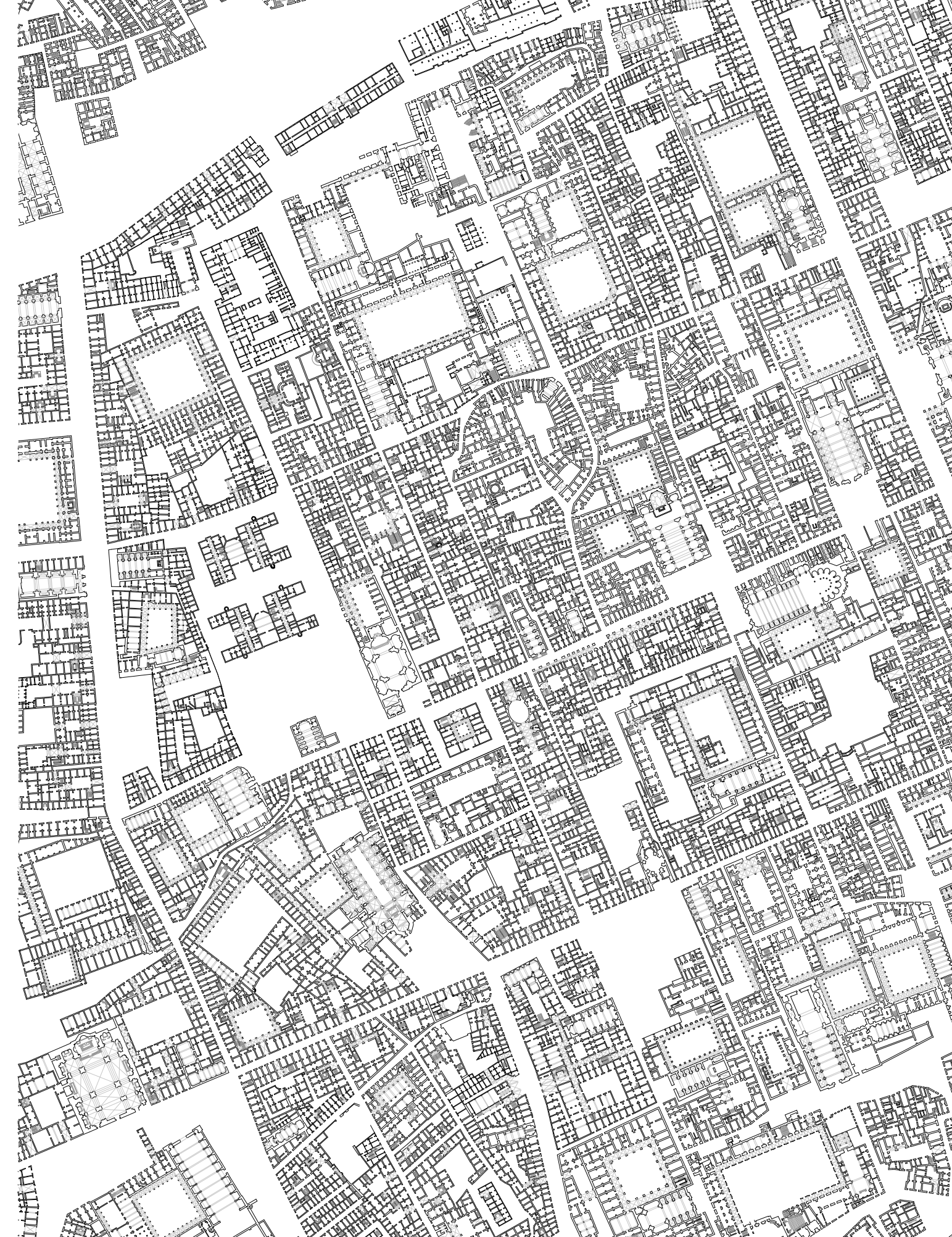
Each of the sites we have chosen demands a specific and precise architectural response. All projects will require the development of a strategy that is capable of negotiating the relationship between the dense urban fabric in which the sites chosen for your investigation lie. Inevitably, the project will be a speculative one, and you should be sensitive to the transformation that would occur through its introduction to a place that is already rich, complex and highly contested.

The dominant programmes for your projects should be 'normative' ones, and specifically housing. This may also include the introduction of public programmes on the lower floors, as they have a greater capacity to mediate between private places and the public character of the street or public realm.

During the course of the semester we will be asking ourselves what it means to live in the centre of Naples: what form should a meaningful and appropriate contemporary addition to this particular, highly determined urban condition take? Such a question is not easily answered, especially when any new building must yield an extremely high density solution, while minimising the number of floors. This will require you to develop apartment plan types that can function humanely in spite of a degree of proximity that newly built neighbourhoods at the periphery of a city would never be allowed to entertain in current planning law.

Finally, we will be asking ourselves what the atmosphere of a project is. We are interested in more than the question of the appearance of a building, although this is also important, and requires the development of a strong concept for the building's elevations. A successful project will be knowing of the presence it has in the surrounding urban context, the clarity of its concept and the accuracy with which it fits and adds to the city.

City plan showing the ground floors of the historic centre of Naples





1

1
A garden in the historic centre of Naples

2
Apartment buildings north of the historic centre

3
A busy street in the centre

4
View towards via Imbriani Matteo Renato, north of the historic centre

5
The internal courtyard facade of Palazzo Venezia, with a typical open staircase

6
The open staircase of a courtyard building in Via Toledo



2



3



4



5 6



Naples is the capital of Campania and the third-largest city in Italy, after Rome and Milan. Situated in the Gulf of Naples to the east of Vesuvius, an active volcano, and to the west of Monte Ecchia, it is an area naturally delimited by the sea and topography.

Today it is home to 960,000 people who live within the city's administrative limits, while the wider urban area has a population of over 3 million. Its port is one of the most important in Europe, and second only to Hong Kong for passenger flow.

Founded more than 2,500 years ago Naples is one of the oldest continuously inhabited cities in the world, due to its mild Mediterranean climate and fertile volcanic soil. Today, its historic city centre is the largest in Europe and is listed by UNESCO as a World Heritage Site.

The original Greek settlement played a key role in the merging of Greek culture into Roman society, eventually becoming one of the main centres of the Roman Republic. Naples remained influential after the fall of the Western Roman Empire, serving as the capital city of the Kingdom of Naples under French, Spanish, Austrian Habsburg and Bourbon rule. Sicily and Naples remained separate kingdoms until 1816, when they were merged into the kingdom of the Two Sicilies, which in 1860 became part of the unified Kingdom of Italy.

Greek settlements – initially known as Parthenope – were established on Monte Ecchia and the island of Megaride in the Gulf of Naples around the seventh century BC, and were re-founded as Neápolis (new city) in the fifth century BC to the east of the first nucleus, on a slight slope descending towards the sea. The new settlement followed the ideas of the ancient Greek architect Hippodamus of Miletus, who recommended placing orthogonal grids on scenic terraces. The plan is rigidly geometric, marked by a system of decumani, three parallel streets from west to east, the central one running across the ancient agora and a large number of cardi, perpendicular streets. The insulae, the remaining space in between these streets, face an approximate north-south direction. The length of the two sides, and their relation of approx. 1:5 derived from Roman measures: the actus (37 meters) and stadium (185 meters). Today the traces of the ancient grid lie around 40m below ground, but the street arrangement has remained and the position of the ancient theatre or agora can still be detected.

Naples was influenced by the alliance with the south Italian Arab kingdom that lasted half a century, during which the city was the point of origin for the expansion of Islamic culture. The city flourished during the final centuries of the first

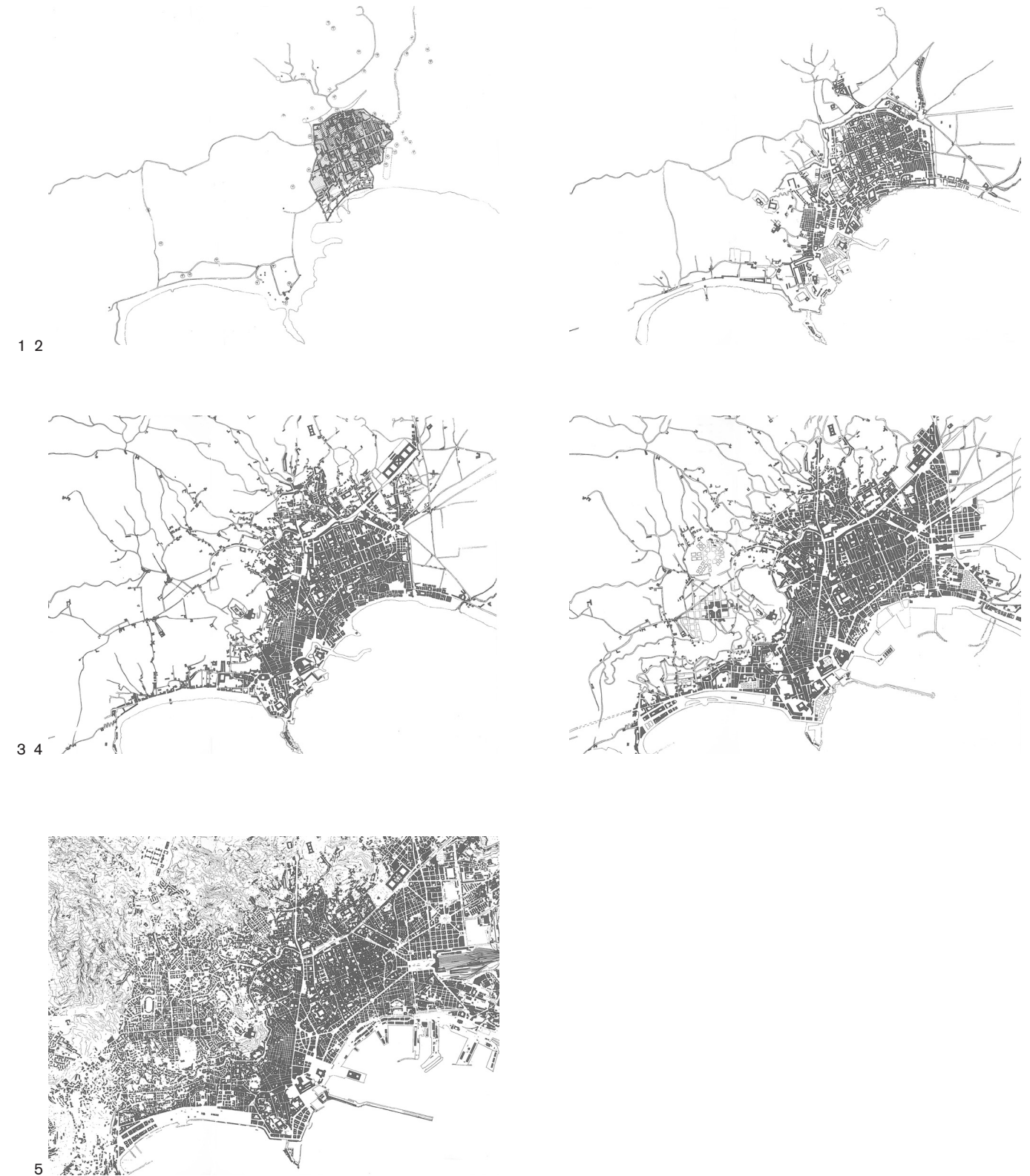
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Naples in the eleventh century showing the ancient greek and roman settlement.

2
Naples in the sixteenth century, the city has extended toward west and south and is only partially contained by city walls.

3
Naples in the second half of the eighteenth century. New developments constructed during the time of the Spanish Viceroy and Bourbon reign.

4
Naples at the end of the nineteenth century showing the city's urban expansion in all directions including the coast area.

5
Naplex today, explosive growth of the city (example Vomero hill) especially after WW2.



millennium and controlled sea trade in the Mediterranean. The Middle Ages and the Angevin epoch were characterised by the construction of churches and convents, such as the Santa Chiara convent. They interpreted the geometric grid of the ancient city while making adjustments to its rigid order.

Population growth was never matched by the physical growth of the city area. Over many centuries the city grew within its walled boundaries often in an unorganized and organic way, by densifying existing built areas or filling urban voids. These unplanned and unregulated acts of construction around the compact and ordered city blocks of Greek and Roman origin, were, with time, contained within the city walls built in the Paleochristian, Duchy of Naples and Angevin periods. Centres of activity such as the market square, the royal court, the port or court house influenced the siting of new buildings. This contrasts with the area around Via Toledo and the Spanish quarters, which conform to a primary ordered design. From 1501 to 1713, with short interruptions, the Kingdom of Naples was ruled by Spanish Viceroy. At this time, the city was at an economic and political low point. Population increased from around 40,000 inhabitants in 1450 to 210,000 inhabitants in 1550, becoming Italy's most populated city, only surpassed by Paris in Europe.

Pedro Alvarez de Toledo was the only viceroy who, to some extent, cared about the demographical problems and the city's miserable state. The city walls were enlarged between 1533-47, Via Toledo was built, and a series of streets were straightened in plan and repaved. The Spanish quarters (quartieri spagnoli), the Palazzo Vicereale, a number of churches were built, and the renovation of several buildings was undertaken. This was an important period of urban repair in Naples although it did not solve many of the city's problems. The situation was aggravated in 1656, when the plague killed about half of Naples' 300,000 inhabitants.

The Spanish Bourbons finally achieved an improvement in the city's precarious condition. Carlos VII introduced a policy of urban repair and supported culture in general. His major interventions include the construction of Via Foria, the demolition of most of the city walls and gates, as well as the construction of the Hospice of the Poor (Albergo dei poveri) which was never completed according to its original plan, but is still imposing, with its 300m long facade.

The city was a major cultural centre during the Baroque period and was home to artists, philosophers and writers. This was a time of intense architectural activity, as many buildings of the time still demonstrate, the city was extended and voids due to earthquake damage and decay were filled by new buildings. Especially the town palazzi situated in the old city center (palazzo dello spagnolo, palazzo trabucco, palazzo spinelli etc.) are well known examples of Neapolitan baroque architecture.

The late eighteenth and all nineteenth century will be remembered for the new public buildings and infrastructure works. French Emperor Bonaparte reigned over Naples until 1815, and two important traffic arteries were constructed during French occupation: Corso Napoleone connecting Via Toledo and Santa Lucia, which runs all the way to the sea, in a north-south direction. Corso Maria Teresa (today Corso Vittorio Emanuele) was constructed in the same period, and formed an important east-west connection linking the old city with the Vomero. This facilitated the expansion of the area, which in 1885 was planned as a quarter with a rectangular street system, influenced by the Haussmann plan for Paris. It was developed as the quarter of the bourgeoisie with many villas and art-deco palazzi.

Following Garibaldi's conquest of southern Italy, Naples became part of the unified Kingdom of Italy in 1861. The economy of the area collapsed, and in 1884, Naples was swept by a major cholera epidemic, caused largely by the city's

poor sewerage infrastructure. During this period land reform could not be achieved and the city was governed by an underground economy and mafia-like structures. This led to an unprecedented wave of emigration: at least four million left the city for Northern Italy, the USA, Argentina and Brazil between 1876 and 1913.

Both the cholera epidemic and the peak in emigration were largely due to the city's urban structure with very narrow streets, considerable building heights, little natural light and ventilation, inadequate sanitation and overcrowding. As a reaction to these terrible conditions, a large scale re-planning of the city was initiated, resulting in the demolition of many buildings and whole neighbourhoods providing space for the construction of new palazzi and streets. Thus the structure of many historical quarters was radically changed.

King Umberto I attempted to represent the new Naples and its recovery through several urban interventions such as Corso Garibaldi, Via Duomo and the Rettifilo (Corso Umberto), which were, however, nothing more than an attempt to hide the overcrowded and problematic quarters. In the case of the Rettifilo completed in 1899, the diagonally cut historic building blocks were decorated with new facades facing onto Corso Umberto, while buildings of great historic and artistic value were demolished.

During World War II, Naples suffered heavier shelling than any other Italian city. Although the Neapolitans did not rebel against Italian fascism, Naples was the first Italian city to rise against German military occupation, and was liberated in October 1943. Much of the city's twentieth-century periphery was constructed under Benito Mussolini's fascist government, and the reconstruction efforts after World War II. The symbol of the city's rebirth was the rebuilding of Santa Chiara, which had been destroyed during an Allied air raid.

The occupation of the Allies until 1946 secured a short period of comparable wealth.

From 1950 to 1984, special funding from the Italian government's Cassa del Mezzogiorno (Fund for the South) helped the economy to improve somewhat, and some new public buildings were completed. But war damage and chaotic reconstruction, the building boom and property speculation in the 1950s and 1960s, together with a great increase in the population (which tripled between 1870 and 1970) continued to hinder development. Naples still has high unemployment and crime rates, and grossly inefficient local government – as manifested most visibly in decades of unregulated rubbish disposal and the expansion of the Camorra organised crime network.

In many ways Naples has improved over in the last few decades. A large business district, the Centro Direzionale, has been built, historic landmarks such as the San Carlo Theatre and Galleria Umberto have been restored. An advanced transport infrastructure has been created, including a major ring-road (the tangenziale) that has alleviated traffic through and around the city, the Alta Velocità high-speed rail link to Rome. An expanded underground network, which will eventually cover half of the region is now operational, and even in its current unfinished state provides easy transportation from the upper reaches of the Vomero hill into the downtown area for the first time in the history of the city.

Today the city centre and its density are not only seen as a problem but also as a quality, and are the focus of intense study and interest. The city centre is something of a summary of different ways of life, social strata and related architectural forms. The different uses of buildings within the old city give rise to an extremely vivid spectrum of contradictory forms of existence.

First exercise: Urban strategy

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 and massing study.

The principal tools to assist in this exercise will be 1:200 models which will also enable your project to be placed within a wider context. The models should be made collectively, in groups.

We ask you to begin by exploring numerous solutions that would ensure that the site you are studying could to be developed to a reasonably high density. Each study or option you propose should be recorded photographically and then critically appraised and tested in terms of the density that it yields. This in turn should be further developed, refined or discarded accordingly.

This work should be understood as an iterative process that will begin to develop the idea for the project that you will be working on throughout the semester. You should also use the study trip we will be making to Naples as an opportunity to verify your project.

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

Pages 16 and 17

View of the historic centre of Naples from Corso Vittorio Emanuel, below Castel Sant'Elmo

Sites

- 1 Vico Luciano Armanni
- 2 Vico Pallonetto Santa Chiara
- 3 Vico Giuseppe Maggei
- 4 Vico Cinquesanti

- 5 Vico Giganti - Vico Gerolomini
- 6 Via San Giovanni in Porta
- 7 Vico San Petrillo



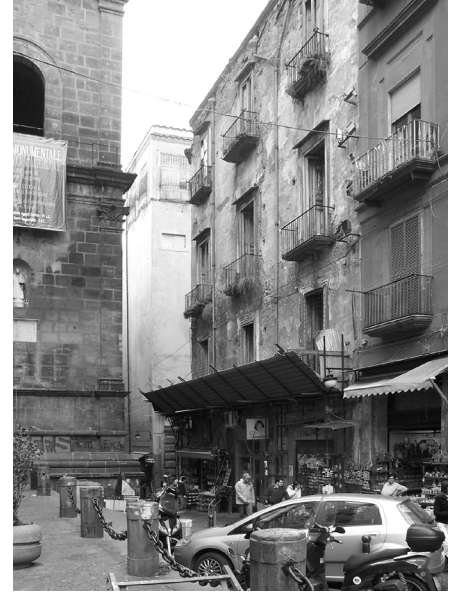




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2 3



4 5



6 7



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1
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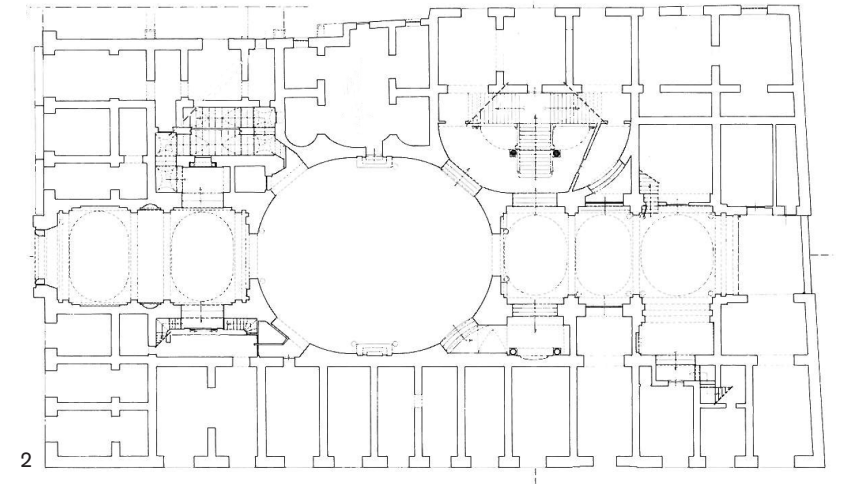
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Vico San Petrillo

In this studio we hold the position that invention is a necessary ambition in architecture, but it rarely emerges through a spontaneous intuitive impulse. An architect can only make a truly unique proposal after many years of study and reflection. It is even questionable if true originality is achievable, given the enormous number of buildings in the history of architecture.

To aid your understanding of the task that you are attending to this semester we would like you to survey a building or buildings in Naples. You should select an instructive example that will assist you in developing your project. Your work should consider the plan organisation of the building. You should be able to describe it clearly and analytically, employing diagrams where necessary. Alternatively, you may choose to concentrate on understanding the quality and arrangement of a facade resulting in a measured survey of an existing elevation.

This will require you to look very carefully at a building, making sketches and taking photographs to record the condition of the building. We would also ask you to make a precise photographic portrait that conveys the atmosphere of the building and the manner in which it is situated in the city. Alternatively you might make a photographic portrait of an internal space and record the relationship the building's interior has with the city outside.

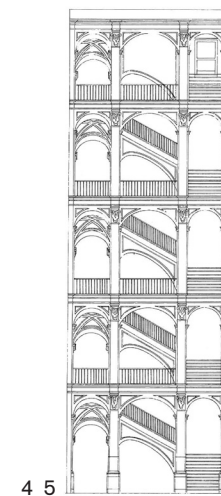
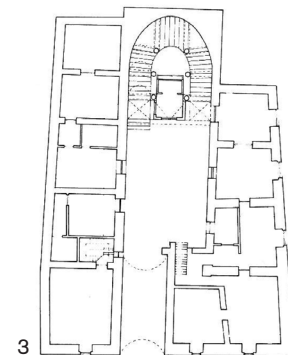
A seminar will be offered to introduce this piece of work.



1 2
Palazzo Spinelli di Laurino:
ground floor plan and longitudinal
section

3
Floor plan of a courtyard building
in via Constantinopoli

4 5
Staircase elevation and
longitudinal section of
Palazzo Tufarelli



Third exercise: Atmosphere/Image

This exercise will require you to produce two images. The graphic technique to be employed is not prescribed, although you should be able to explain why the technique you choose is appropriate.

These images should represent the atmosphere and presence of your building. One of the images should represent the exterior of the building and its relationship with the existing urban tissue. The other image should convey an interior space and ideally represent its relationship to the city.

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

1 2



3 4



1-5
Examples of interior and exterior perspectives produced in previous semesters

5



Fourth exercise: Building concept and plan

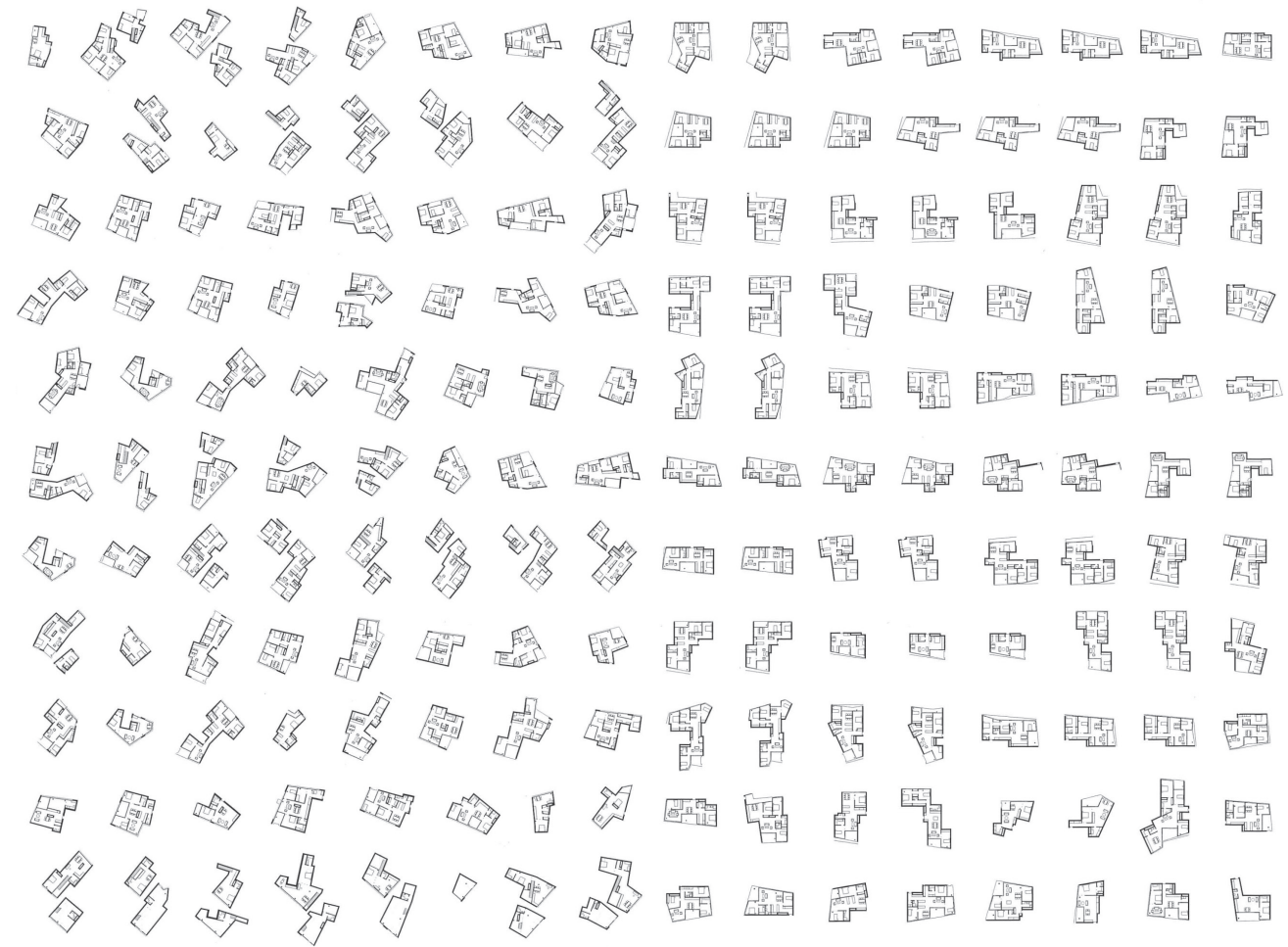
The results of these previous studies should now be re-appraised and drawn upon to make the next instalment of this semester's work. We would like you to develop a more precise concept for a building or series of buildings on the site you have chosen. The principal tool we ask you to employ is a 1:100 study or sketch model which should include an appropriate amount of context.

Your work should critically appraise and further refine earlier studies. While a model will be the principal piece of work, we expect that your project should be developed with study plans, elevations, sections and sketches. It is important that the density of your project is also measured.

In the semester you should already have developed a rudimentary understanding of your project in plan and section, which you should now develop and test more precisely.

Your studies should be undertaken at a number of scales and consider the circulation concept for the building and the distribution of residential and non-residential programmes. You will need to develop an idea for apartments. Consideration should be given to their number, variety and internal organisation. You should undertake this work by also reassessing the interior image made earlier in the semester.

A seminar will be offered at this stage of your work.



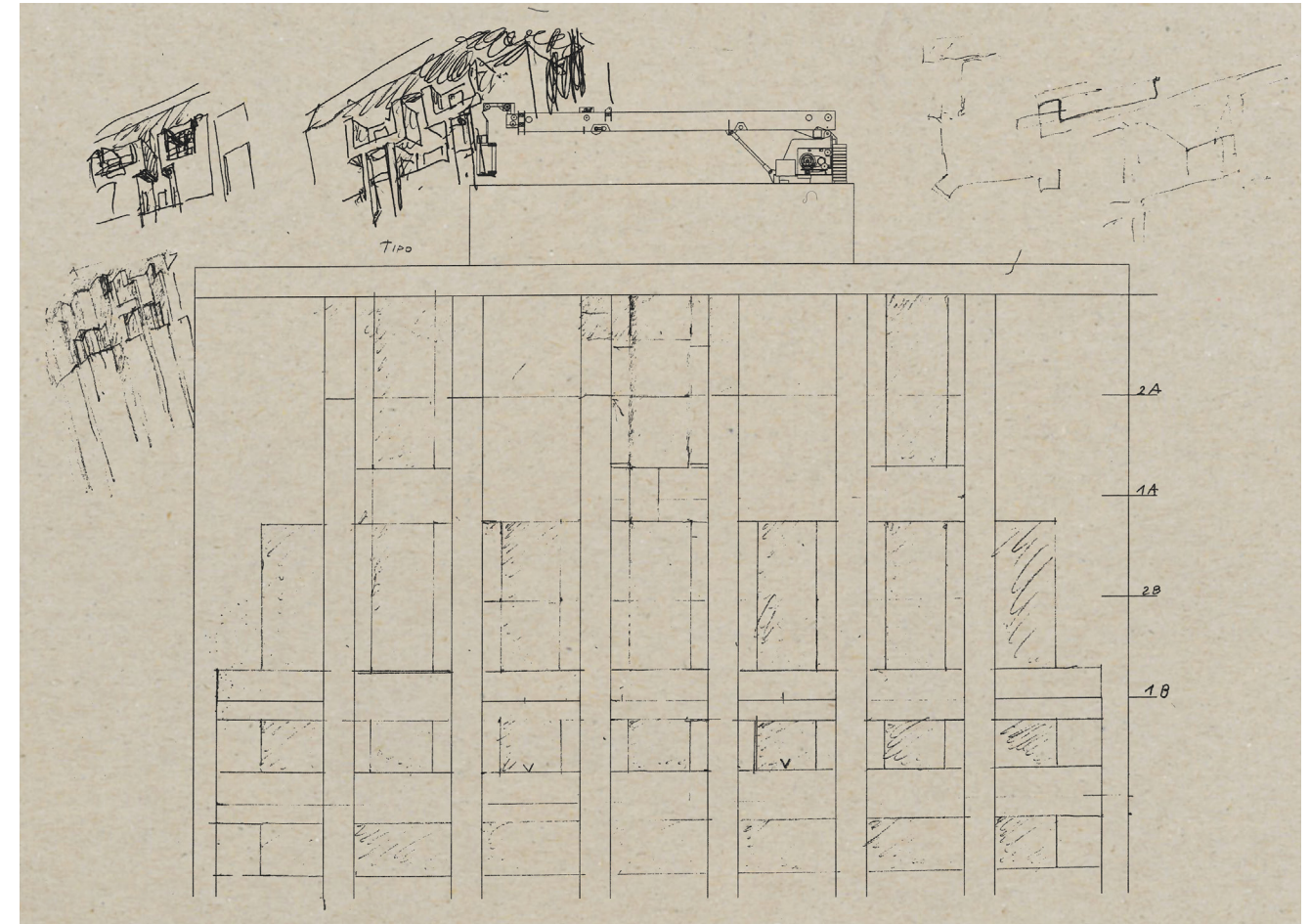
'Butterfly plans' of the apartments of house C and B, City West Areal, in Zurich by Meili, Peter Architekten, in cooperation with Diener & Diener Architekten

Fifth exercise: Elevation

This piece of work will require you to re-appraise the study you made earlier of the image of your building in the city and consider the elevation. Your facade studies also need to take account of the work done in the fourth and fifth exercises and the understanding you now have of the formal properties of your building and the manner in which it is organised in plan.

This piece of work should be undertaken with a clear concept for the image of your building. What materials is it made from? What is your attitude to the arrangement of window openings? How does the building meet the ground, and how is the top of the building resolved? There are numerous additional questions you should be addressing in designing your facade.

A seminar will be given to assist your understanding of this exercise.



Sketch by Álvaro Siza

Date	Event	Details	Assignments
20 September	Studio introduction		
21 September	Studio briefing	Jonathan Sergison (JS) presents studio and autumn semester Introduction to the sites and to the site model by Corinne Weber (CW)	Allocation of sites Book tickets for Naples Start 1:200 site model
27-28 September	Tutorials	Lecture by Sarah Maunder (SM) on "History of Naples" Lecture by JS on "Survey of a building"	1:200 site model First ideas of a building
4-5 October	Review	Lecture by Georg Nickisch on "Ideas of buildings" Review of first ideas of a building Study trip briefing	1:200 site model 1:200 model studies First ideas of a building
11-14 October	Study trip to Naples	Please see separate programme for detailed information	
18-19 October	Tutorials	Presentation of survey analyses Introduction by SM and CW on "Perspectives"	Survey analyses 1:100/1:50 survey drawings 1:200 model studies
25-26 October	Review	Revision of survey analyses and review of Perspectives Lecture by JS on "Plans"	1:200 model Interior and exterior perspectives
1-2 November	1st intermediate review	Project reviews with guest critic	1:200 model Interior and exterior perspectives Facade, plan and section studies
8-9 November	Review	Review of plans Lecture by JS on "Facades"	1:100/1:50 model studies 1:100 plans
15-16 November	2nd intermediate review	Project reviews with guest critic	1: 200 model 1: 100/1:50 model studies Interior and exterior perspectives 1:100 plans and sections 1:100 elevations studies

Date	Event	Details	Assignments
22-23 November	Review	Review of elevations	1:50 model 1:100 elevations
29-30 November	Review	Review of final drawings	1:100 plans and sections 1:100 elevations 1:50 typical apartment plan
6-7 Decemeber	Tutorials	Submission of final drawings and model discussions	Start final model
13-14 December	Tutorials		Final model Prepare presentation
18-19 December	Final review	Invited critics	1:200 site model 1:50/1:20 model 1:100 plans and sections 1:100 elevations 1:50 typical apartment plan Interior and exterior perspectives Sketches and references PDF presentation

Reading list

Das Haus und die Stadt / The house and the city
Diener & Diener, Städtebauliche Arbeiten/Urban Studies
Roger Diener, Martin Steinmann, Birkhäuser, 1995

Dichte / Density
Archithese, Niggli Verlag, 2011

Forme forte
Martin Steinmann, Birkhäuser, 2003

L'Architettura della città
Aldo Rossi, Marsilio, Padova, 1966

Papers 2
Jonathan Sergison and Stephen Bates, London, 2000

Pour l'amour des villes
Jacques Le Goff, Textuel, 1997

The seduction of place: the city in the 21st century
Joseph Rykwert, Weidenfeld & Nicholson, 2004

References

Il centro antico di Napoli
Roberto Pane, Edizioni Scientifiche Italiane, 1970/71

Il ventre di Napoli
Matilde Serao, Adriano Gallina Editore, 1988

Immagini di città
Walter Benjamin, Einaudi Editore, 2007

Italienische Reise
Johann Wolfgang von Goethe, 1786-1788

Napoli '44: a World War II diary of occupied Italy
Norman Lewis, Adelphi, 1993

Storia della città di Napoli
Cesare De Seta, Laterza Edizioni, 1973

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