Desmos:
Design, Inventiveness and Collaboration in a Time of Crisis

by

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CONTENTS

ABSTRACT

The modernist *polykatikia* typology (translating to multi-dwelling) arose in Athens after the population boom of the 1960s. Now sixty years later, the demands of the city have changed. No longer is there a need to continue to build houses for people, but a need to focus on the workplace. As economic turmoil is pressuring Greece towards larger, more efficient operations, the thesis seeks to signify the importance of micro-economies of informal Athens. Given that energy and vibrancy are defining characteristics of the city, it considers how the workplace can intersect with public space to create new relationships in Athens. By curating talent, people and expertise which already exist in Athens, the aim is to propose workplaces based on resource sharing within underutilized zones in the city: an urban gesture which re-imagines the city blocks of Athens as a system of micro-agoras.

ACKNOWLEDGEMENTS

CHAPTER 1: INTRODUCTION

In 2011 McKinsey presented results of their economic study for Greece, Greece 10 years ahead. It revealed many of the economic weaknesses of the nation and proposed solutions to the ongoing economic crisis. In line with the media, the country was differentiated against the powerful northern nations which stand as exemplars. Many findings in the study were valid, yet suggestions such as expanding tourism with all inclusive resorts and the creation of bigger, more efficient companies are transplanted ideals that fail to reveal potentials of Greek citizens (Adelman 2012, 9-25).

In comparison with other European Nations, Greece has by far the highest concentration of small 0-9 employee business, constituting thirty percent of all businesses. Even second place does not come close at nineteen percent (Portugal) while Germany has the lowest percentage of small businesses at less than five percent (Adelman 2012, 19). Statistics as such allude to the small scale character of Greece.

With the economic downturn of 2009, Athens is witnessing a new type of growth. As unemployment is currently an all time high of twenty-seven percent (Euronews 2013) the number of self employed professionals is increasing and desires for collectives and shared workspaces is growing. It is a pattern which moves away from the desires of the EU governing body, proving that Greece does not fit the imperial model.
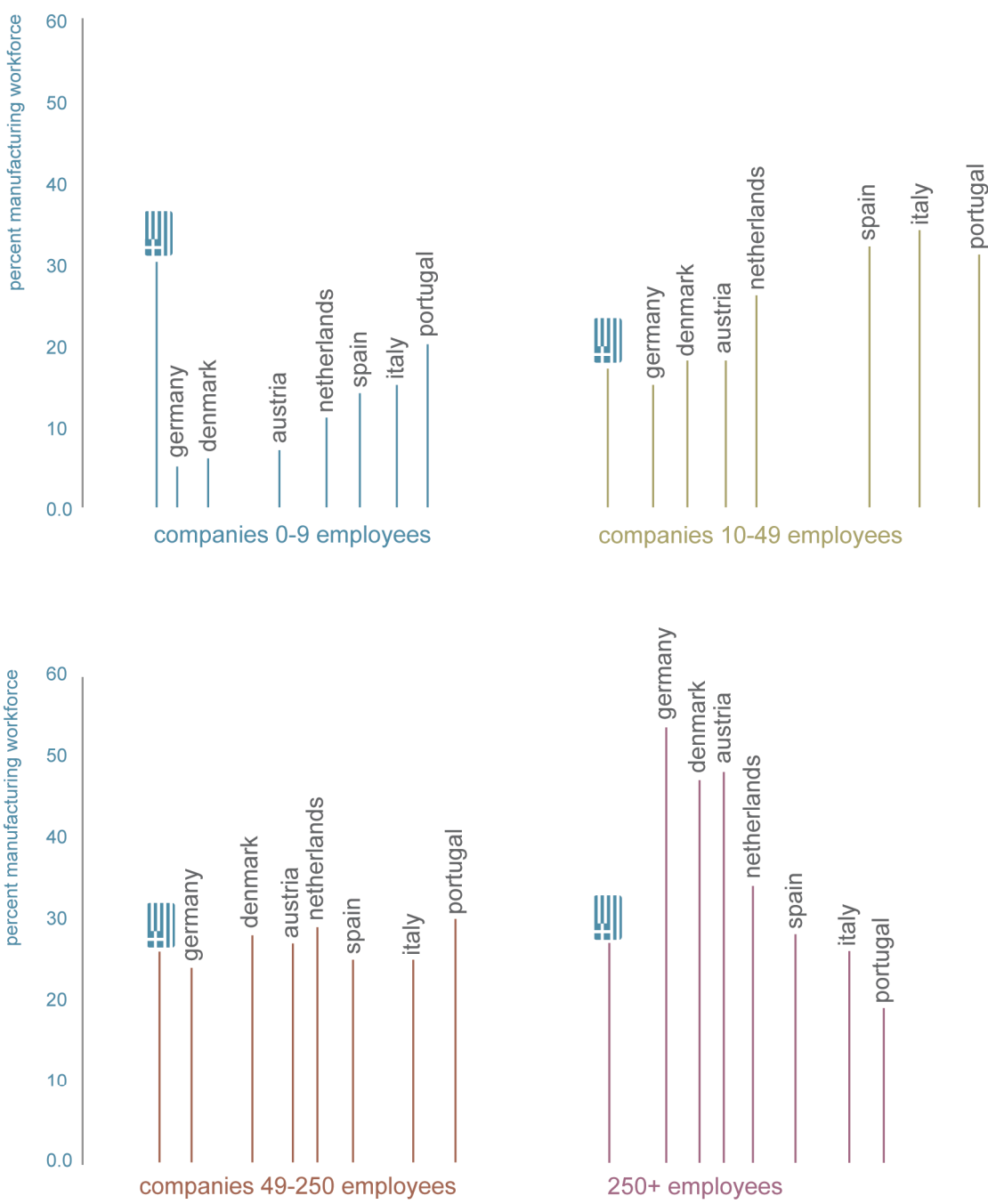
Figure 1: Breakdown of business sizes (data from Adelman 2012, 19)

The need for change in Athens is non-disputable, but it is during these times that it becomes important to reflect on the tendencies and forces of the citizens, re-thinking architecture to more accurate curate the city's activities. In 1973, E. F. Schumacher released the first edition of *Small is beautiful*, promoting the human-scale of economics. It was considered ground-breaking for its recrimination of the modern "bigger is better" mentality that was (and still is) present in most economic models. The philosophy resonates well with Greece's small business culture and its relevance can not be more timely as the country transitions from economic crisis to economic recovery. Schumacher states that small businesses bring their own energy and allow a much higher quality product to be brought forward, something mass production can never achieve. By doing so, value can be added to products that would normally be sold for a much lower rate. Three points he considers to be fundamental in function of work are: give a man a chance to utilize and develop his faculties; to enable him to overcome his ego-centredness by joining with other people in a common task; and to bring forth the goods and services needed for a becoming existence. They are principles reinforcing the necessity for people to create a work culture as a product of their lives. The Indian philosopher and economist J.C. Kumarappa summarizes it well:

> If the nature of the work is properly appreciated and applied, it will stand in the same relation to the higher faculties as food is to the physical body. It nourishes and enlivens the higher man and urges him to produce the best he is capable of. It directs his free will along the proper course and disciplines the animal in him into progressive channels. It furnishes an excellent background for man to display his scale of values and develop his personality. (Schumacher 2010, 59)

Empowerment of people and exposing their strengths should not be underestimated and is at the root of innovation and the discussion on innovation can not be more timely. Athens is home to one-third of Greece's population, stands as the political center for the country and attracts roughly 6 millions international visitors annually.

As the country is now entering year five of recession, we are now contemplating the built environment's role in recovery and more specifically on innovation.

This thesis seeks to understand what it means to innovate by understanding and revealing the potentials of the city. It seeks to evolve the architectural discourse towards an emphasis on the workplace and its intersection with public space. Doing so demands a curation of Athens at all scales; understanding why the city expresses the present urban form and how the urban form can evolve, not as a "lets start over" approach, but rather what are the interventions we can build upon the current urban form. The proposal takes lessons from the past and tries to understand current patterns of Athens to create a sequence of micro-agoras within city blocks of Athens' informal sector.

Today's economic crisis brings light to the long standing urban crisis. Greece as a small nation needs to produce better exports rather than more products. Services by the city need to be more useful not more plentiful and therefore Athens must be better, not bigger. Such traction is spreading through smaller communities in Greece, where public squares still create a heart, uniting communities which the Greeks call *Desmos*. Strong unity encourages collaboration and reinforces an understanding that we are part of a system. Transposing such an ideal back into Athens translates the city from a compartmentalized individualistic centric structure, into a collection of community nodes, encouraging progress and innovation.
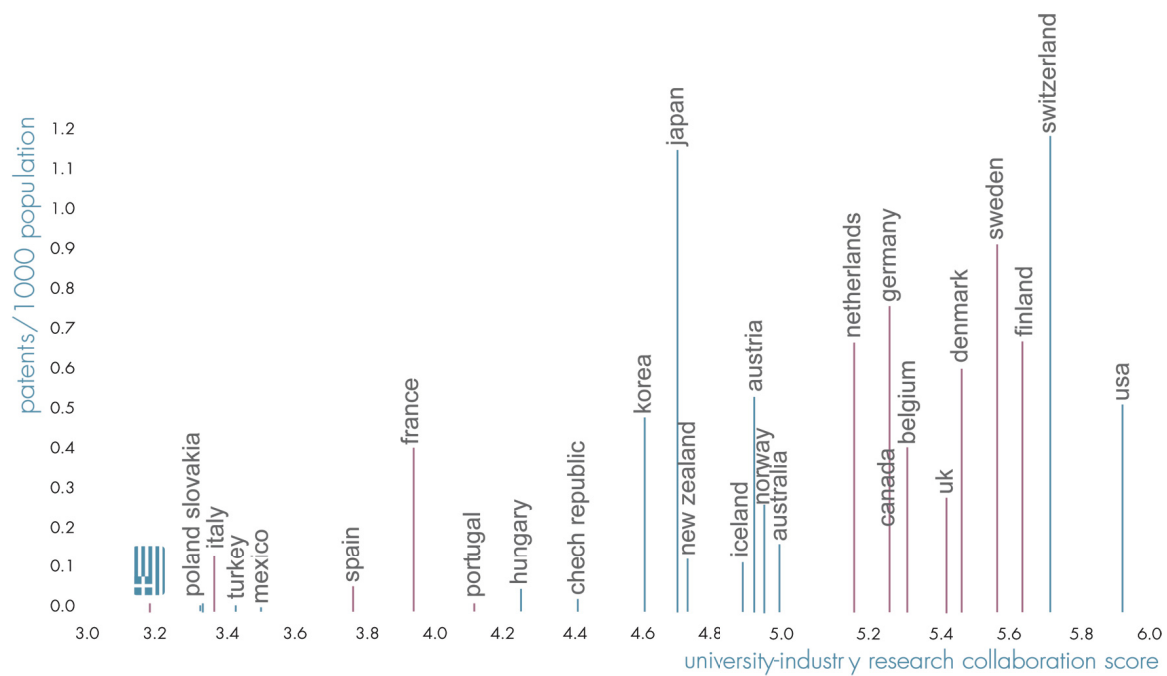
Figure 2: Collaborations versus innovation, illustrating the deficiencies. (data from Adelman 2012, 24)

CHAPTER 2: DESMOS

The word *desmos* (δεσμός) directly translates to "link", but as a concept it means much more. It is at the root of Greek culture and *desmos* has evolved to represent the strength of a community. It has emerged as a belief system in which a sense of belonging is of utmost importance in forming a community, progressing thought and moving forward as a collective. Time and time again we are reminded that with *desmos* we can progress as a unit and we are never alone, regardless of the challenges that may come about. Athens' ability to collaborate between disciplines is limited by the physical urban structure. It is perceived as an inhibiting force rather than a catalyst in the exchange of ideas and communication, concealing *desmos*. At the core of the issue is a lack of a public node servicing the city block. Just as troubling are challenges of the city center's inability to adapt, contributing to increased vacancy of Athens' core with many people forced to emigrate from the city.

In favour of Athens, many are leaving for the countryside, where the slower more organic levels of growth have provided resilience to changing economic conditions leading to a more stable platform for living, even during a time of crisis. People in the country have control of their future, whose existence is dependent on a person's ability to take advantage of their resources. It is a significant contributor in longevity for many rural Greek communities, such as the island of Ikaria. Dan Buettner of National Geographic interviewed Stamatis Moraitis, a local resident of Ikaria, "For the many cultural holidays, people pool their money and buy food and wine. If there is money left over, they give it to the poor. It's not a 'me' place. It's an 'us' place" (Buettner 2012). But for Athens, the over-emphasis on dwelling for the individual nuclear family has been out of touch with the Greek notion of *desmos*.

In traditional Greek communities, the driver of *desmos* has been the *platea*, or the Greek Public Square. From town to town, the *platea* is slightly different according to the landscape and vernacular, yet has defining characteristics which are clearly expressed through all *plateas* in Greece. They are always flexible, with a large unobstructed stone paved surface that can be adapted for multiple scales of cultural events with obstructed view-planes. The church is always joined to the *platea*, which not only acts as a beacon for visitors to locate the space, but given many of the cultural holidays are religious in Greece, it provides a direct relationship from the religious ceremonies to the cultural festivals. At the very minimum, each *platea* has one coffee shop and one tavern with its tables spilling onto the *platea*. In smaller communities, the post is delivered to the local cafe where locals would meet here discussing their business while waiting for the mail. In the evenings, the taverns draw people to the *platea* once again. While most are sitting at tables, the children are allowed to run free on the vast open space. It is here where they meet others, and a strong tie of community is built from a young age. Furthermore, the space's usage by a vast demographic encourages an understanding that we are all part of the same system - individual lives do not exist in a bubble.

Figure 3: Traditional *platea*,
Sirraco, Greece, 2011

Such a strong community system along with the *platea* has created a movement across small towns within Greece to progress their products beyond minimum cultivation and branding. Regions across the nation are promoting what they do best - such as acorns from Kea, wine from Nemea, and honey from designated origins of Greece. The best example is Mastiha from Xios, where a simple tree resin has been explored and transformed into innovative uses for cooking, medicinal purposes and even cosmetic products. Such progress from a very specialized product involved a range of skills and professions from farmers who cultivate the plants, to designers who market the brand, to business professional who provide management. As a result, almost 5000 families are supported financially and just as importantly, the traditional lineage of harvesting mastiha can be kept alive. The skill sets associated with these traditional practices are now funded and can now continue to be passed on into the future.

1347 — MAONA was founded in Chios to undertake trade and distribution of Mastiha

$

price of mastiha triples after the first year

1938 — Mastiha Growers Association formed

$$$

1985 — launched ELMA chewing gum   **ΕΛΜΑ**

1997 — Mastiha becomes a Protected Designation of Origin

Mastiha Growers Association

establishes

2002 — Mediterra S.A

with the establishment of the Mediterra company, the growers were able to broaded their appeal through establishemnt of branded retail shops

mastihashop
MEDITERRANEAN NATURAL PRODUCTS

OFFICIAL SHOP
OF THE CHIOS
MASTIHA GROWERS
ASSOCIATION
www.mastihashopny.com

2006 — Mediterra founds a factory in Chios

2008 — Mediterra becomes a public company in the Athens Stock Exchange, with the growers retaining 51% of the shares

2008 — Mediterra build a state-of-the-art processing plant

Figure 4: Business structure of Mastiha operation (data from Chios Mastiha Growers Association, 2012)

Athens also must innovate and progress, but learning from the smaller Greek communities is less about their outcomes of desmos and more about adapting the process of *desmos*. We must recognize that the city is a unique place in relation to the village and the focus is on service and academic innovation as a platform for progress rather than the land. The methods of interventions for this thesis is to evolve and adapt an existing condition to order to stimulate *desmos*. It takes a stance towards improving the everyday moments rather than injecting specialized projects for very specific situations. It is not about controlling what people do in Athens, but rather opening up the possibilities for exchange. It allows the city to breathe and makes innovation possible. The people are then allowed to imagine for themselves and innovation can occur more naturally, allowing Athens to operate less as a factory and more as an innovator.

City Center

Athens
Districts: 7
Region: Attica

City Center
Population: 656,000 (794,000; 2004)
Area: 39 km^2
Urban Population
Population: 3,074,168
Area: 412 km^2
Density: 7,462 km^2
Metropolitan
Population: 3,737,550
Area: 2,929 km^2

Athens

Figure 5: Satellite view of the Attica
basin (data from Google 2012)

Figure 6: Figure-ground of Athens' city
center (data from Re-Think Athens, 2012)

CHAPTER 3: URBAN FORM OF ATHENS

Planning for Athens

Athens' history of settlement dates back further than any other capital in Europe yet is also considered one of Europe's youngest cities. Until Approximately the 1820s, Athens adapted a medieval structure. The first documented city plan was designed by the Engineer Goubault in the early 1800s but was quickly superseded by a more formal strategy. The plan was released by the architects Gustav Eduard Schaubert of Prussia and Stamatios Kleanthes of Greece in 1834 as new modern strategy aimed at enlarging the population of Athens from about 4000 to 10,000 people (Tung 2001, 256-60). By 1875, the population had already swelled to 44,000 residents and the urban form had already diverted back to a less formal, bottom up approach. The frequency of urban change, partly attributed to the geographical location has branded Athens as a city in constant transition. The period surrounding the civil war of 1949 gave rise to a entirely new Athens once again. In the course of a couple decades, Athens transformed from a small urban center to a vast dense metropolis (Aesopos 2012, 44).

Figure 7: First documented urban plan
for Athens circa 1800 (Traulos 2005)
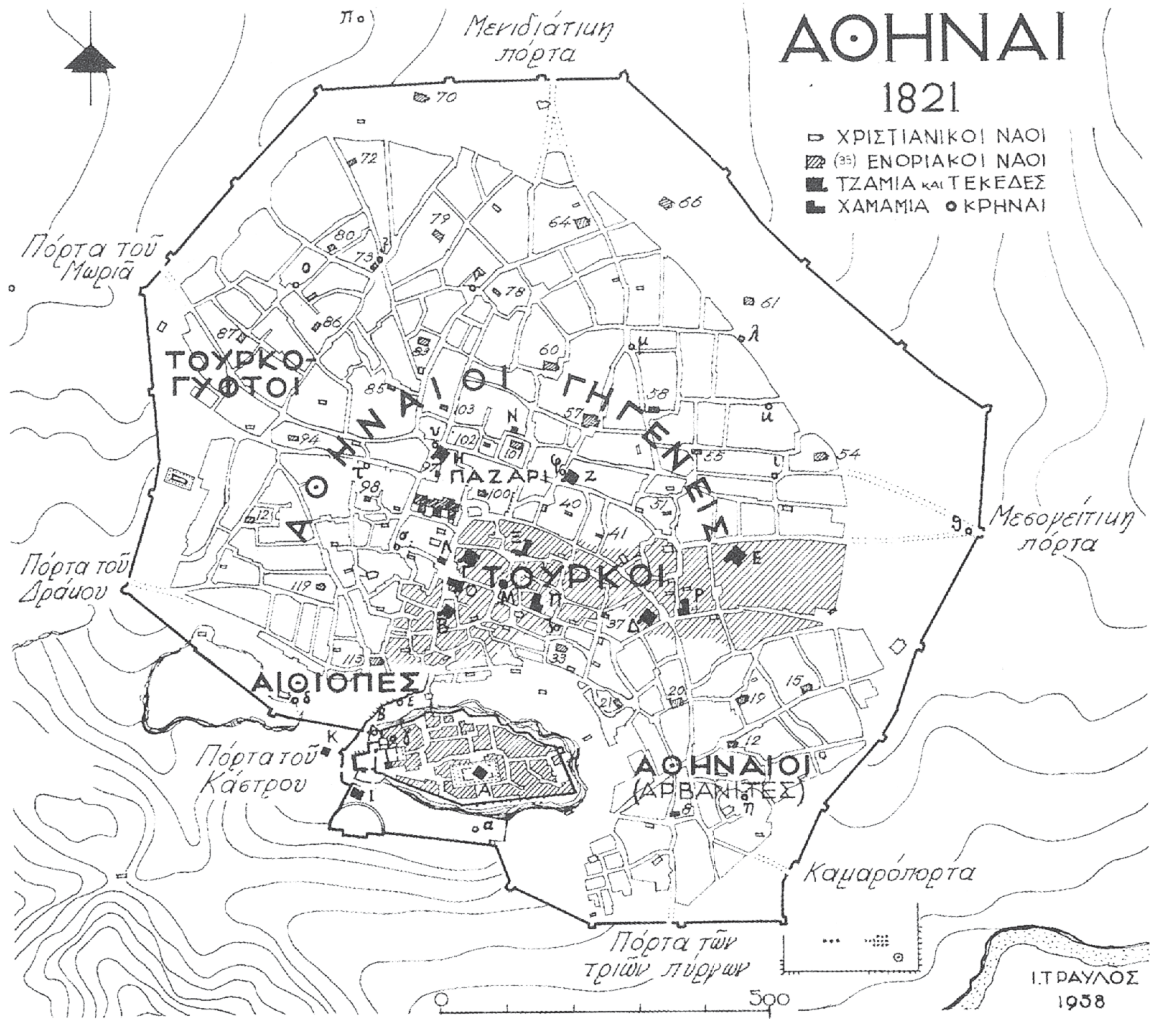
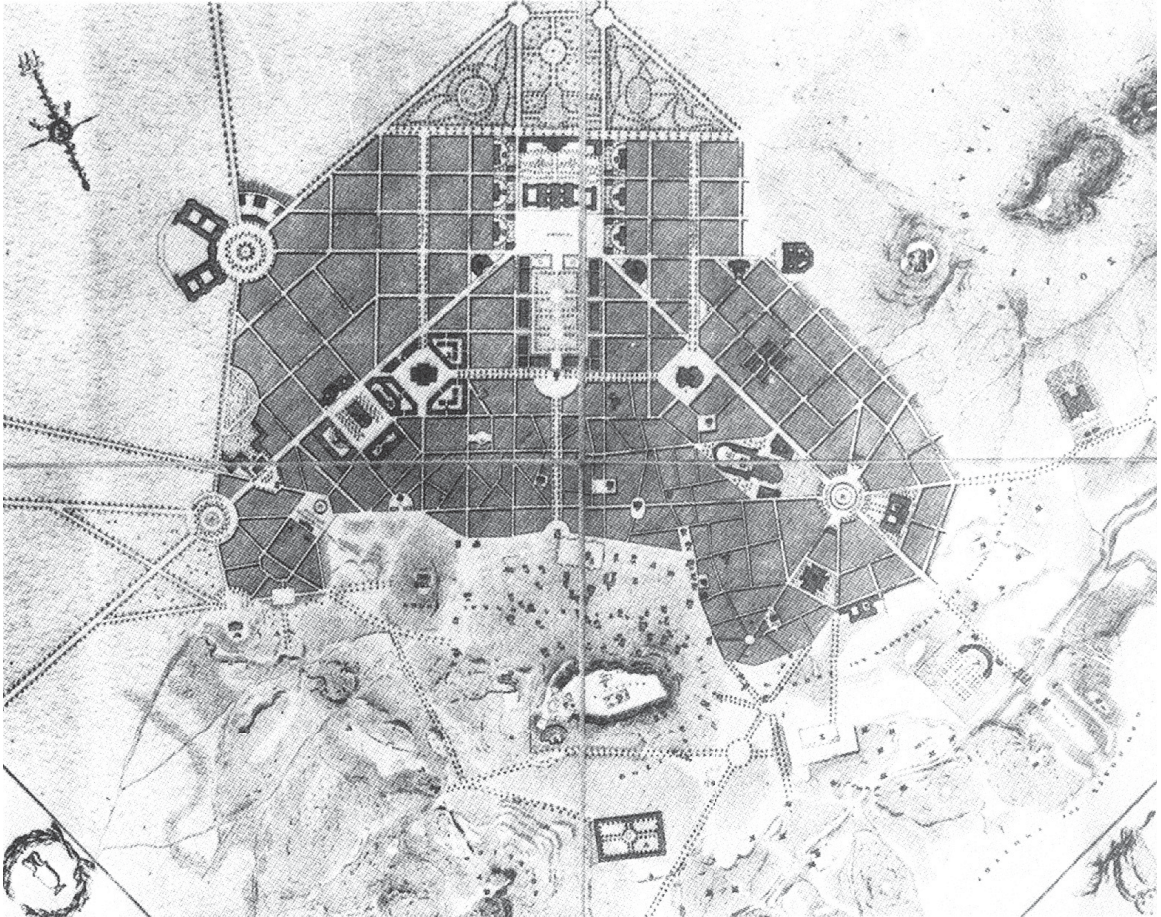Figure 8: City map of Athens circa 1821 (Traulos 2005)

Figure 9: City plan for Athens
circa 1834 (Traulos 2005)

Figure 10: City map of Athens
circa 1875 (Traulos, 2005)

Figure 11: Athens from Polygon Heights. Psiri is located immediately in front of the Acropolis to the far right. The foreground representing the dominating modernist architecture emerging from the 1960s-1970s, 2012

Polykatikia Athens: A New Type of City

Shortly after the civil war, small quaint homes and shops were gradually demolished in favour of dense Greek versions of Modernist apartment buildings coined *Polykatikias* (translating to "multi-dwelling"). This *polykatikia* extended across the city with minimal variations from building to building, constituting to this day, Athens' "urban unit" (Aureli 2012).

Non-coincidently, this new form of density spread across the entire Attica basin shortly after the debut of CIAM's fourth conference, "Functional City," at the National Technical University of Athens in August 3rd 1933 (Mumford 2000, 81). Modernism was greeted with open arms by Greece and its then current Prime Minister (who inaugurated CIAM's conference) and seeked to re-interpret and extrapolate lessons towards Athens' rapid population influx. The first wave of immigration into Athens was a result of an obligatory population exchange between Greece and Turkey in 1923, followed by an influx of residents from villages whose homes were destroyed in WWII (Katrini 2009,1). Influx of residents into Athens continued after Greece's civil war of 1949 and through the dictator Georgos Papadopoulos regime from 1967-1974. But while construction slowed down during the 1980s, the *polykatikia* continues to be built today with little adaptations but tweaks to the building envelope.

Athens, the once neoclassical city, quickly became a city of *Polykatikia*s by the 1970s. The homogeneity at the scale of the city resulted in a blanket of concrete for as far as the eye can see. Open spaces and plazas ceased to be designed.

It was a paradigm shift for the city where the previous model based on a rhythm of private and public outdoor spaces was displaced for a fetish on tectonic form. Accommodating for public spaces was considered a luxury and therefore displaced by the necessity to build

for the bourgeois nuclear family. Although considered as a viable solution, It became an urban crisis in the making. With time to reflect, we must now consider outdoor spaces as social connecting tissue and how they can be integrated back into the city, within a culture of *polykatikias*.

This new typology of the *polykatikia* was raw and honest, expressing a modern feel which reflected the presence of a new age population immigrating into Athens. The simplicity of the concrete post and beam construction allowed for maximum flexibility and the same structural system could then be repeated across the city and easily adapted by each specific program after the construction. Construction therefore progressed efficiently by developing a workforce that specialized in the *polykatikia* typology. Manipulation for program would then occur independently from the erection of structure, resulting in a Fordist system of development at the scale of the city (Aureli 2012). The construction industry emerged strong, providing as much as 60 percent of employment, transforming the city into a factory and bypassing the need for Athens to develop a strong industrial sector.

Corbusier's Dom-ino typology forms the predecessor to the radical *polykatikia* and inherently shares its benefits. Both building systems were designed to maximize possibilities of production in the interior (Aureli 2012) - a design that would allow the typology to evolve overtime, adjusting for unforeseen developments. With floor plans relatively constant from floor to floor, the section is as homogeneous as the plan is flexible.

Figure 12: An unfinished *polykatikia* in Metaxourgio,
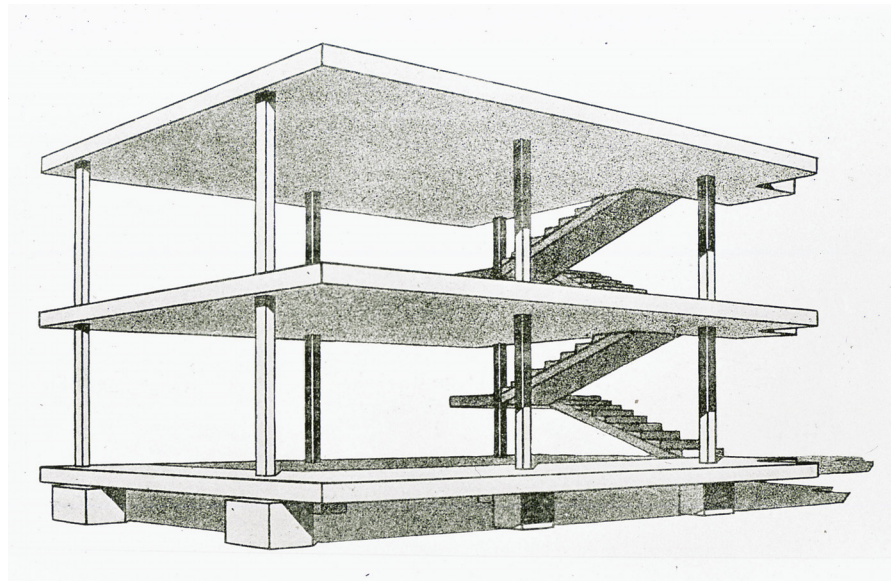revealing the free plan of this typology, 2011

Figure 13: Flexibility and simplicity of the *polykatikia's*
structural system recalls its predecessor, Corbusier's Maison
Dom-ino of 1914 (Aureli 2012)

The flexible *polykatikia* would then evolve after construction, where its surroundings dictate programmatic use. A vibrant Mediterranean street culture makes the ground floor of polykatikias most valuable to restaurants, bars and shops. The top three floors are setback 1.5-2m from each preceding floor, which allows for light to penetrate down into the street. The setbacks create ideal balconies while being elevated above the city permits views towards the Acropolis, both significant factors for being used as housing. The middle section (about 2-3 floors) became the least valuable real estate and is used for offices and workshops, or is transformed into more affordable housing by extending balconies outwards.

balconies

residences and offices

offices, storage, manufacturing

store, services

height: 3.5m

street width 8-11m   stoas

Figure 14: Height restrictions of the Athenian *polykatikia.*

Set back for light penetration at street

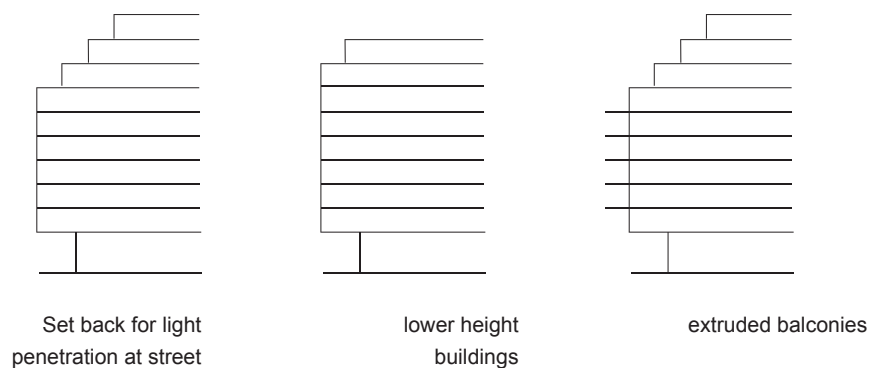lower height buildings

extruded balconies

Figure 15: Permissible variations of the *polykatikia*.

The former is the case in downtown Athens, while the later occurs as you move away from the center of Athens. Over time, building bylaws mandated a stoa to be accommodated at the ground floor for protecting pedestrians from the strong Mediterranean sun, a modification that pushed the Maison Dom-ino inspired typology even further towards the *polykatikia* vernacular we know today. The capitalist ideals dictated a desire for private ownership with a lack of communal public spaces. Such spaces are still absent from the building program today, presenting a challenge in the configuration of *polykatikias*. The streets absorb much of this function, yet they are far too narrow to fulfill requirements of public nodes at the city block scale.

The need for rapid construction resulted in the bottom-up urban planning strategy called *Antiparochi*. *Antiparochi* was a building contract strategy put in place by the city which motivated Athenians to sell their small properties to contractors in favour of receiving a percentage of the newly built *polykatikia* (Katrini 2009, 1). Because it was difficult to convince multiple property owners to sell concurrently, the *polykatikia* became very small in footprint - resulting the *polykatikia* to become Europe's smallest modernist building in a city already home to one of Europe's smallest city blocks. For the city, *Antiparochi* seemed like a miracle to the need for rapid urbanization where time consuming top-down master planning was bypassed, allowing the contractor to dictate building siting (Aureli 2012). The repetition resulted in a "layered cake" condition, a result of homogenous horizontal distribution of program. Over multiple buildings, the striations are expressed clearly, contributing to a layer of residential life at the top floors and roofs - segregated from the street by a layer of in-between floors.

residential
workspace/storage
store

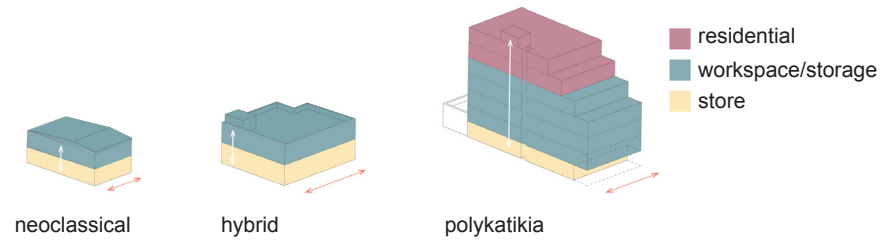neoclassical   hybrid   polykatikia

Figure 16: Building types of Downtown Athens.

These in-between floors which were once office spaces, workshops and storage are now increasing in vacancy, further isolating the top and bottom layers of the *polykatikia*. The only hope of communication is via circulation cores, but those have been paired down to such minimum dimensions that they fail to provide interaction between floors that polykatikias now demand.

Figure 17: Typical staircase into workplaces and offices of Psiri District, 2012

A Networked City

The construction of Athens as a collage of individual urban units continued strong until the late 1990s when Athens successfully won the bid to host the 2004 Summer Olympic Games. The city shifted from an individual centric composition towards one that focused on gaining international presence, leading to the emergence of an entirely different Athens described by many as "Olympic Athens" (Aesopos 2012, 44). New metro and tram lines were constructed, freeways connecting Greece were modernized, public spaces to house the large international crowds emerged. In 2004, at the pinnacle of Athens' renaissance, the city was a glorious place. Today, these images of Athens are little but a nostalgic memory, as much of the infrastructure is underutilized in post-olympic times. The International Airport was constructed as a generic box positioned 30 km from the center of Athens, replacing the Eero Saarinen designed Hellenikon Airport, only 10 km from the center. New roads and metro stations made affordable plots of land in the periphery more accessible, leading to emergence of large shopping centers and big box stores further and further from the core of Athens and naively focusing on a consumerist culture. Collectively these projects were intended to unite the city but resulted in a diffused Athens. If it wasn't for the archeological sites, the dispersal of Athens would have jeopardized its urban center too. The Parthenon, a monument, free of program, simply a symbol has proven to be the most significant urban intervention in Athens of all time. Its presence has cascaded a series of projects, from Bernard Tschumi's new acropolis museum (arguably the most successful contemporary building in the city) to public pedestrian green spaces fanning from the Acropolis, functioning as an escape from the repetitive polykatikias. In such a case, it stands as an example of how past city layers never completely disappear - the strongest urban gestures pass the test of time.

CHAPTER 4: INFORMAL ATHENS

informal city
center
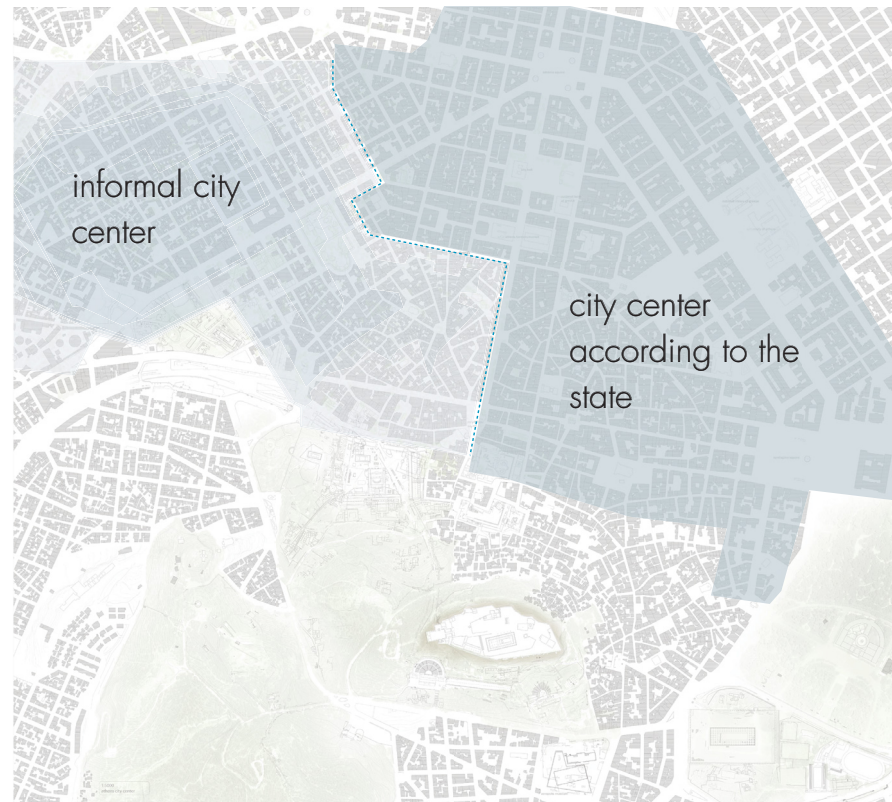
city center
according to the
state

Figure 18: Official versus informal
city center of Athens.

Since the 1800s, desires for a strong, powerful capital resulted in establishing a series of boulevards of large monumental interventions between Omonia Square to the North and the Parliament to the South East. Consequently, areas outside this "city center" zone were of little interest to the city allowing for a far more informal, bottom up construction and occupation. Today an informal city core coexists with the political and commercial city center, separated by a not so invisible line, Athinas Street. It is this informal area which is most eclectic, features the widest demographic and is most condensed in terms of programmatic diversity and therefore has the most potential for new ideas to emerge. Informal Athens is expressed in three districts; Metaxourgio, Gerani and Psiri.

Metaxourgio

Metaxourgio's residents were strongest to resist temptations of *Anitparochi* and therefore *Polykatikias* are nearly absent. The clusters of modest scaled neoclassical homes and in-between spaces lends itself to a reputation of being an intermediate between city and countryside. Although extremely central to the archeological sites, its failure to adapt with *Antiparochi* Athens led to mass vacancy. Overtime, vacant buildings fell in a state of disrepair which have emerged as dwellings for refugees and illegal immigrants. But although viewed by Athenians as a decaying and dangerous district of Athens, its small scale character and presence of open space married with affordable rent has led to the emergence of a strong art culture in Metaxourgio.

Figure 19: Village character of Metaxourgio, 2012

Gerani

To the North lies the district of Gerani, whose composition of mainly *polykatikias* resulted in a much denser form of urbanism to Metaxourgio, therefore expressing a "layered cake" structure most clearly. The ground floor remains as shops which is growing

with outlets for selling goods and products from the Orients. The affordability of this merchandise has led to increased demand during the current economic crisis of Greece. Its middle layer has been utilized as factories and warehouses where inexpensive textiles and other miscellaneous products are produced through the exploitation of immigrants from predominantly China and Pakistan. The top floors remain as housing, which in Gerani are occupied by a very culturally diverse demographic.

Figure 20: Dense urban fabric of Gerani, 2012

Psiri

The district of Psiri is bound by Gerani to the North and Monastiraki Square to the South and is arguably the most eclectic area in Athens. It containing traces of both Metaxourgio's smaller scale character and Gerani's denser form. Unlike Metaxourgio which has maintained a "low-key" presence over time, Psiri's proximity to the archeological sites and direct access to Monastiraki square contributed to its renaissance in the 1990s. In 1994 Psiri had six restaurants, but by 2002, restaurants and bars exploded to one-hundred and seven, fifty-seven of those are restaurants (Nikolaou 2011). The outcome resulted in a change of energy, from a quiet zone of housing and small scale workshops to a vibrant energetic entertainment hub bursting with people.

Figure 21: Miaouli Street in Psiri. In the background is Platea Iroon, 2013

Such a condition would be considered a success for many cities, but the speed of development and rapid influx in people shocked the system. The noise and crowds became so intense that it drove away many of Psiri's inhabitants, resulting in residential vacancy for almost all but the top most layers of the polykatikia. The transformation resulted in a much less diverse system, and housing is now only suited for artists and young professionals who value proximity to the restaurant and bar scene. In spirit of the 2004 Olympic games, many streets in Psiri were re-paved with cobble stone, emphasizing the smaller scale of the area and functioning to re-direct more international visitors from the neighboring archeological sites to the windy streets of Psiri. Today the culture of small scale workshops exists, yet is overshadowed by the strong presence of restaurants and recreational facilities.

CCR: CityCommonResource
Athens_Gerani 2010-2012

A pilot study
by

sarcha
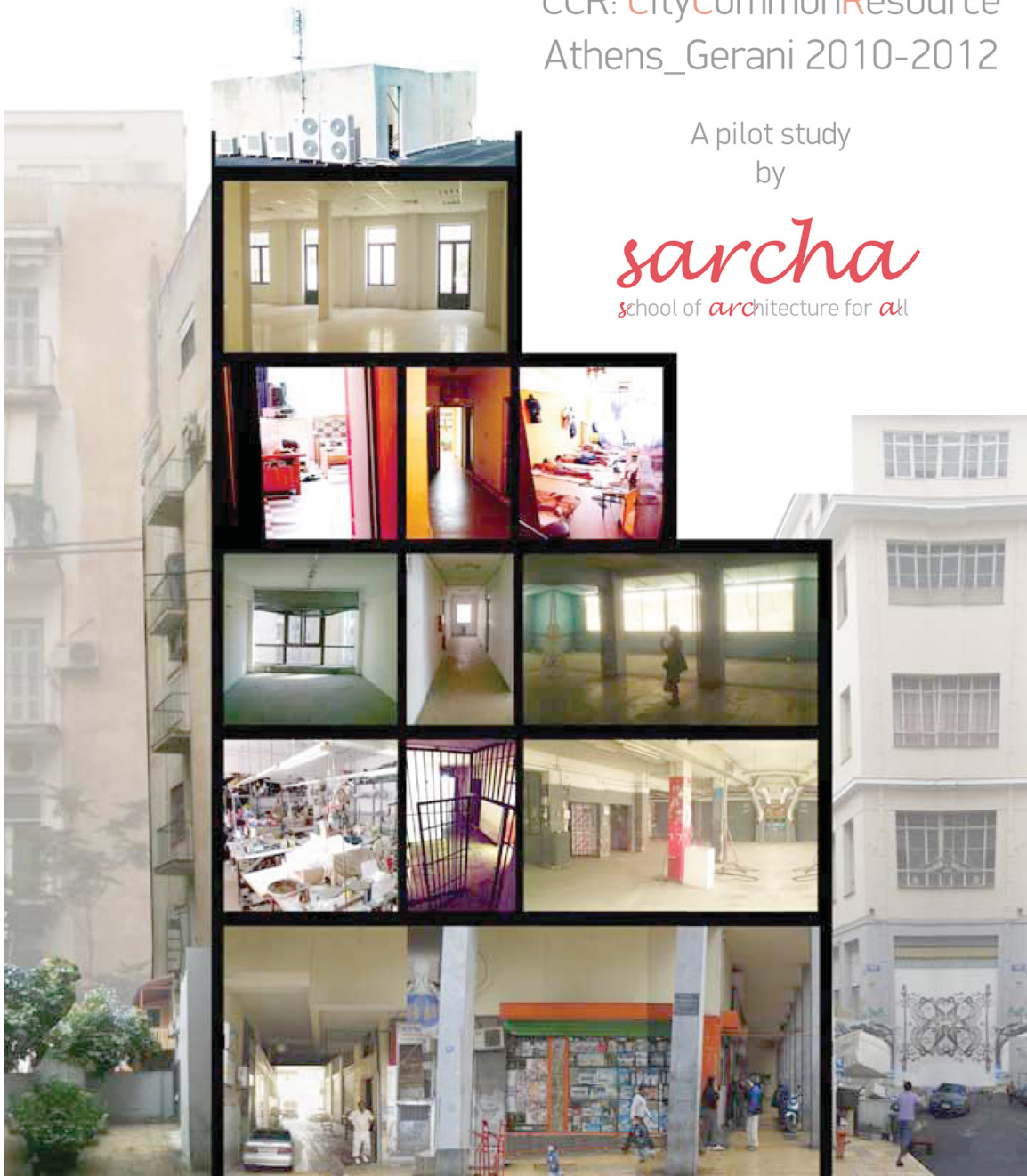school of *arc*hitecture for *a*ll

Figure 22: Photo montage illustrating the current uses of spaces within informal Athens' vertical layers, (SARCHA 2010)

City of Canvases

The informality and unpretentiousness of the city, especially the informal center has allowed for an emergence of a graffiti culture. Facades are used as a medium and communication tool to project thoughts. Stucco *polykatikia* walls have become platforms for public art. Advertisements are shamelessly positioned on every available column and post. The outspoken character of Athenians physically manifests itself onto the urban fabric, naturally transforming the monolithic architecture into a system of canvases. Such a condition has become part of the identity of Athens.

Figure 23: City commissioned mural at Platea Iroon. Not only do such projects provide opportunities for emerging artists, but the mural acts as a markers in Athens, 2013

Figure 24: Commissioned for the 2004 Olympic Games, such projects transformed stark walls into showcases for artists, 2012

Figure 25: Graffiti shop facing thesis site to the north west, 2013

Figure 26: Street art culture of Athens has expanded to political graffiti in the past few years, 2013

Figure 27: Void spaces in Athens become a platform for public art, 2013

CHAPTER 5: A COLLECTIVE ATHENS

Current Interventions

Current efforts by the city are geared towards drawing more international presence, encouraging large scale interventions - a strategy which bypasses potentials of the city's micro-systems. A prime example being the $759 million dollar Renzo Piano opera house and public library (World Architecture News 2012).
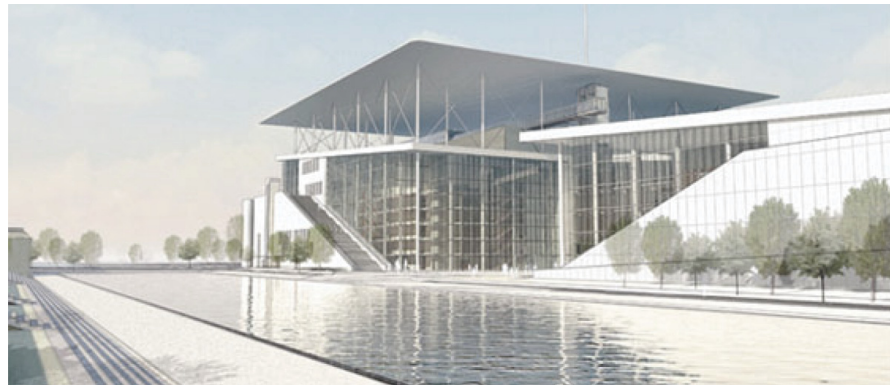

Figure 28: Stauvros Niarchos Cultural Center, project is currently under construction (Archdaily, 2012)

Figure 29: Water front vision, Stauvros Niarchos Cultural Center is positioned in the Northeast (Archdaily, 2012)

The Onassis association has just completed the competition: "re-think Athens", a re-imagining of the car congested Panepistimiou avenue into a green public space (Re-think Athens, 2012).
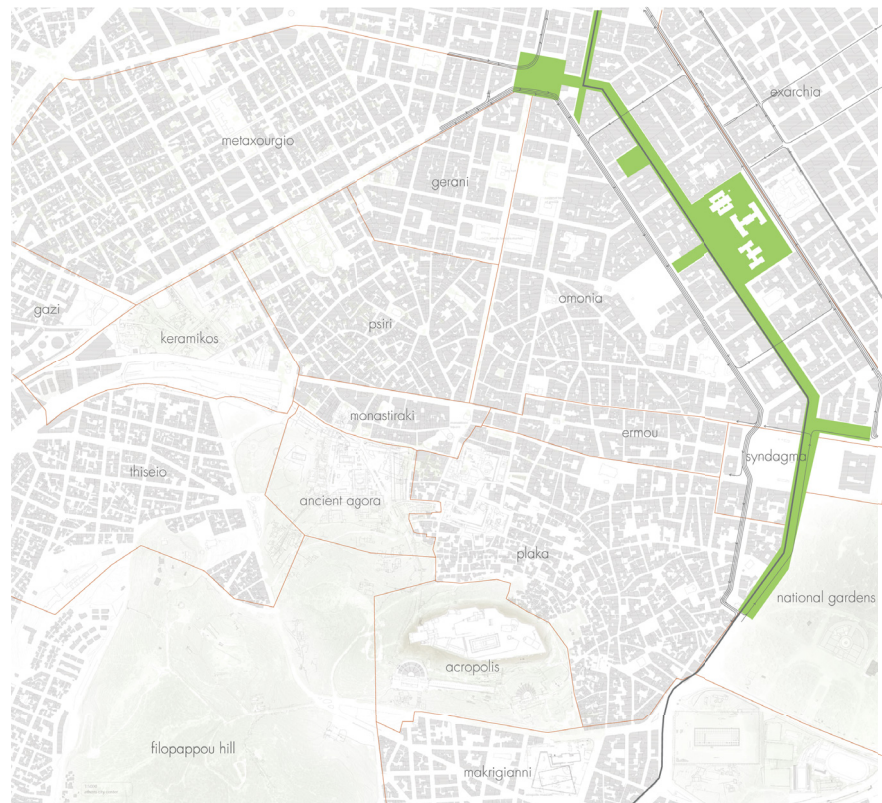

Figure 30: "Re-think" Athens project in relation to the districts of Athens' city center (Re-think Athens, 2012)

The project is based on good intentions, acknowledging success stories such as the pedestrianization of the acropolis area, which transformed a dangerous neighbourhood (due to reckless drivers and scooters) into the city's glowing hub. Anne Verez Moudon discusses this as a case study in her book "Public Space for Public Use". She emphasizes the importance of the ground floor and how friendlier streets can treat pedestrians as if part of the system and not just an afterthought (Moudon 1987, 250-260). But the project does little to curate the activities of the city, instead it re-enforces already strongly defined borders in the city.

It brings light to how the city is trying to "hide its mess" behind large tree lined boulevards. A method aimed at protecting its mass tourism in an attempt at transforming the city from a three day to a seven day destination.

New Forces in the City

Despite the economic crisis forcing many Athenians to smaller rural communities, the core of Athens has maintained its vibrancy. Stephania Xydia talks about the organization "Brain Gain", a movement for those returning to Athens despite challenges in the city (Xydia, 2013). Such young professionals are moving as close as they can to the center of Athens. They are seeking to form collaborations and cross-professional networks in order to create new employment opportunities for themselves. These tendencies in Athens are therefore increasing the number of self-employed workers. In addition, workshops are still operating, artists are emerging and taverns are still full of life. Yet such character is not expressed at the scale of boulevards, but rather this energy is concealed deep within the city block.

Figure 31: "Imagine the City" seeks to orchestrate and organize architectural urban projects for cities in Greece, 2013

The Athens biennale has recognized these potentials and had based the third biennale (Monodrome) on revealing the character embedded deep within informal Athens. For 2013's fourth biennale (AB4:AGORA), the venues are active workshops. The intention is to establish a communication network for small businesses and spark interest from Athens' visitors. Eleanna Pontikaki, assistant curator for the biennale discussed with me how the current biennale's theme was based on a forward looking direction for the city. In 2012, the ex-hibition, followed by the publication "Made in Athens" was presented at the Venice Biennale showcasing architectural projects, thoughts and theories which have emerged from young Athenian talent.

Amogst a movement of professionals seeking to express the character of Athens is SARCHA (School of Architecture for all), an underground architecture collective of architects, urban planners, writers and other professionals whom take interest in the built environment (SARCHA 2010, 6). The intentions of SARCHA is to become a platform for dialogue amongst professionals and seeks to propose feasible built works for urban regeneration.

The influence and notice SARCHA has received from other European countries stands as an example of how bottom-up collectives are gaining traction in Athens. It is a movement that considers that ideas need to emerge from the people, not just through legislature, therefore re-building Athens from the informal sector inwards towards the "government centric" center is critical to the health of the city. It is a strategy that is not meant to attack the current political system, but one that is meant to alleviate pressures from the larger "democratic" system. The most recent package to the ministry of culture by SARCHA suggests a series of interventions for a better Athens within this informal city. Simple suggestions such as benches and garbage disposal brings light to the lack of seating and garbage bins along street-scapes. The issues of quality paving is also raised - claiming

that damaged, unaligned and tall curbs make navigating this part of Athens unpleasant and inhibits a pace of leisurely strolling - necessary for encouraging mixing of Athenians through the streets (SARCHA 2010). *Stoas* are also an element of the Athenian street and have been integrated through the *polykatikia* typology. But its poor quality space in terms of materiality and articulation have many people dismissing them as unsuccessful. Architect Eleni Tzirtzilaki defends these *stoas*, claiming their protection from the sun and refuge from automobiles has immense value and we should focus on improving the space underneath. In parallel to improving their material quality, Eleni suggests we utilize the voids of Athens to create nodes of exterior spaces along the *stoa* (SARCHA, 2010). Street vendors and pedestrians can continue to use these stoas, while exterior spaces can act as rest points to escape the dense concrete centric city. The abuse of concrete in the city has led to an even greater challenge - unbearably warm summers. In the most extreme months of July and August, temperatures reach highs of 42 degrees Celsius and it is during these months that most residents choose to escape to the country side. The conditions result in a very unpopulated Athens during the summers with many people returning in September. The landscape of concrete radiates heat from the already hot sun and with little soft landscape to regulate the heat, the green house effect generated is of serious concern. Outside, full shade is sought under retractable canopies. The *stoas* provide some protection while traveling, but they are un-continuos and many find walking under tree lined streets to be much more comfortable.

The Agora

The successes of innovative thought in classical Athens can be attributed to the Agora (Market). A system that embraced the notion of *desmos*, encouraging cross-disciplinary interactions as opposed to the compartmentalized *polykatikia*. The Agora of modern times is based on buying and selling of products, but in contrast, the ancient Agora was based on knowledge. However the terminology still translates into the contemporary market place. In the present day, when you are actively listening to someone, you would say "I am buying (*agorazo*) knowledge."

The attributes to the Agora which contributed to its success can be broken down to three key features. *Stoas* provided relief from the strong Mediterranean sun. As opposed to the *stoas* of *polykatikias* which are for traveling, *Stoas* of the Agora were fragmented extensions of interior program and treated as nodes in which to converse. The second feature is location. The Agora was constructed at the intersection between converging streets. It was essential that the intersected arteries would lead to significant public nodes at each direction, preventing "dead end" streets. The third critical feature was the creation of a *platea*, functioning as the node along arteries it intersected. The collage of buildings is nothing but scattered pieces without the platea to bind them together.
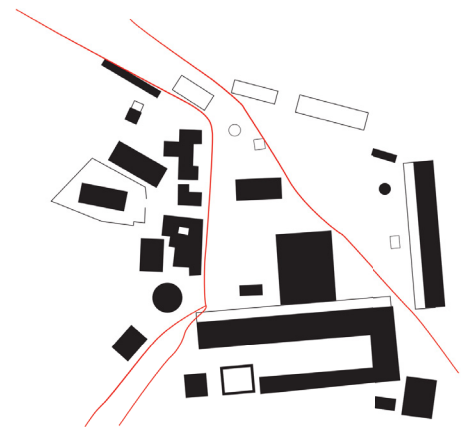
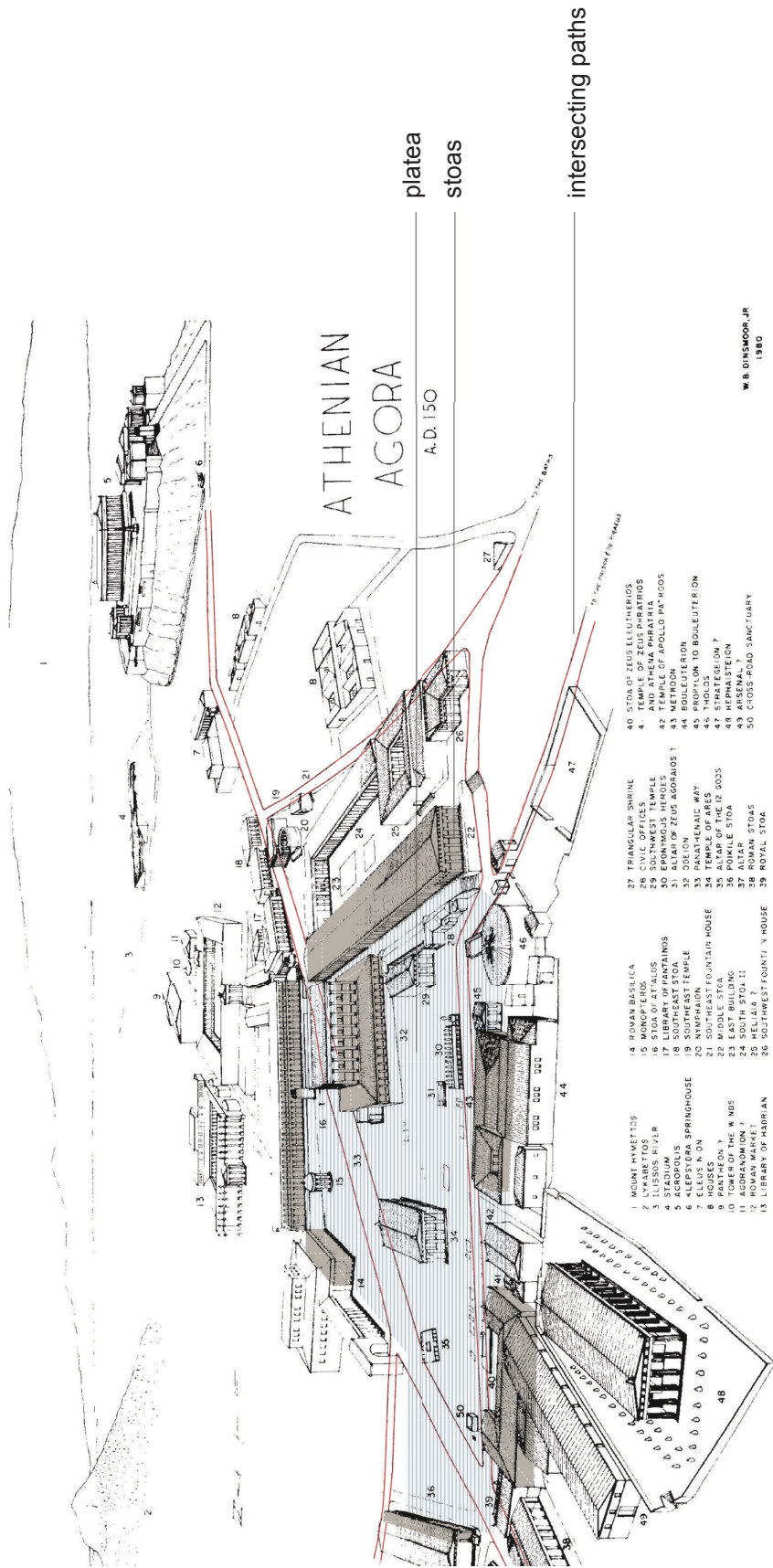Figure 32: Agora during the Hellenistic Period, illustrated in black are interior volumes.

platea

stoas

intersecting paths

ATHENIAN AGORA

A.D. 150

W.B. DINSMOOR, JR.
1980

1 MOUNT HYMETTOS
2 LYKABETTOS
3 ILISSOS RIVER
4 STADIUM
5 ACROPOLIS
6 KLEPSYDRA SPRINGHOUSE
7 ELEUSION
8 HOUSES
9 PANTHEON ?
10 TOWER OF THE WINDS
11 AGORANOMION ?
12 ROMAN MARKET
13 LIBRARY OF HADRIAN
14 ROMAN BASILICA
15 MONOPTEROS
16 STOA OF ATTALOS
17 LIBRARY OF PANTAINOS
18 SOUTHEAST STOA
19 SOUTHEAST TEMPLE
20 NYMPHAION
21 SOUTHEAST FOUNTAIN HOUSE
22 MIDDLE STOA
23 EAST BUILDING
24 SOUTH STOA II
25 HELIAIA ?
26 SOUTHWEST FOUNTAIN HOUSE

27 TRIANGULAR SHRINE
28 CIVIC OFFICES
29 SOUTHWEST TEMPLE
30 EPONYMOUS HEROES
31 ALTAR OF ZEUS AGORAIOS ?
32 ODEION
33 PANATHENAIC WAY
34 TEMPLE OF ARES
35 ALTAR OF ARES
36 POIKILE STOA
37 ALTAR
38 ROMAN STOAS
39 ROYAL STOA

40 STOA OF ZEUS ELEUTHERIOS
41 TEMPLE OF ZEUS PHRATRIOS AND ATHENA PHRATRIA
42 TEMPLE OF APOLLO PATROOS
43 METROON
44 BOULEUTERION
45 PROPYLON TO BOULEUTERION
46 THOLOS
47 STRATEGEION ?
48 HEPHAISTEION
49 ARSENAL ?
50 CROSS-ROAD SANCTUARY

Figure 33: The Ancient Agora and its three defining characteristics (data from Traulos 2005)

People's tendencies towards a more collective and collaborative environment makes the Agora more relevant than ever before. As the urban discourse for Athens needs to be diverted from specialized large scale infrastructure towards interventions which impact the everyday routine, it becomes important to take lessons from the Agora and apply them to the Athenian city block. Interestingly, traces of the Agora are present in contemporary Athens. *Stoas*, although mismanaged appear along streets. Open spaces exist and the flexibility of the *polykatikia's* concrete frame has potential to be re-adapted towards more collective nodes for exchange in expertise.

Figure 34: Stoa of Attalos, 2013

This thesis proposes careful injection of common work spaces, public nodes and revised circulation systems. These three elements are orchestrated by the lessons learned from the ancient Agora, re-imagining the Athens' city block as a micro-agora in the city.

CHAPTER 6: SITING

Urban Composition of Athens

By looking at Informal Athens in its entirety, we can distinguish specificities in character for each block which make each city block unique from its neighbour. In addition, by knowing what the public nodes are and where people congregate, we can ensure the intervention at the scale of the city block still relates to the city scale. Monastiraki square is the intersection between international visitors and local Athenians seeking to experience the city. To the north lies the public market and in between is the district of Psiri. The thesis challenges a city block deep within Psiri and attempts to intersect the two aforementioned public squares. The case study block is at the corner of Pallados and Miaouli streets not only embodies all the prototypical characteristics of Athens, but is also at close proximity to other public nodes of the city.

Figure 35: Monastiraki Square, 2013

Figure 36: Athens Public Market, 2013

public nodes
within informal center

spines of activity

metro A_1
metro A_2
metro B
metro C
metro D

highest traffic
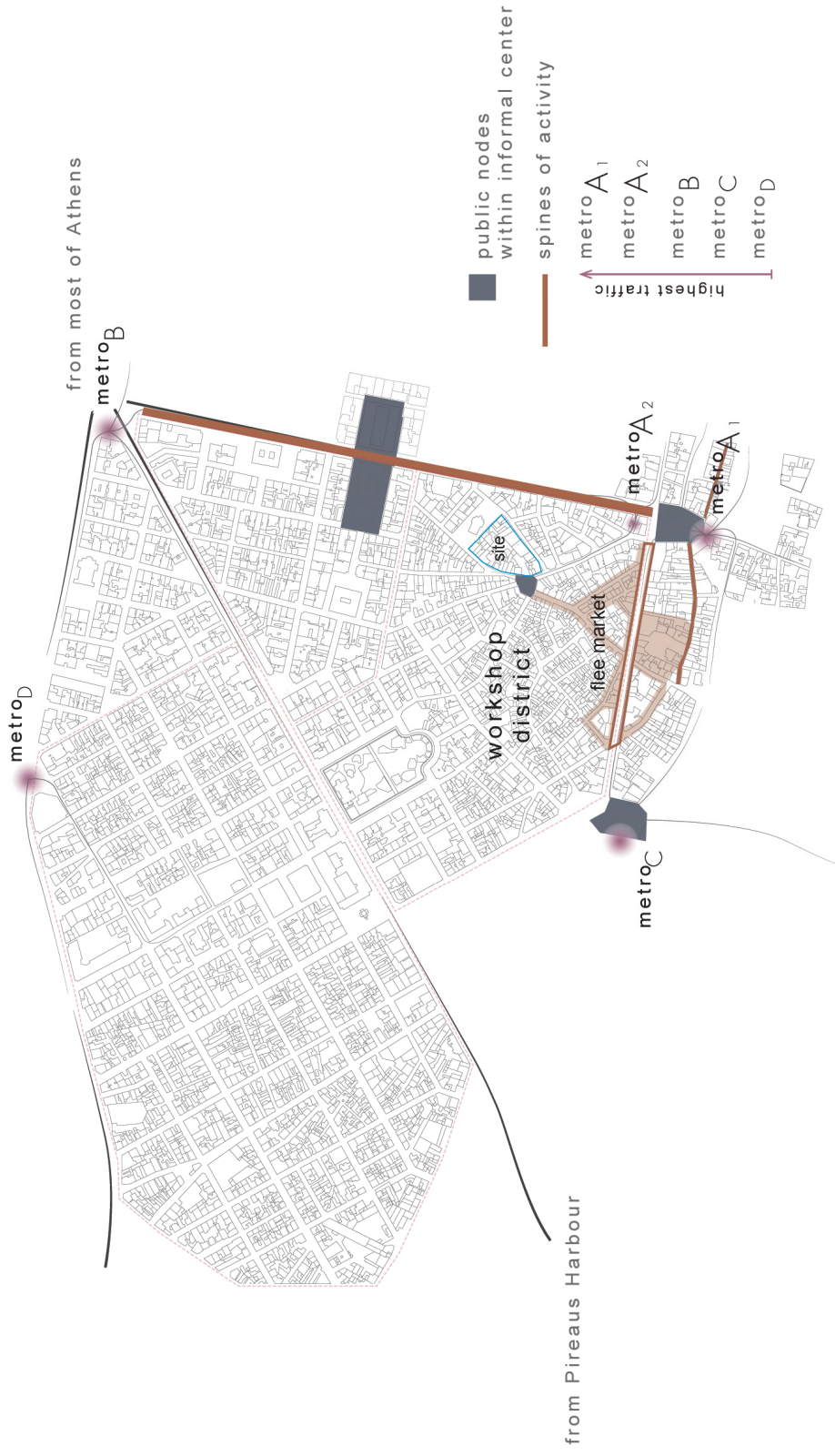
Figure 37: Public nodes of
interest in Athens.

from most of Athens

metro$_B$

metro$_D$

metroA_2

metroA_1

site

workshop
district

flee market

metro$_C$

from Pireaus Harbour

exhibition spaces
performance spaces
art gallery
art/design innovation centers
restaurant
club/bar
shops
tourist shops
govenment building
automotive garages
craftsmen

ATHENS?

ATHENS!

DANGER
DANGER
DANGER
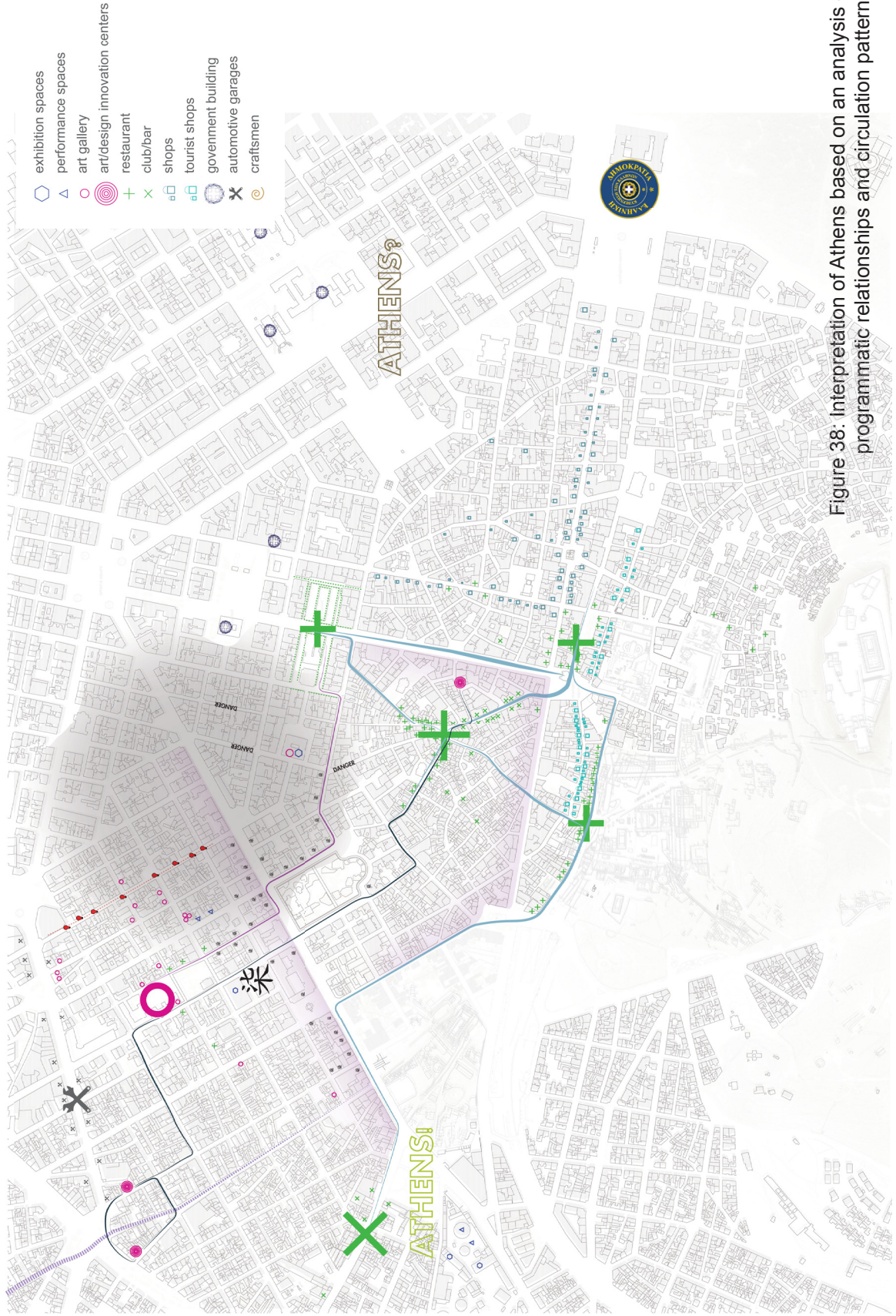
Figure 38: Interpretation of Athens based on an analysis of programmatic relationships and circulation patterns.

City Scale Circulation

The street and the way one moves through it is the city's lifeblood. Its flow informs who meets who, when people cross when, and most importantly what you find where. While in motion, you are exposed to the greatest range of events and people. The coincidences, the exchange of information and encounters will happen during the unexpected. The act of moving through the city is therefore a force much larger than the building components that attach to it. By moving through Athens, the destination can be less important than what happens along the way. The street drives not only movement of people but also acts as a platform for selling, trading, meeting and communication, its dynamic nature make *peripato* (περίπατο), or leisurely strolling, one of Athens' greatest past times.

The most successful circulation systems are those which have no clear end or start, but rather are loops through the city. To integrate the micro-agora into the system of the city, Figure 39 reveals pedestrian circular loops of travel and seeks to intersect these existing loop patterns of the city with movement through the city block.

Figure 39: Study mapping out circular loops in the city based on patterns of movement and points of interest.

site

acropolis

Figure 40: Project location in the heart of Psiri. Shaded
in red to the North East is the Re-think Athens project.

Figure 41: Existing conditions of thesis site, 2013

CHAPTER 7: RE-DESIGNING A CITY BLOCK

Architectural Framework

As we begin to re-imagine spaces in the city, it becomes important to be critical about proposing new structural technologies. With every modification on familiar construction methods comes the need for more time to invest in research and leads to potentials for added costs in transporting materials and knowledge from foreign sources. Structurally, few changes have been made to the *polykatikia's* concrete post and beam construction system since the 1960s, resulting in a local expertise of this building type.

As the thesis is about creating spaces and circulation systems, it is also important we do not limit ourselves to the existing structure. Yet a series of studies (see Figures 125-148) revealed that we do not need a new structural technology to create the desired spaces - the possibilities of the *polykatikia* have not been exhausted.

Not only does the thesis use the familiar concrete post and beam construction, but typical brick plastered walls are also maintained as part of the architectural palate. The play on spaces occurs by re-arranging floor slabs and walls to articulate new relationships between inside and out. Once we start thinking about the structure, walls, floors and stairs as a kit of parts, we can mold these elements to work more organically with the forces and ecology of the site.

Figure 42: An unfinished *polykatikia* amidst the district of Psiri, 2013

Figure 43: An unfinished parti wall reveals the wall construction as infill between the concrete structural frame, 2013

NE Polykatikia

NW Polykatikia

SE Polykatikia

SW Polykatikia
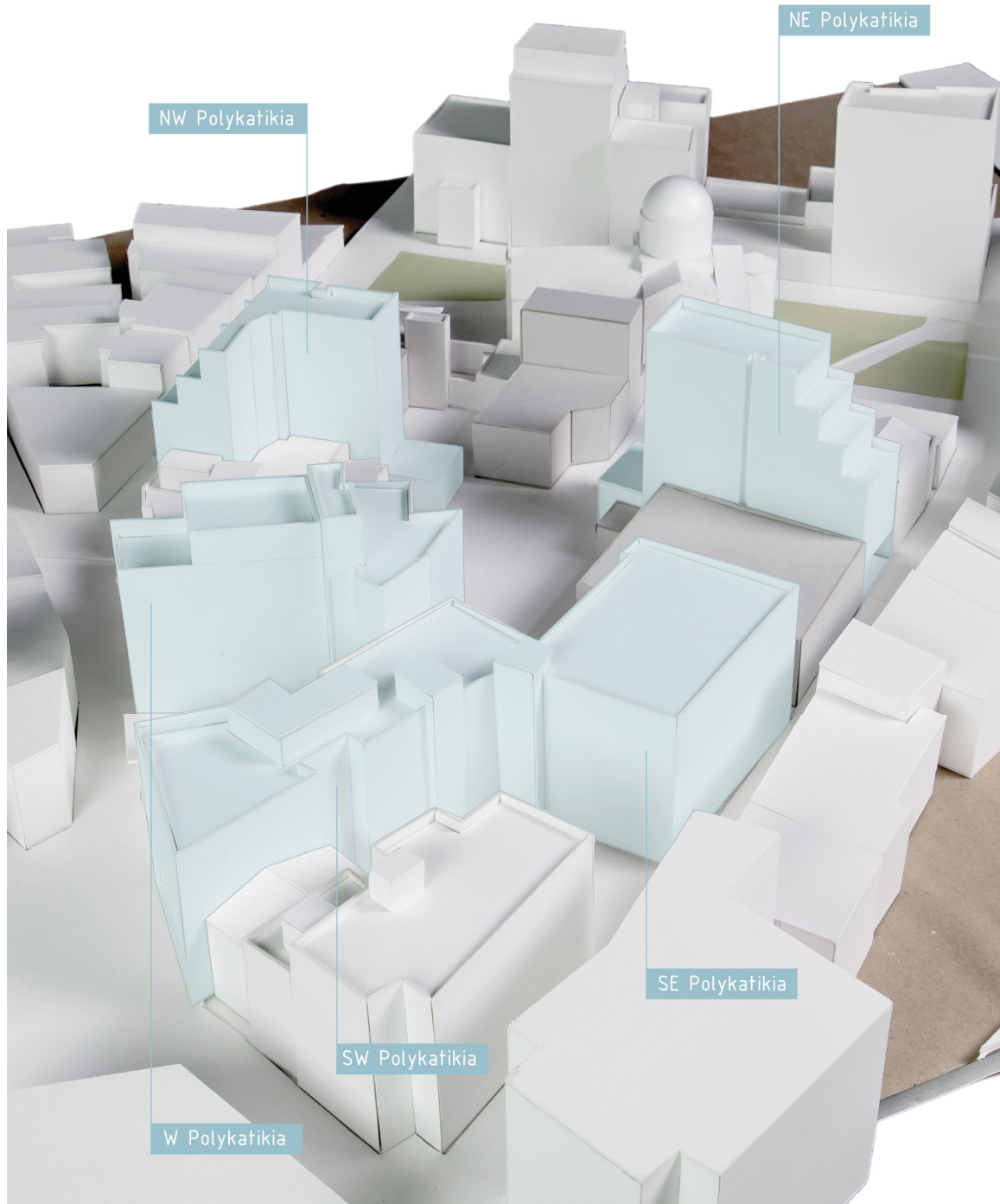
W Polykatikia

Figure 44: Existing city block. Highlighted in blue are the five *polykatikias* to be addressed for this thesis.

Existing NE Polykatikia structure

New structure

Existing NW Polykatikia structure

Figure 45: Structural study of creating a new architecture based on the familiar post and beam technology. Modeled at 1:100

Figure 46: Early schematic. Striping the polykatikia from its monolithic wrapper allows for a greater degree of customization and therefore expression of activity. New program is represented by the blue volumes, inserted between the frame. Circulation no longer is limited to cores, but rather serpentines through the new program, along the frame.

to athens public market

to platea monastiraki

■ new structure to support bridge addition
■ exisiting structure to support tower complex

1 2   4   8   16m
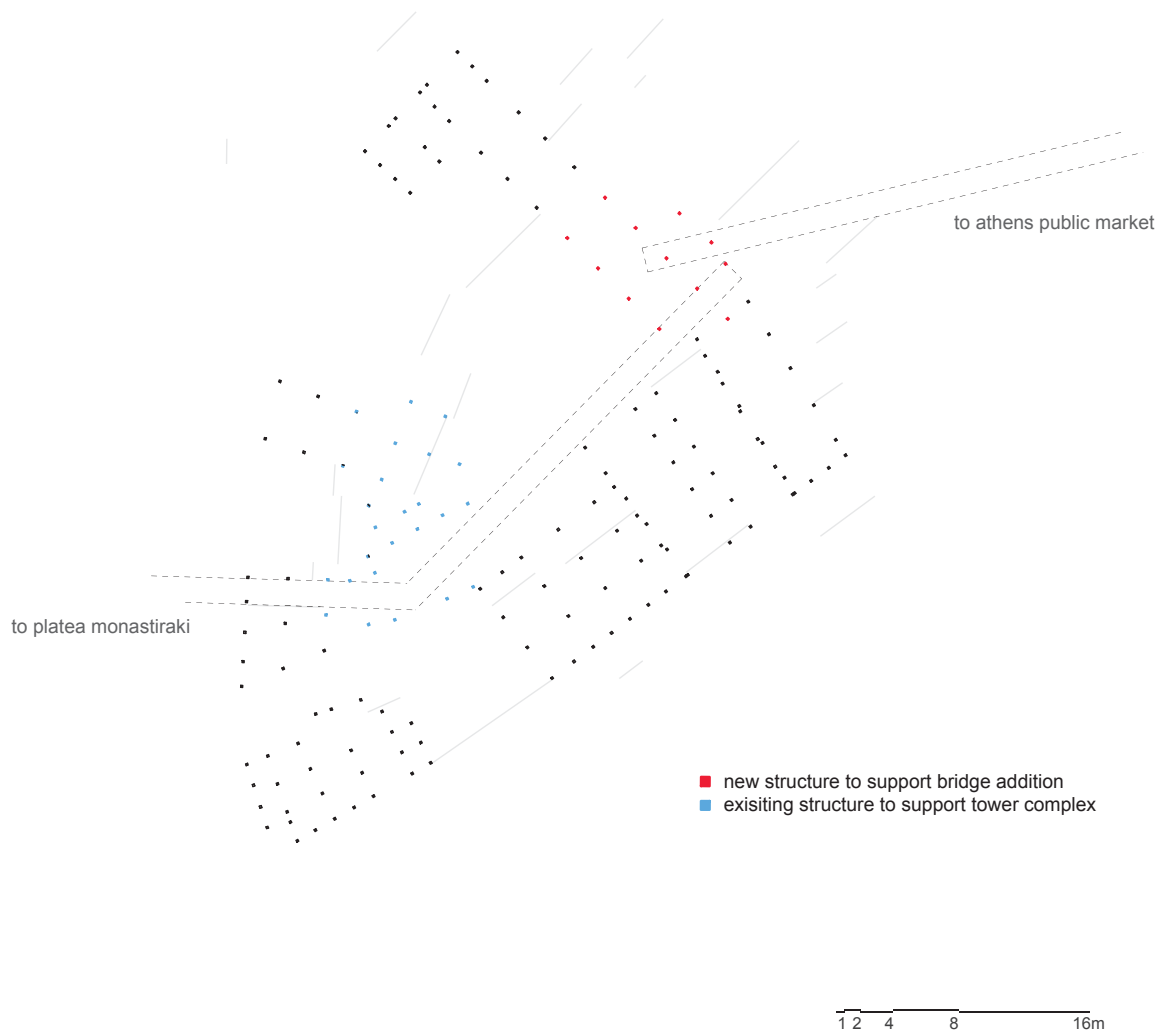
Figure 47: Structural columns of *polykatikias* on site illustrating new structure and existing structure to be used for new design.

Circulation in the City Block

Not only is it important to plug architecture into the circulation system, but it is important to extend circulation loops from the city scale into the city block. Multiple passages create redundancy in circulation, encouraging exploration of the city block. The thesis designs paths through the *platea* and between *polykatikias.* The circulation networks within the architecture and platea are designed in parallel and are intersected with the street network to allow public engagement with the activities of the block.

Three interventions have been designed to form a more networked city block. The aim is not only to link the program horizontally, but also vertically, helping reduce the "layered cake" effect of the city. The bridge links the NE and NW *polykatikias*. The Tower links the W, SW and SE *polykatikia*. The creation of the *platea* in the center forms a hinge between the Tower and Bridge intervention, providing a central node for the users of the block at the point of converging paths.

North city block

Agiou Dimitriou Street

North west
city block

to athens public market

Pallados Street

to platea monastiraki

South east
city block

defined boundaries

⟋ inner walls of site

⟋ street edge

⟋ walls N of site

⟋ walls NW of site

⟋ walls SE of site

Miaouli Street

1 2   4   8   16m

Figure 48: The *platea's* amorphous character is gener-
ated by reaching between buildings of site and adjacent
city blocks. By engaging neighbouring city blocks, the
platea is woven into the city, ensuring it is not a trapped
isolated entity.
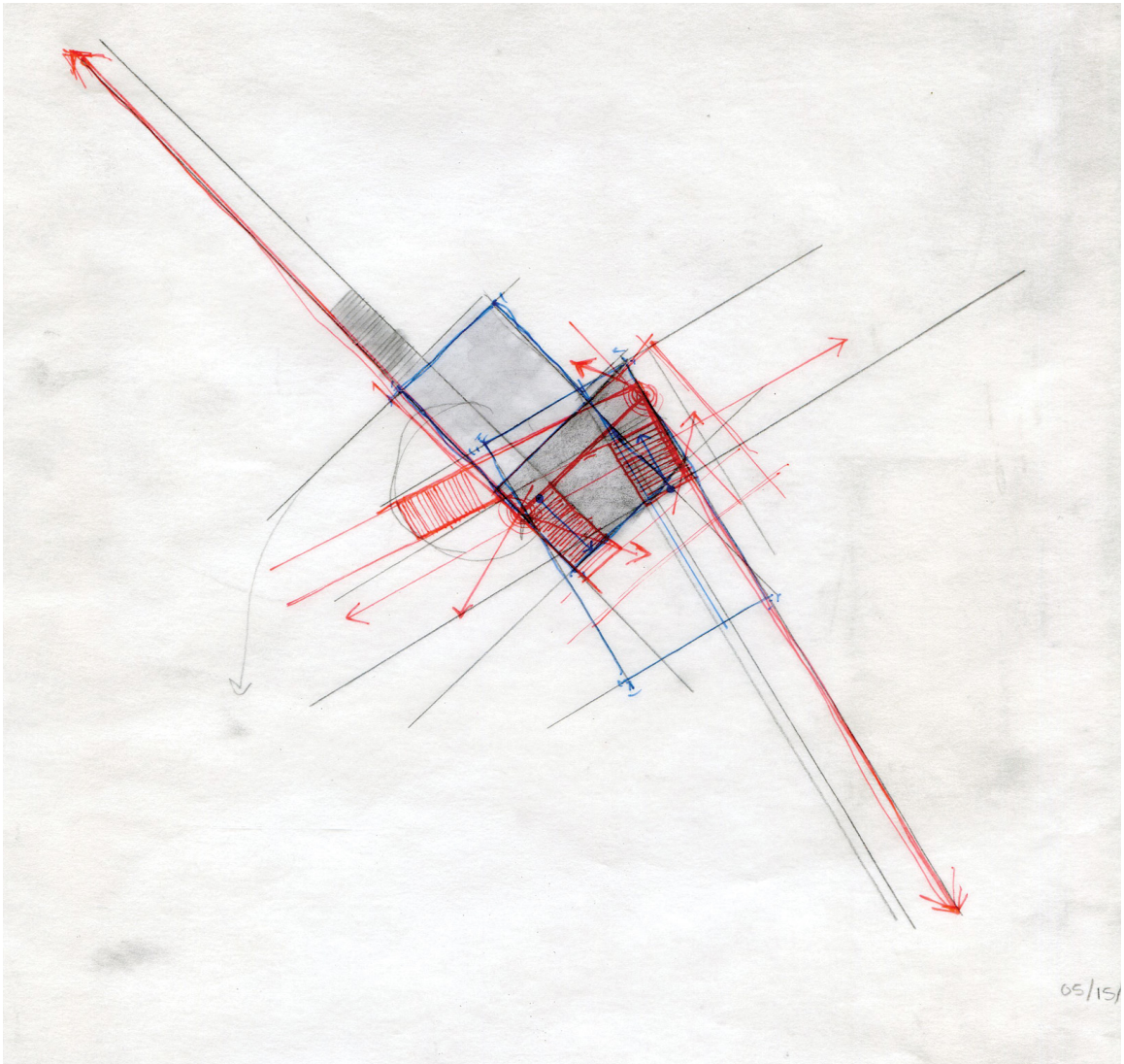
Figure 49: Forces of the site combined with forces of potential movements between NW and NE *polykatikias.*

to athens public market

to platea monastiraki

edges of adjacent blocks

main circulation into platea

secondary circulation into platea

circulation above

platea

1 2   4   8   16m
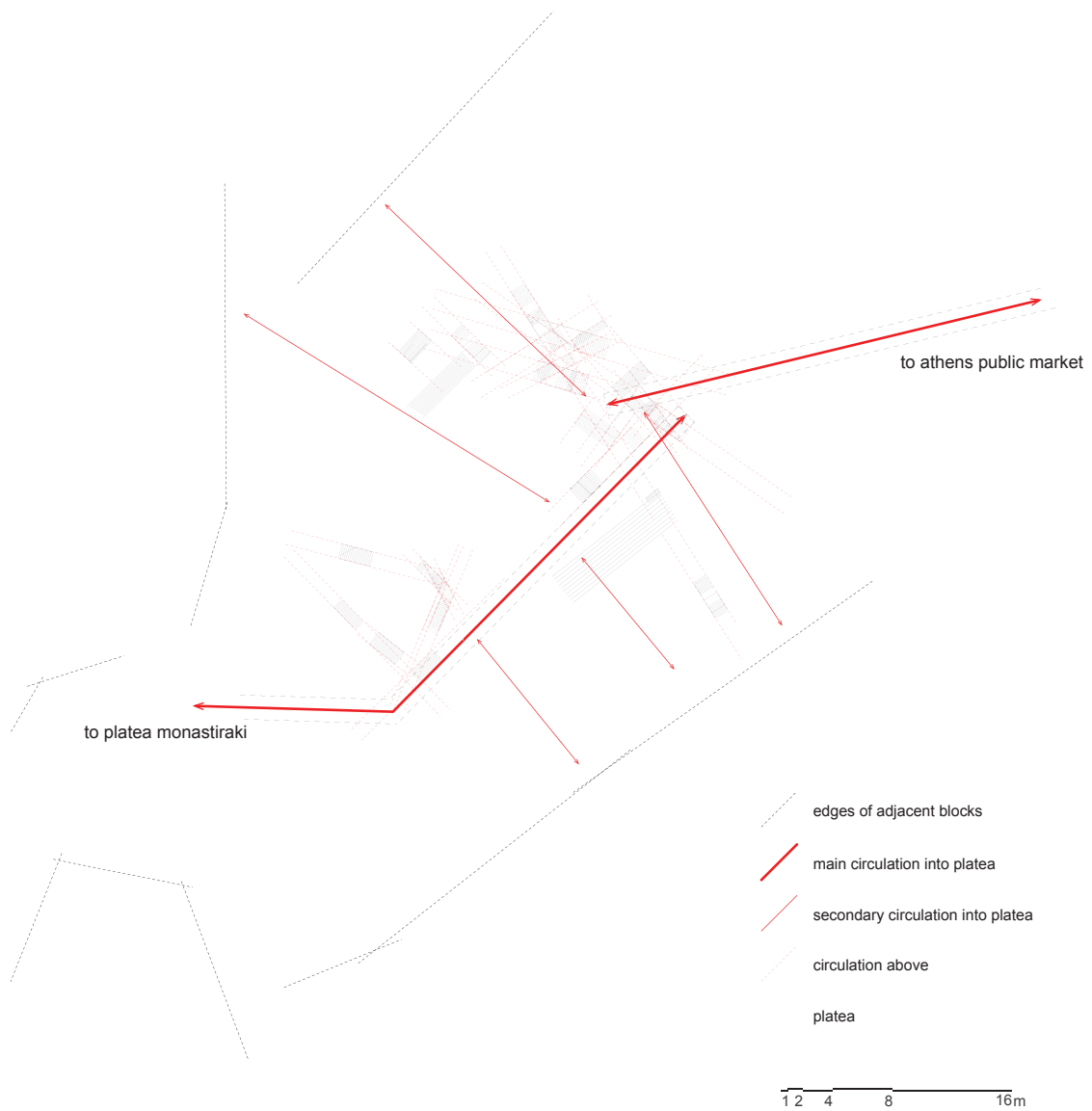
Figure 50: Circulation routes through the system divided
into primary, secondary and vertical routes. A primary
route links the *platea* to the Athens Public Market and
Platea Monastiraki. The designed *platea* becomes a
swelling of the street along this primary circulation route.

to athens public market

to platea monastiraki

1 2 4   8   16m
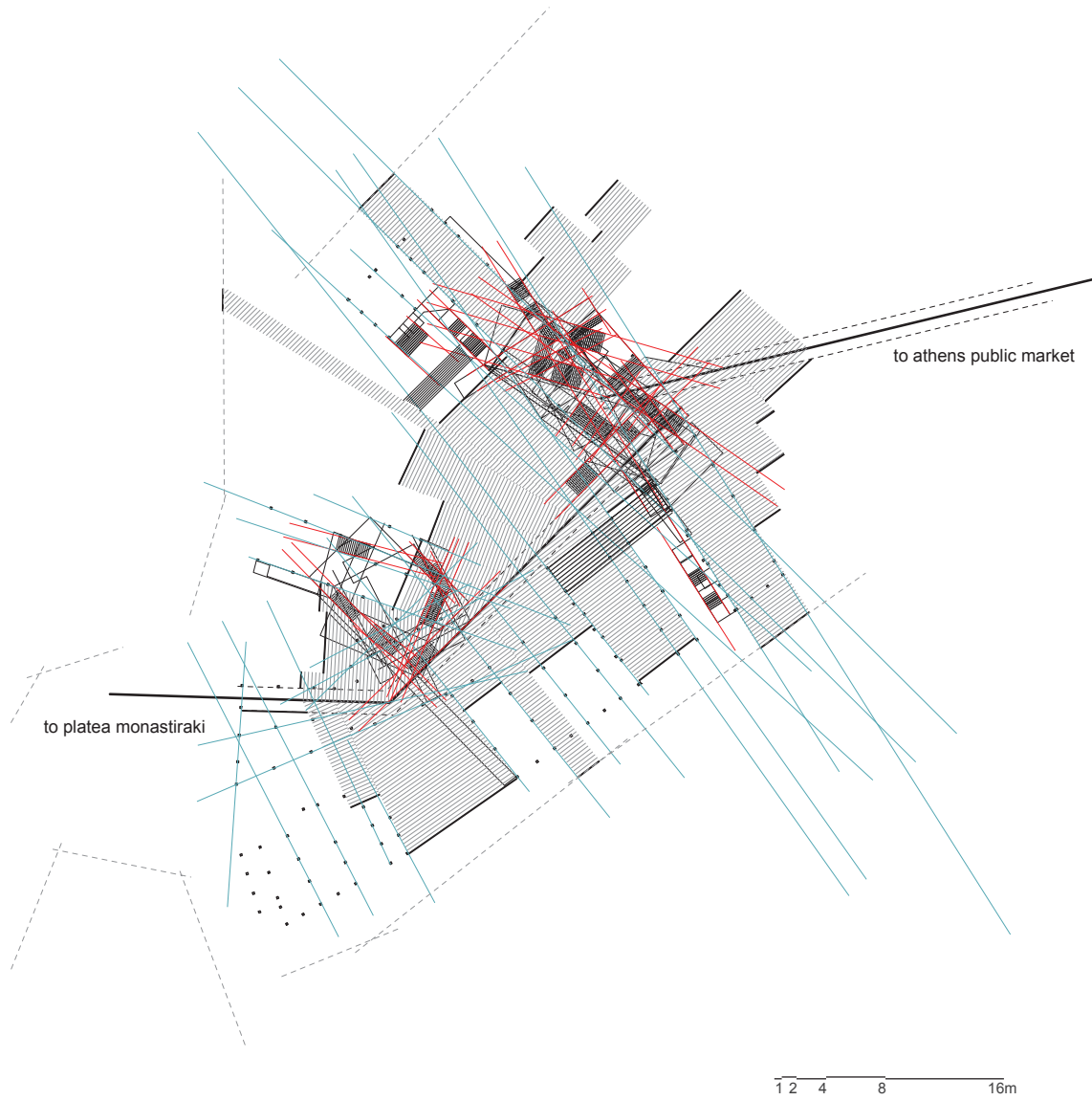
Figure 51: Generator diagram illustrating structural forces, public spaces and circulation acting in sync to create the proposed micro-agora system.

vegetable
market

meat
market

190m

75m

ing an increase in vacancy. The trend is for design studios
er of the city

ure. These restaurants are
sin, but international

rkshop district

290m

sunday flea market

metro A₂

monastiraki square

metro Δ
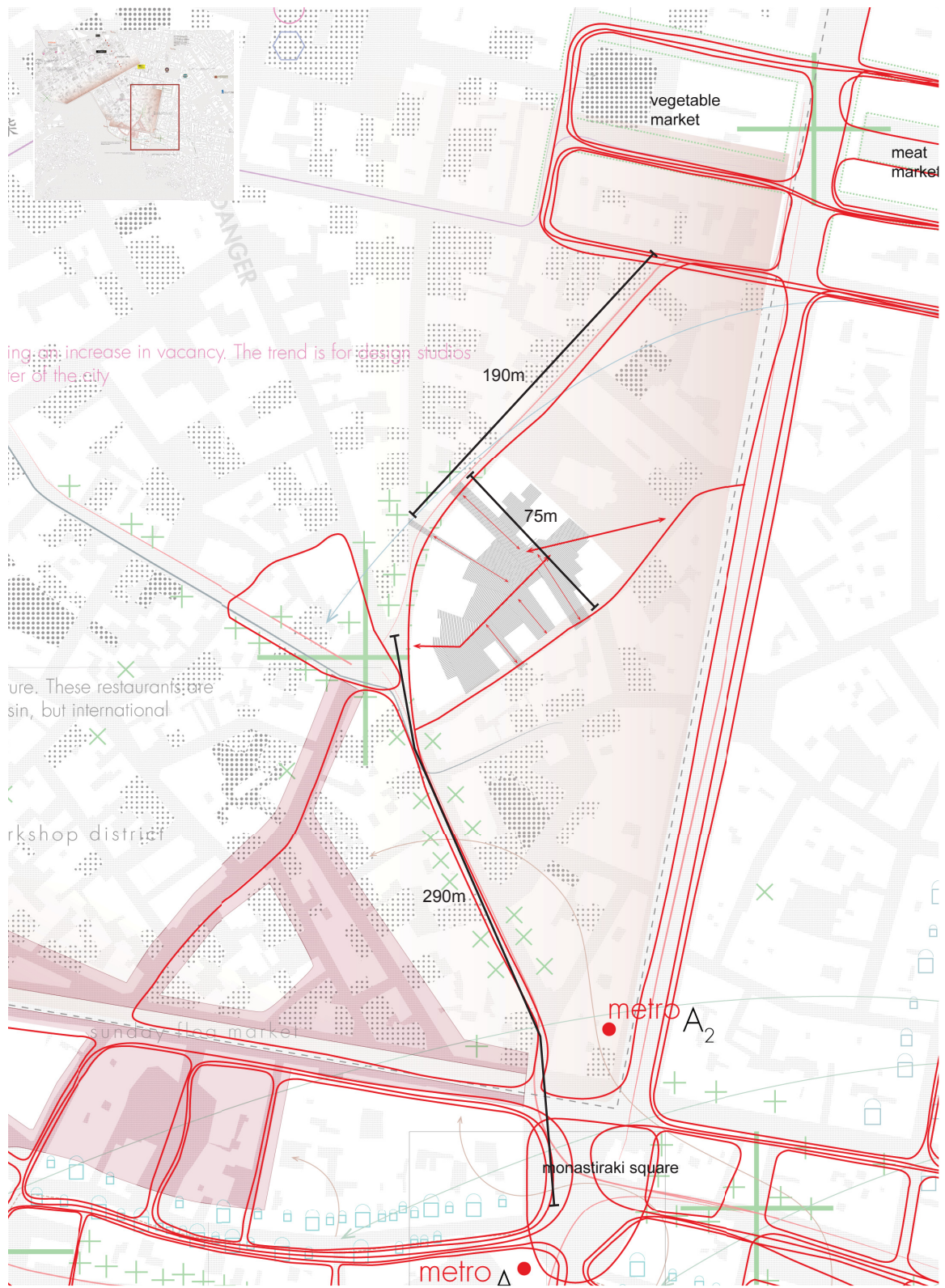
Figure 52: Positioning of thesis within the city scale of Athens.
Illustrated in red is the main pedestrian circulation network of
the city.
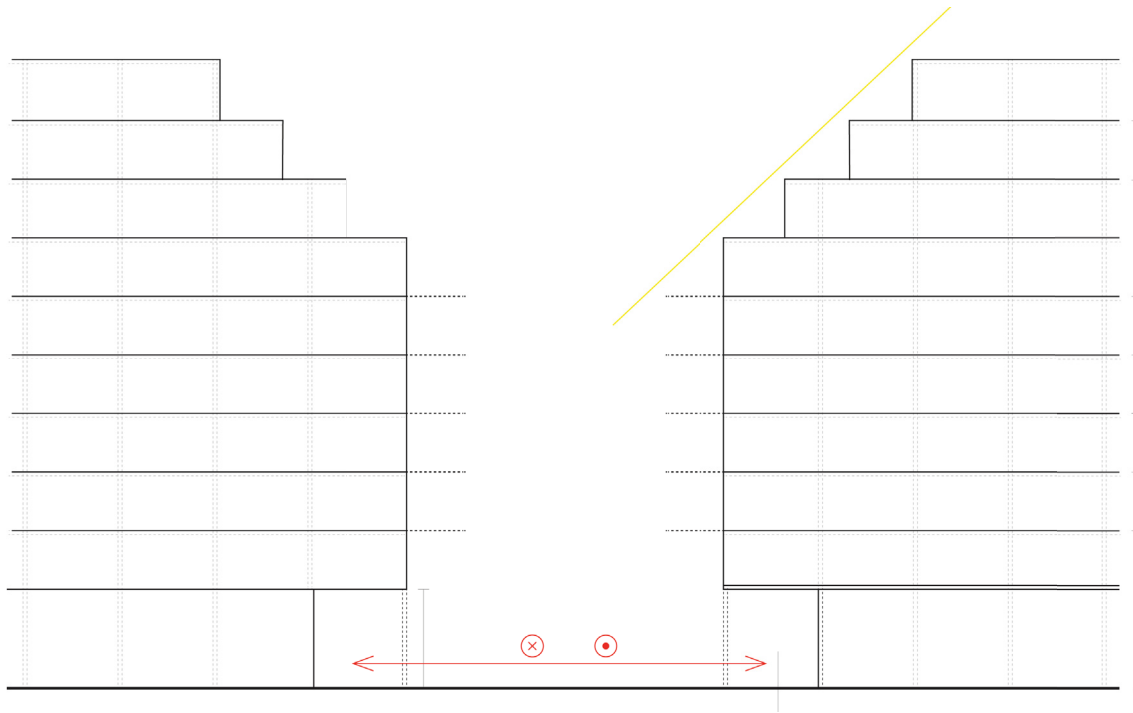
Figure 53: Currently linkages between buildings is only provided by the street.

height: 3.5m
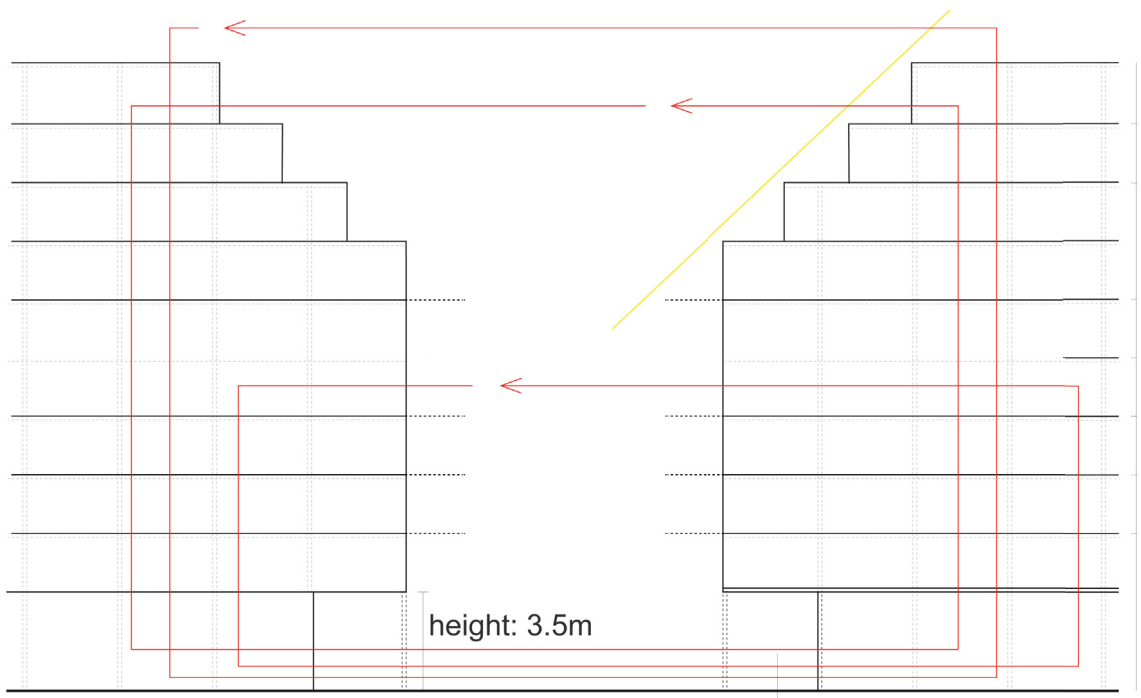
Figure 54: By adding new circulation, the vertical layers of the city become unified, exposing the workshop layer of the polykatikia and disintegrating Athens' layered cake effect.

NW Polykatikia

NE Polykatikia

SE Polykatikia

SW Polykatikia

W Polykatikia

Figure 55: Revealing the site's existing circulation system. The street effectively links the city blocks together. However the vertical circulation provides little engagement between layers of the city.

NE Polykatikia

NW Polykatikia

Bridge

Platea

Tower

SE Polykatikia

SW Polykatikia

W Polykatikia
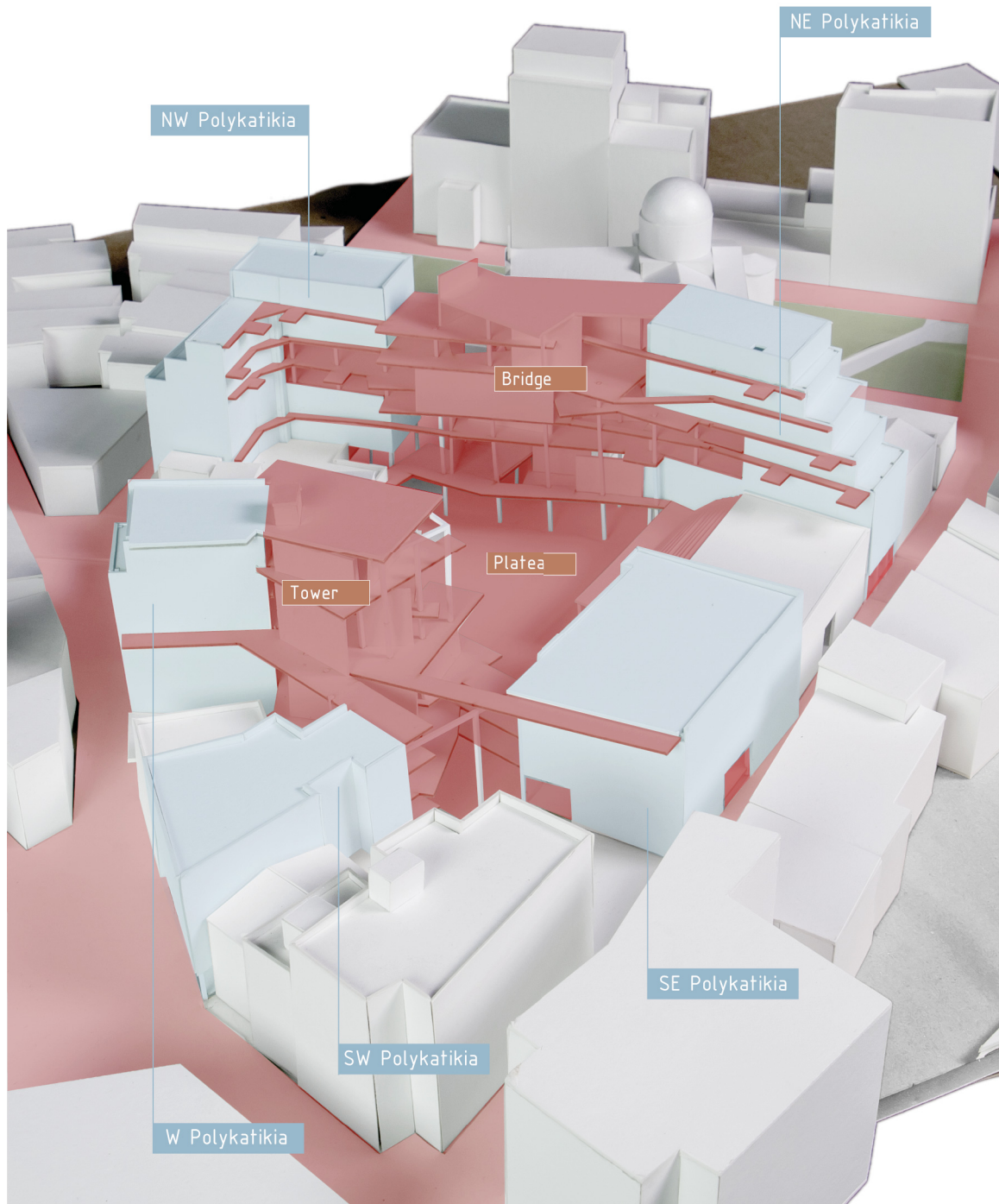
Figure 56: Proposed bridge, tower and platea provide
a new circulation system.

existing public vs private

public spaces
private/inacessible

proposed public vs private
relationships on ground floor

Figure 57: Adaptations in public and private zones
of ground floor for the city block.

existing active public domain

public spaces
private/inacessible

proposed public domain
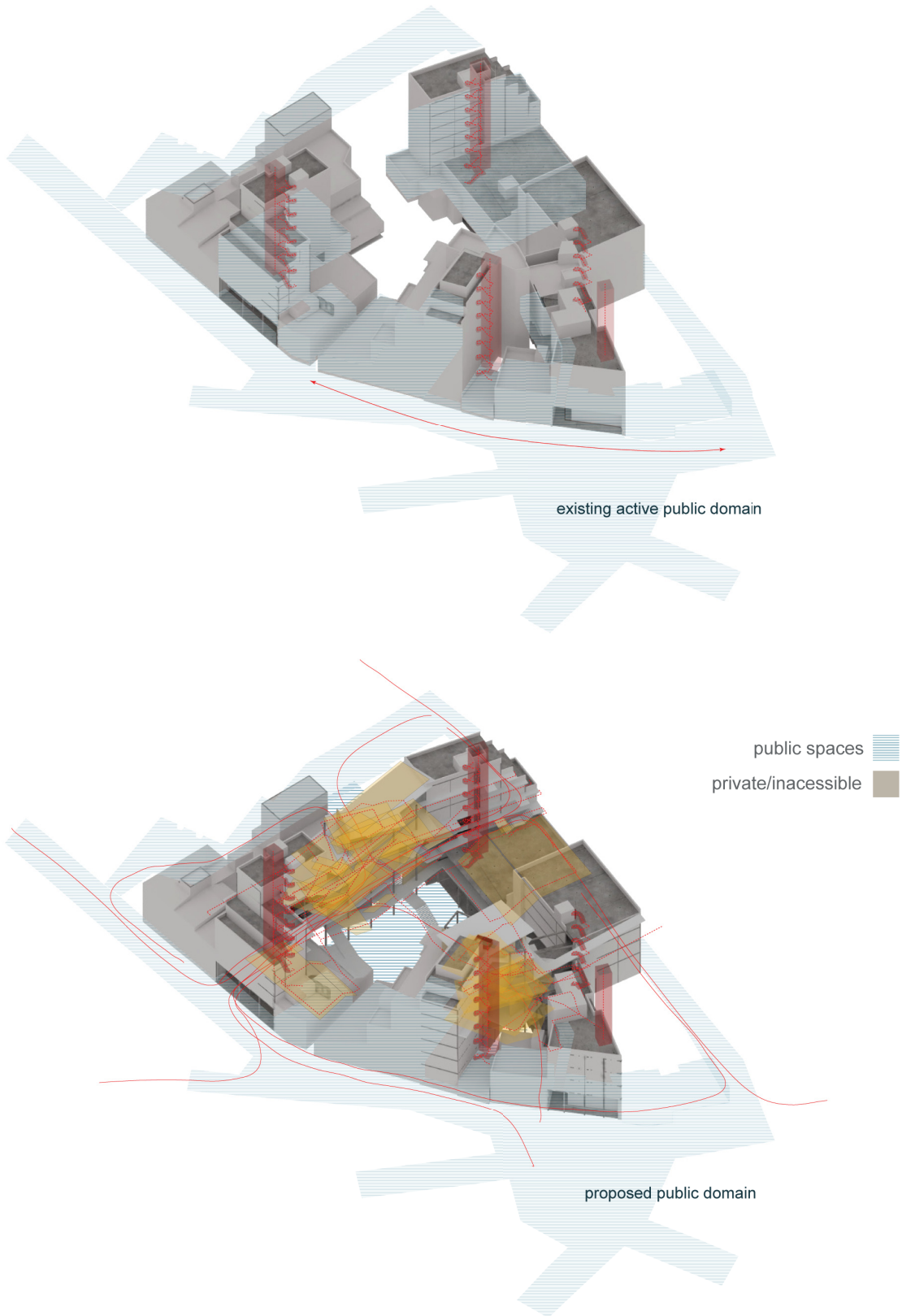
Figure 58: Adapting routes through the city block and intersecting these routes with a central public node.

to north-east polykatikia

to north-west polykatikia

to north-west polykatikia

to platea
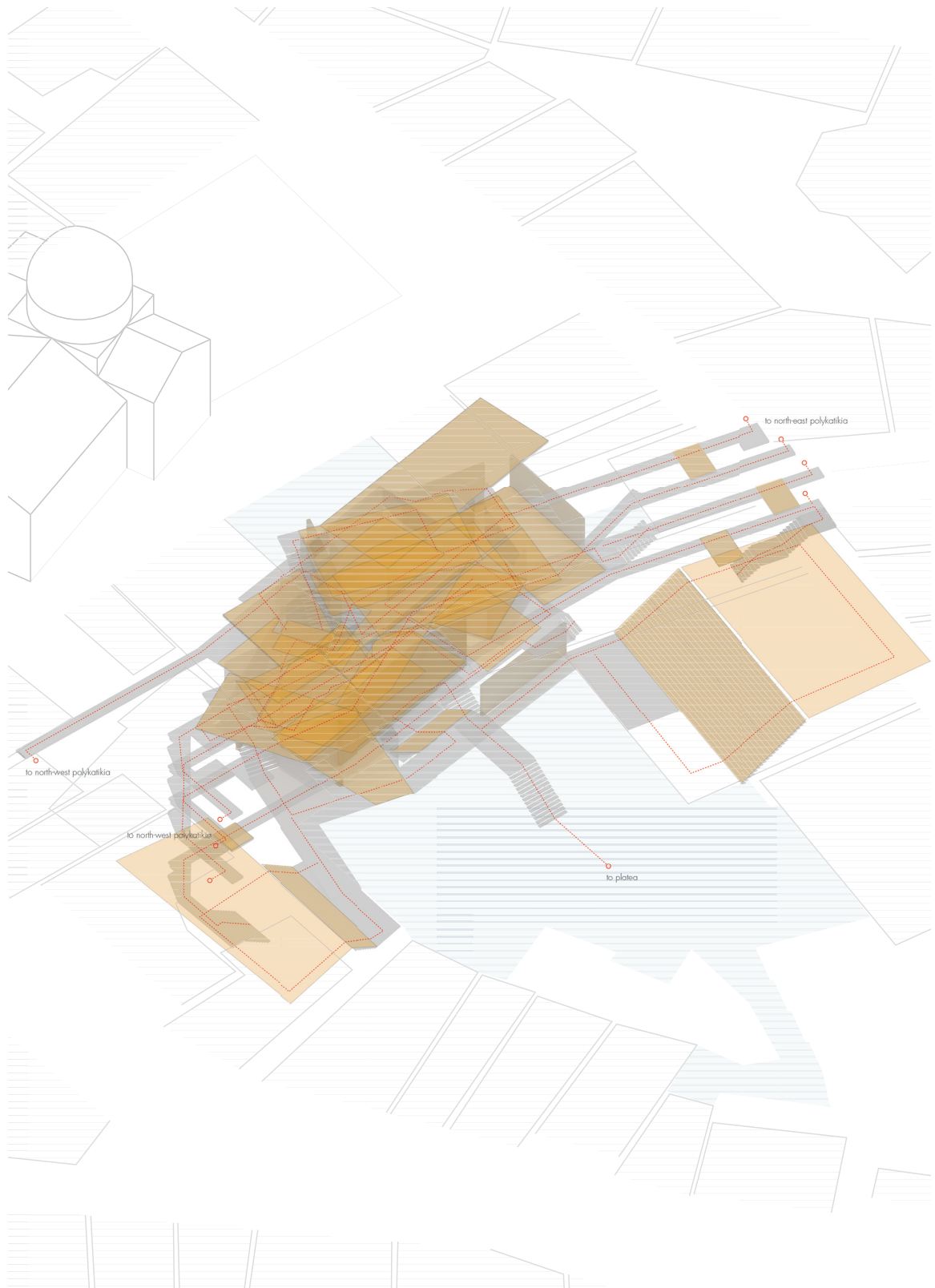
Figure 59: Proposed bridge addition. Orange represents new spaces which are intersected by circulation routes.

NE Polykatikia

sixth floor

NE Polykatikia

fifth floor

NW Polykatikia

NW Polykatikia

NW Polykatikia

NE Polykatikia

fourth floor

NW Polykatikia

NE Polykatikia

NE Polykatikia

third floor

NW Polykatikia

second floor

NW Polykatikia

first floor

NW Polykatikia

Platea

Bridge

↗ towards upper floor

╱ circulation

○ intersection of paths

↗ towards exisiting
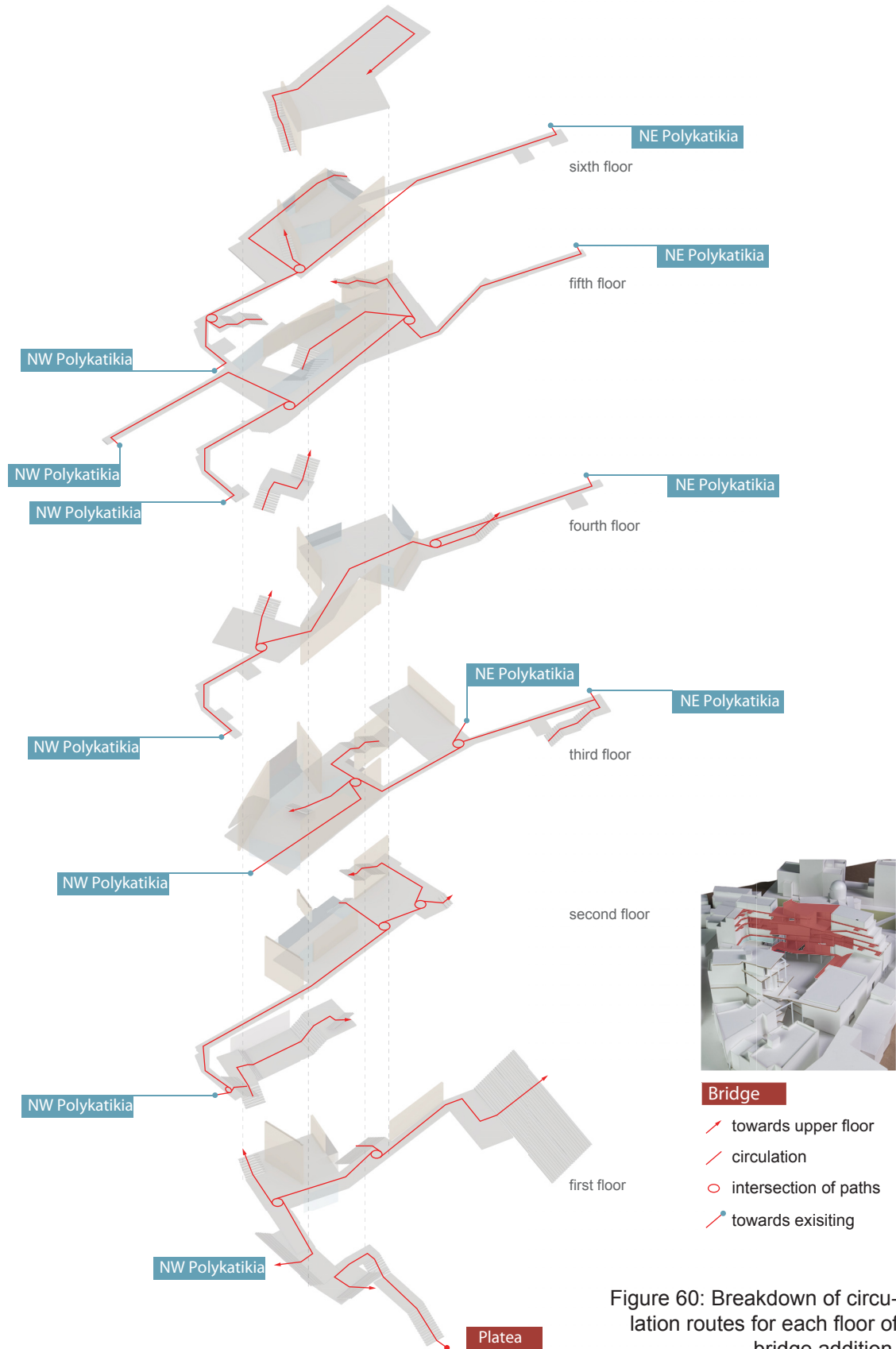
Figure 60: Breakdown of circulation routes for each floor of bridge addition.

to east polykatikia

to east polykatikia

to south-west polykatikia

to south-east polykatikia

to platea
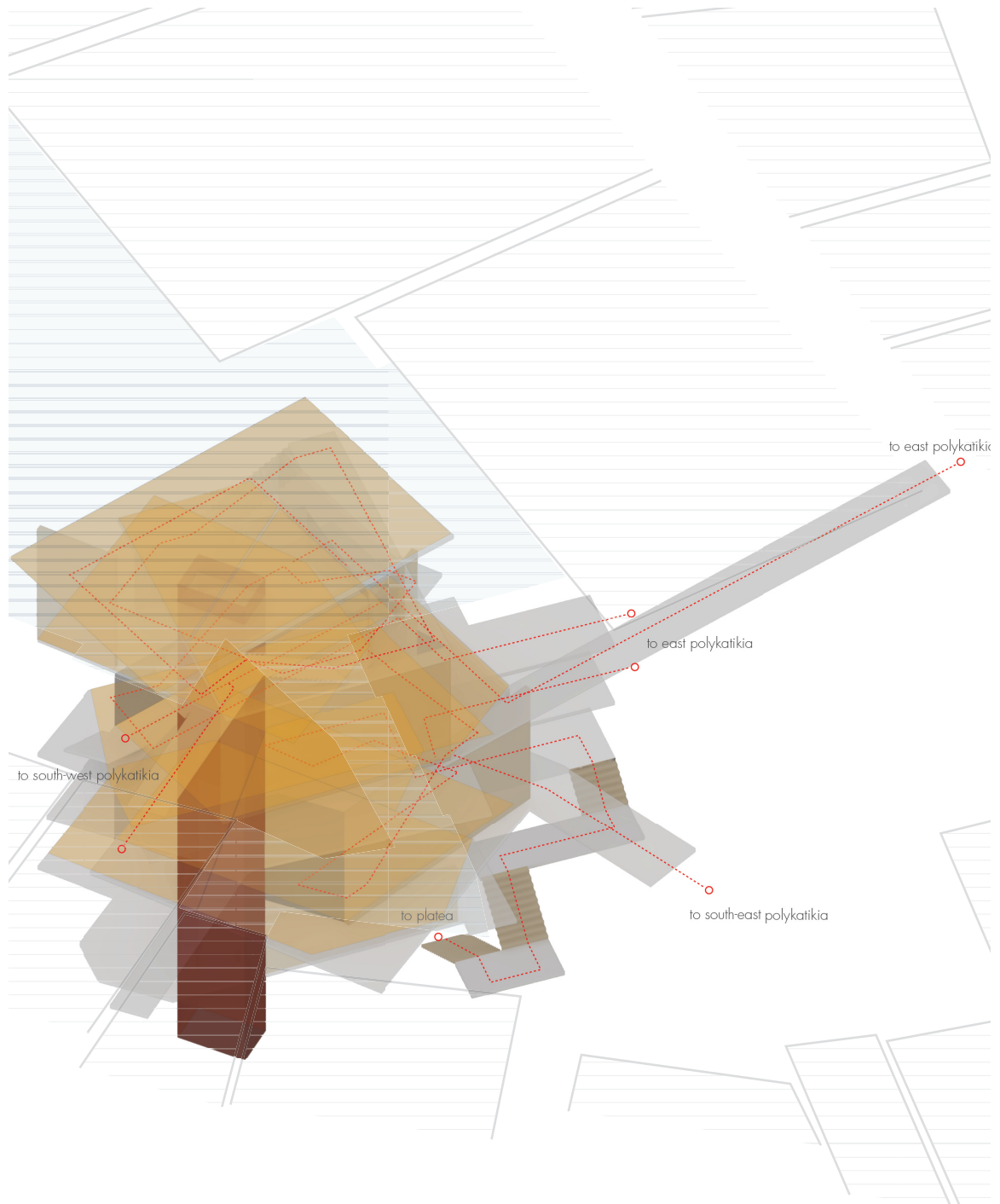
Figure 61: Proposed tower addition. Orange represents
new spaces which are intersected by circulation routes.

W Polykatikia

sixth floor

fifth floor

SE Polykatikia

fourth floor

SW Polykatikia

SE Polykatikia

W Polykatikia

third floor

SE Polykatikia

SW Polykatikia

second floor

first floor

SW Polykatikia

Platea

Tower

↗ towards upper floor

╱ circulation

○ intersection of paths

↗ towards exisiting
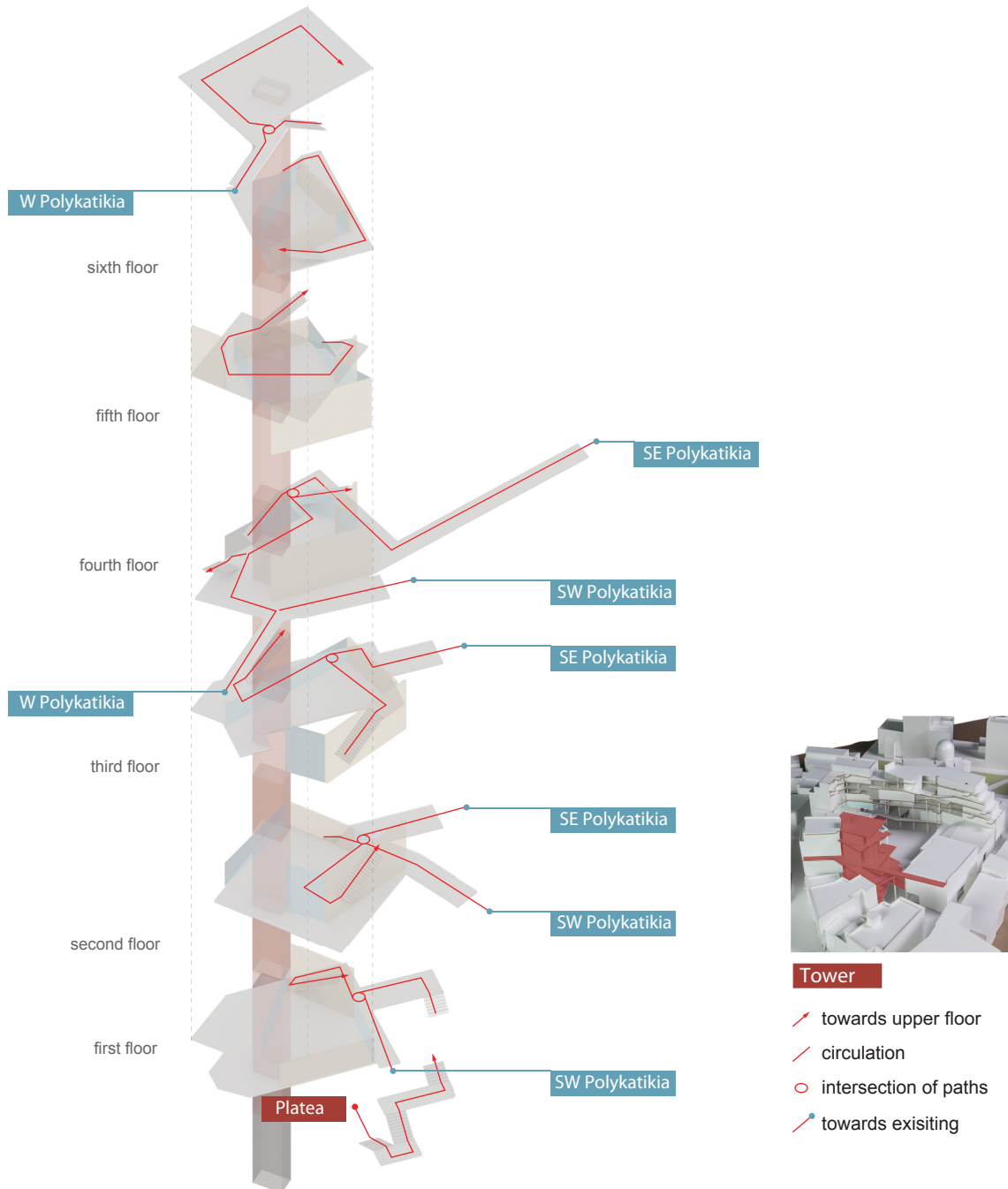
Figure 62: Breakdown of circulation routes per floor for tower addition.

Curating the City Block

The city block of Athens is a dynamic system of activities from musicians, to shoe makers and seamstresses to taverns all within a single city block. Supplementing new program into the system requires an understanding of current activities, explored simply by observing the site and talking to users who work in the city block.

Restaurants occupy the west ground floors, which utilize the street and Platea Iroon for seating. However small sewing studios and shops selling leather also have street presence.

Figure 63: Taverns of Agiou Dimitriou Street, 2013

Figure 64: Stores of thesis site, 2013

Beyond maintaining a restaurant and bar culture, Platea Iroon functions as an intersection of paths supports seasonal markets.

Figure 65: Cheese market during the days preceding Greek
Easter on Platea Iroon, 2013

Moving up, deep into the polykatikia hide workshops and studios. The flexibility of the spaces have lend themselves to a myriad of program. Unlike studios of the ground floor, these users have the privilege of much larger spaces.

Figure 66: Manolis has been sewing mens dress shirts for years. He is occupying a full floor of the *polykatikia* which allows him room to work and store his goods in the same space, 2013

Figure 67: Manolis' workshop on the sixth floor of the
NE *polykatikia* in thesis site, 2013

Figure 68: Pavlos takes prides in the shoes he produces. Along with
his partner Kosta, they run a small workshop on the seventh floor
of the polykatikia. Their hours are long, arriving to work at 6am.
Their biggest challenge today is establishing a network to sell their
products abroad, 2013

Figure 69: Kosta the cobbler preparing leathers
for shoe making, 2013

Figure 70: Pavlos and Kosta's workshop within the
NE polykatikia of site, 2013

Figure 71: Artist in residence programs of the city allow for emerging artists such as Basilis to establish a career for themselves. Pictured is Basilis stamping his artwork onto T-shirts, 2013

Program

Proposed Program

The thesis does not seek to displace the existing demographic, nor their existing workplaces. Their personal spaces are part of the worker's identity and take enormous pride in their workshops. Instead it is about introducing additional common workspaces which link the existing workshops through a new circulation network. The approach is to think of the city block in terms of served and service zones. Currently the compartmentalized nature of the workplaces creates a system of almost exclusively served zones. In other words, the city block is an amalgamation of private workspaces for each worker without any common service spaces to be shared amongst the users of the city block, inhibiting desires for resource sharing. The new program seeks to fill the void of service zones by providing ares such as bookstacks, print shops, meeting rooms etc. These new spaces serve the existing demographic at the scale of the city block.

Additionally, Athens today is growing in a different way than it was in the 1960s and 1970s. The extreme rise in unemployment is forcing many Athenians to seek self-employment. The second form of programmatic intervention provides open workplaces injected between the newly built service quarters and abandoned layers of *polykatikias*. These new workplaces allows Athens to absorb the new self employed professionals. By providing spaces in an already dynamic system, the users benefit from working along side a myriad of professionals all within a compact system. Resources are shared and ideas are exchanged, providing framework for a new type of exchange network.

The new interventions target the users of the site, yet their public nature provides opportunities for public to enter. The platea is most public, and the newly built spaces can be accessed by the public during exhibitions and events.

food and
entertainment

chef
musician
baker
cinematographer
artisans
horticulturist

professionals +
academics

computer programer
engineer
academics
entrepreneurs

design

painter
ceramics artist
marketing director
graphic designer
industrial designer

trades +
craftsmen

craftsmen
seamstress
shoe maker
blacksmith
repairmen
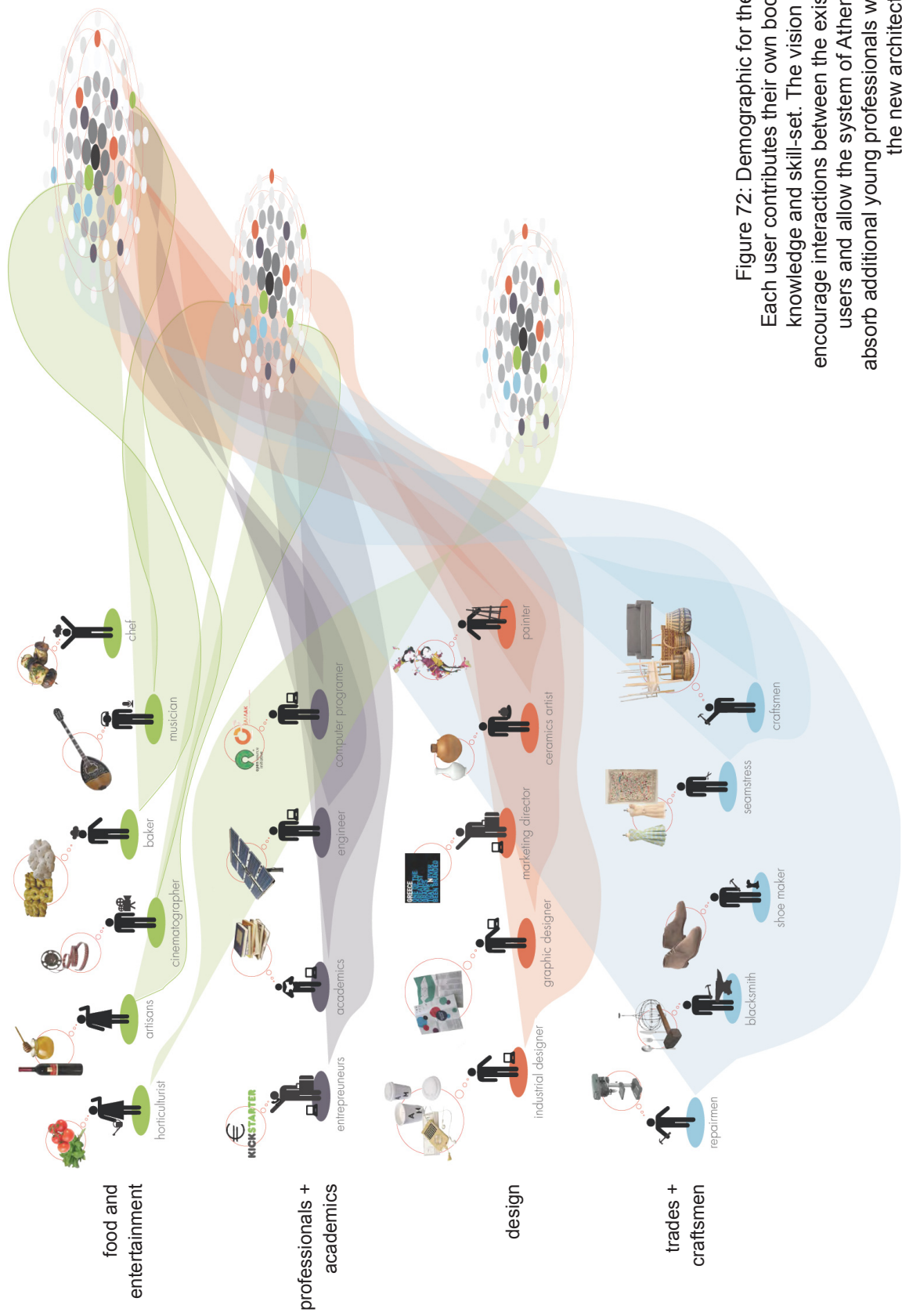
Figure 72: Demographic for thesis.
Each user contributes their own body of
knowledge and skill-set. The vision is to
encourage interactions between the existing
users and allow the system of Athens to
absorb additional young professionals within
the new architecture.

seventh floor

sixth floor

fifth floor

offices and storage

fourth floor

third floor

second floor

first floor

mixed program

ground floor

restaurants
clubs/bars
retail
services
offices
storage
abandoned
residential

Figure 73: Existing program of thesis site. Located at the intersection of Pallados and Miaouli streets in Psiri.

existing program

restaurants
clubs/bars
retail
services
offices
storage
abandoned
residential

new program

workplace

- open cpu desk space
- breakout spaces
- conference room
- studio space (arts, painting,
- architecture)
- common kitchen/coffee station
- print shop
- library
- reading room
- common meeting space
- gallery
- exhibition space

public outdoor space

outdoor

- restaurant seating
- benches
- reading nooks
- planters for growing

platea
- cultural festivals (panegeria)
- music festivals
- barbeque
- art exhibits
- mockup construction grounds

- theatre (movies, events,
- soccer)
- backgammon breakout spaces

who

demographic to be directly impacted by new program

young professionals
- accountants
- graphic designers
- computer programers
- writers
- architects
- tutors
- engineers
- therapists

artists
- visual artists
- illustrators
- musicians

workers
- servers
- seamsters
- shoe makers
- tatoo artists

demographic with access to platea and used as a target audience in dissiminating ideas of the city block

residents of the city

tourists

Figure 74: Breakdown of the existing and proposed program for the city block.

Program Studies

Designing shared workspaces began with studies at the scale of a room. The number of people working in a desk, the circulation through the space, the rhythm between served and service spaces and the presence of exterior spaces were all factors of the study.
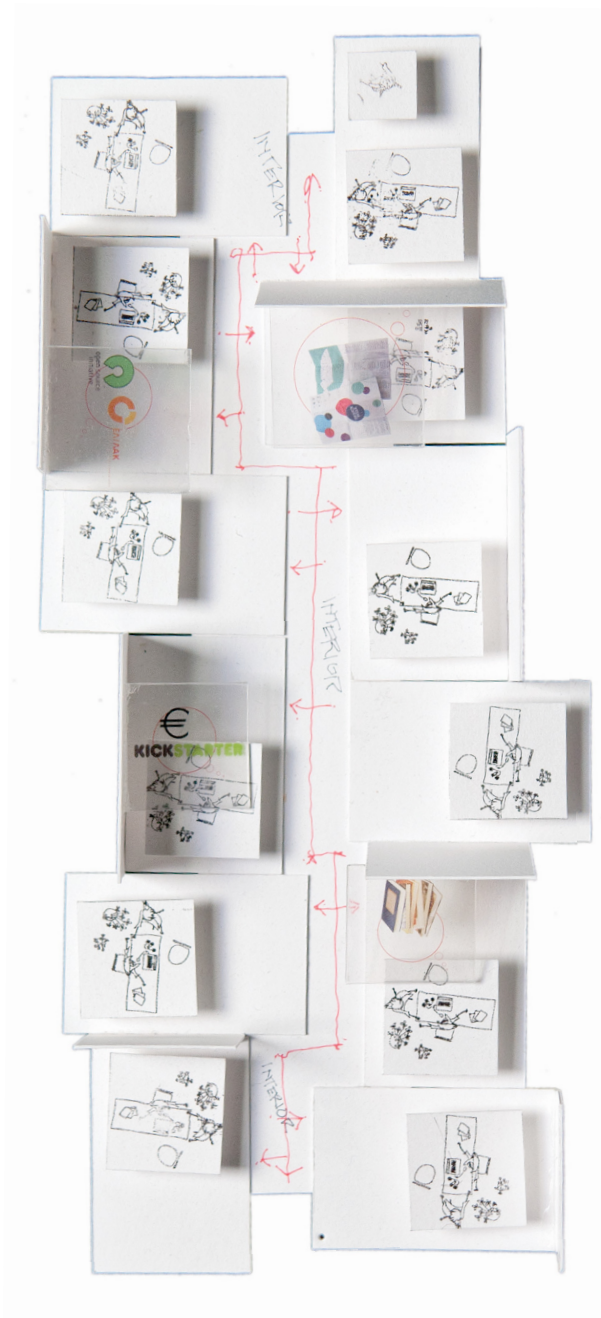
Figure 75: Study of typical office layout. Double loaded corridors with each person contained within his/her own space.
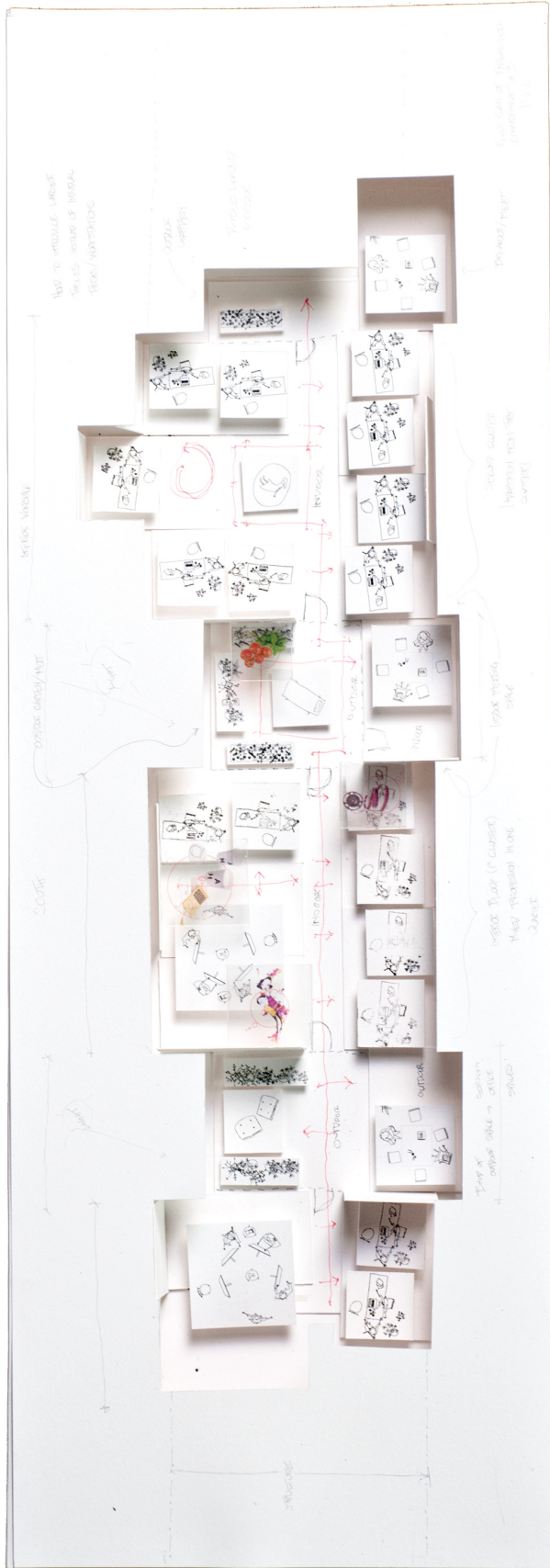
Figure 76: Study of the possibilities for a new type of work environment. Consideration is taken for a rhythm between inside and outside, clustering of disciplines together and natural lighting.
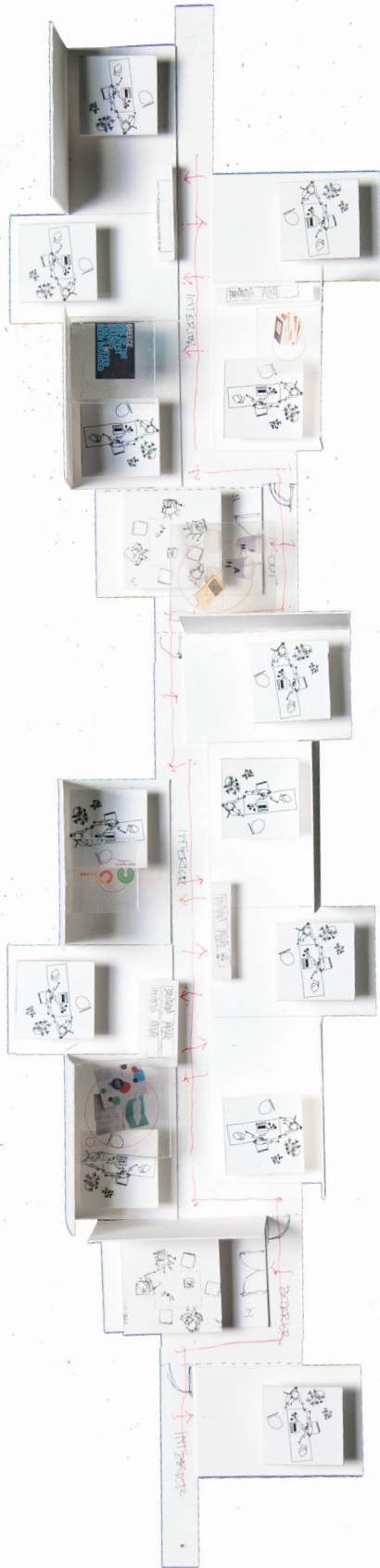
Figure 77: Second variation. No longer is it a double loaded corridor, allowing better ventilation and interaction to the outside. Circulation is now non-linear, allowing meandering through the space.
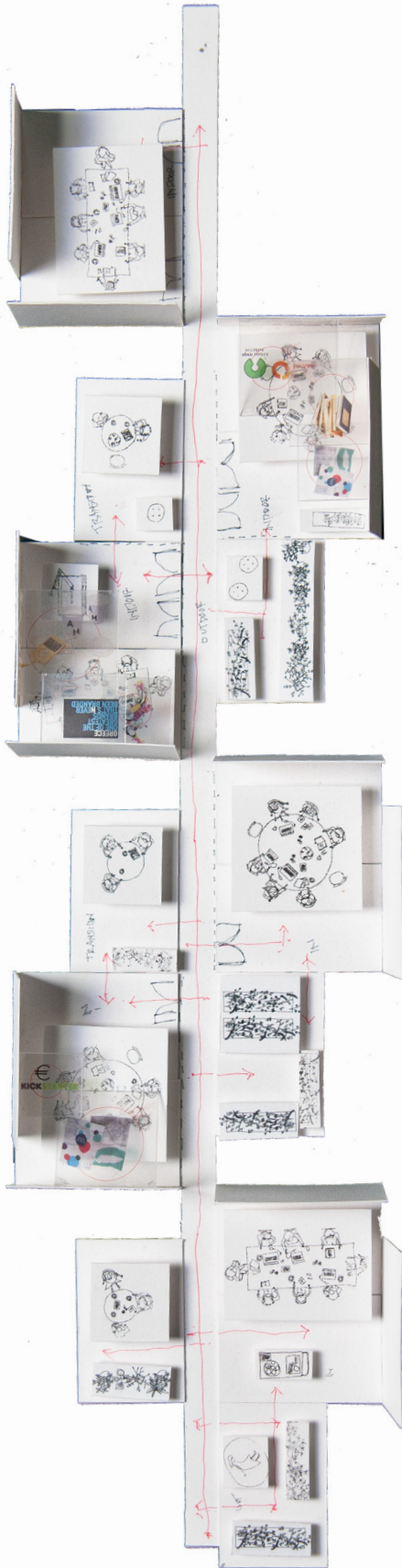
Figure 78: Third variation. Larger tables allow multiple disciplines to work together, while breakout spaces and gardens provide meeting places in the system.

Figure 79: Fourth variation. This scheme is most advanced combining the strengths of the previous studies. Large work-desks allows people with multiple perspectives to work together. These desks are positioned along the center, interrupting the linear circulation. Studios, gardens and breakout spaces supplements he main work area.

Merging New and Old Program

The design is based on harmonizing new workplaces with the existing. Proposed program is treated as if it is a second phase to the current program, supplementing the existing system based on its current needs rather than displacing people and workplaces that already exist. The preceding studies provided the principles for creating new spaces while the design takes lessons learned and merges the desired workplaces with structure and circulation needs. The desires for blurring boundaries between what is new and what is old allows for a more natural adaptation of the new spaces and ensures the spaces are accessible to the users of the city block. The plan expresses activity of the streets and restaurants and illustrates the activities of the new program with the same graphic language as the old.

Figure 80: Ground plan of the micro-agora illustrating
the coexistence of existing and new program.
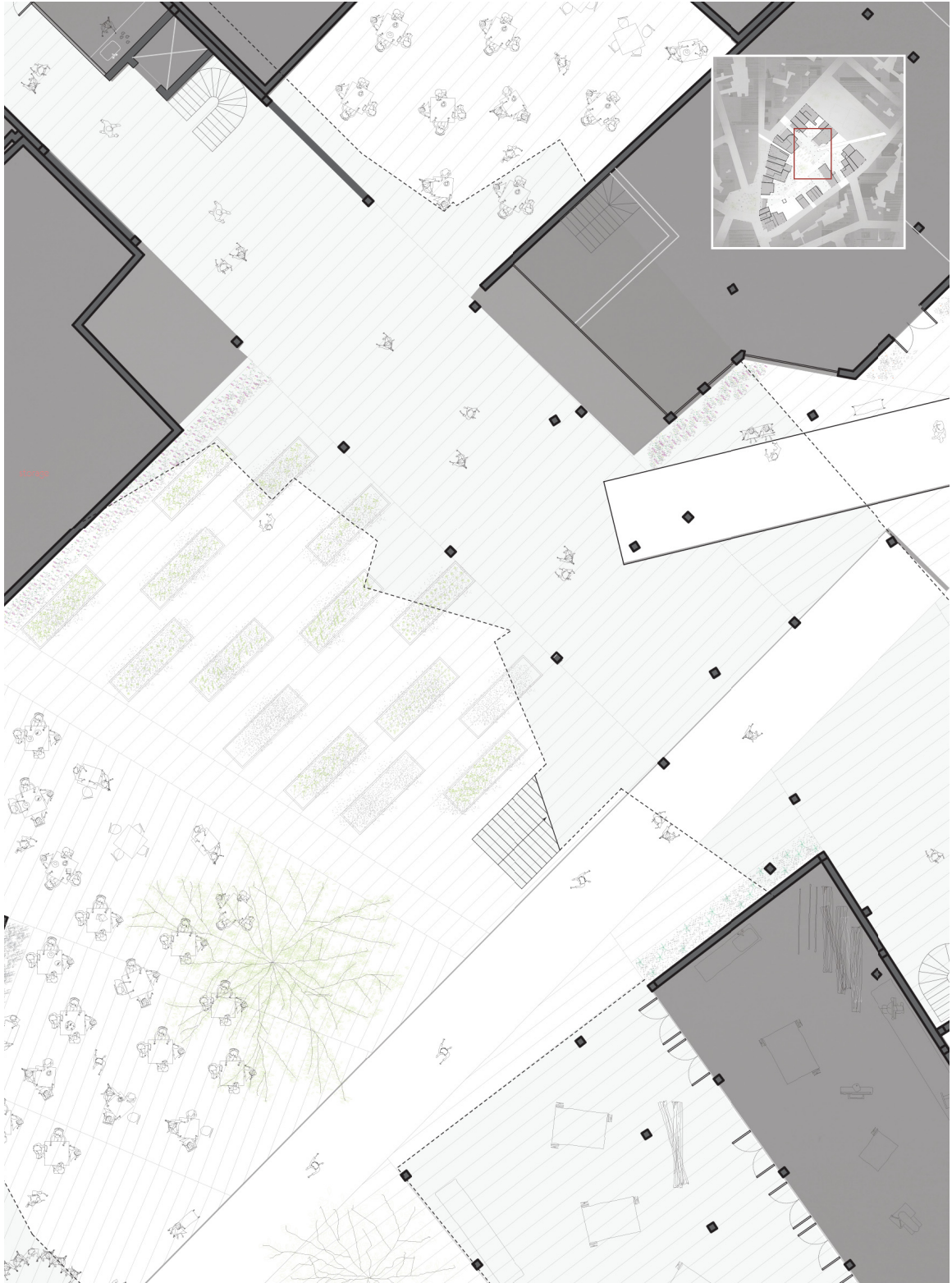
Figure 81: *Stoas* underneath bridge addition to the North and construction courtyard to the South East gesture to the *platea* in the center of the city block.

Figure 82: The restaurant culture to the North flowing to-wards the South at Platea Iroon. To the South East is a *stoa* which I propose to penetrate into the micro-agora.

sixth floor

conference rooms

fifth floor

drawing lab

fourth floor

open workspace

print bridge

open workspace

third floor

prototyping

second floor

outdoor mock-up space

common kitchen

first floor

gallery space

meeting space

outdoor teaching theatre

Bridge

new

existing
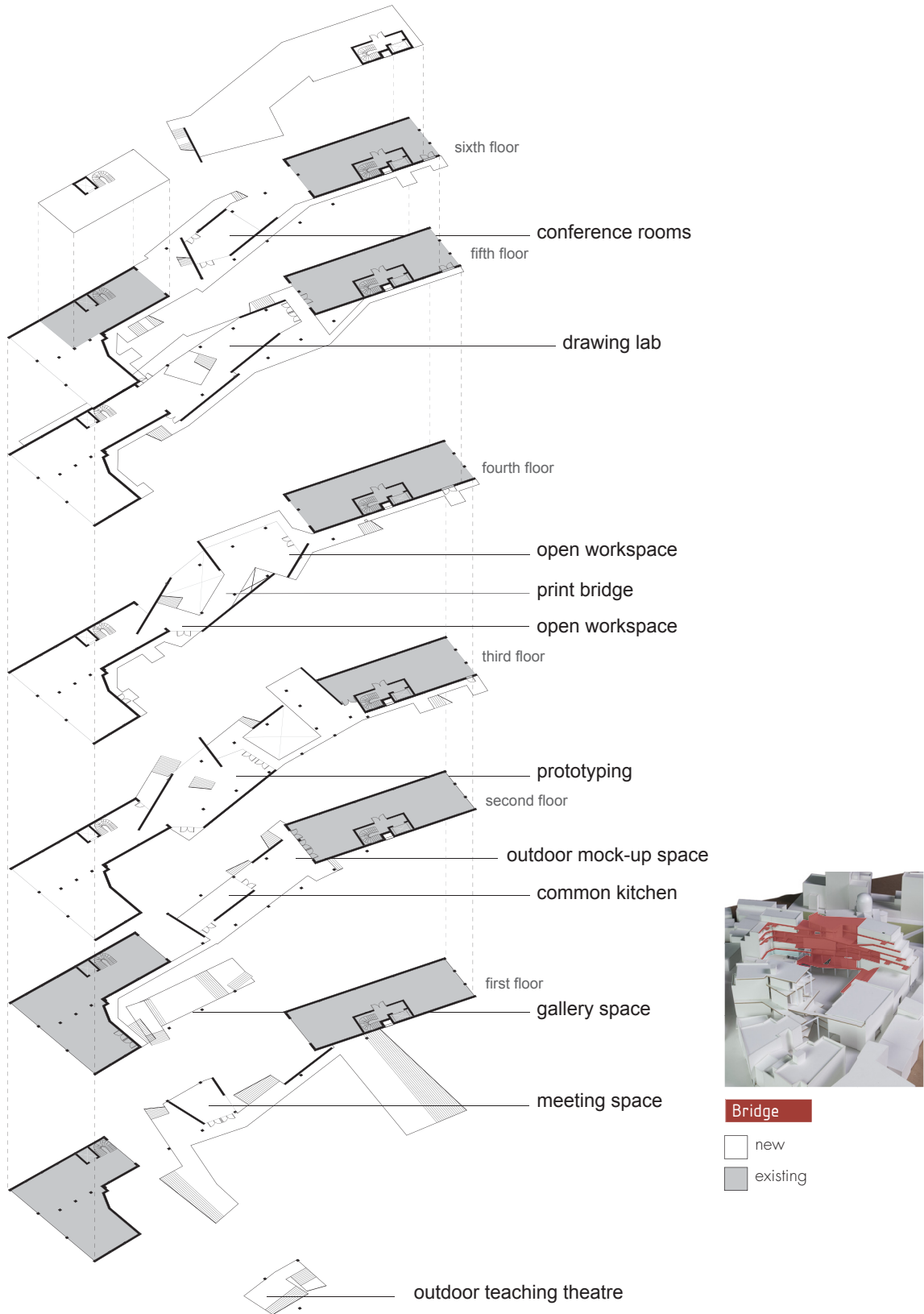
Figure 83: Floor plans of bridge addition.

sixth floor

conference rooms

fifth floor

drawing lab

fourth floor

open workspace

print bridge

open workspace

third floor

prototyping

second floor

outdoor mock-up space

common kitchen

first floor

gallery space

meeting space

outdoor teaching theatre

Bridge

served

new serviced

service

Figure 84: Breakdown of served and
service spaces of bridge addition.

sixth floor

conference rooms

fifth floor

drawing lab

fourth floor

open workspace

print bridge

open workspace

third floor

prototyping

second floor

outdoor mock-up space

common kitchen

first floor

gallery space

meeting space

outdoor teaching theatre

Bridge

interior

exterior

Figure 85: Breakdown of interior versus
exterior spaces of bridge addition.

social lounge

sixth floor

book stacks/ reading room

fifth floor

book stacks/ reading room

fourth floor

common work space

third floor

group meeting space

second floor

instructional room

first floor

Tower

☐ new

▨ existing
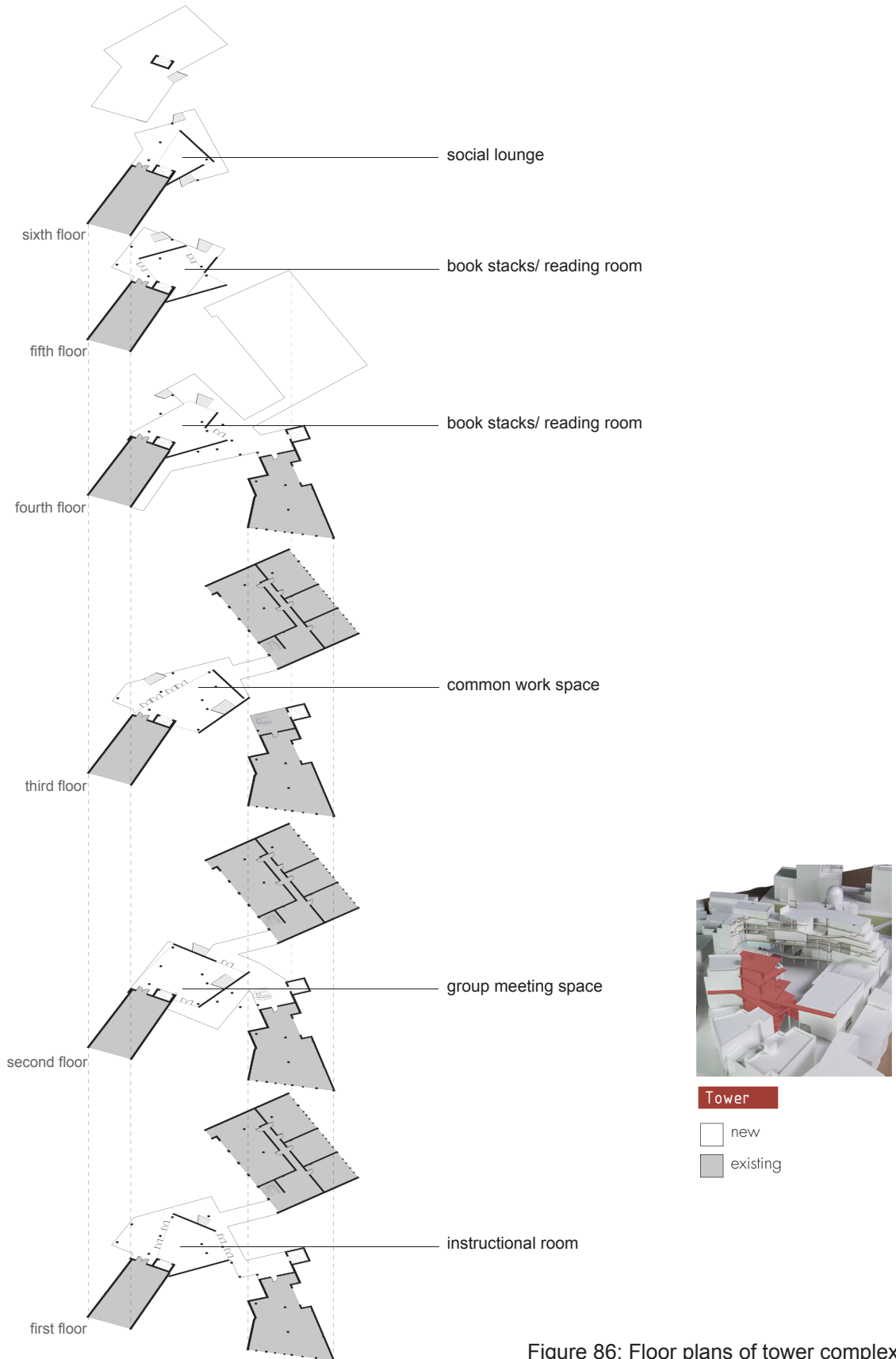
Figure 86: Floor plans of tower complex.

social lounge

sixth floor

book stacks/ reading room

fifth floor

book stacks/ reading room

fourth floor

common work space

third floor

group meeting space

second floor

instructional room

first floor

Tower

served

new serviced

service

Figure 87: Breakdown of served and
service spaces of tower complex.

social lounge

sixth floor

book stacks/ reading room

fifth floor

book stacks/ reading room

fourth floor

common work space

third floor

group meeting space

second floor

instructional room

first floor

Tower

interior
exterior

Figure 88: Breakdown of interior versus
exterior spaces of tower complex.

Figure 89: Programmatic flexibility of *platea,* illustrating the flexibility for commercial and leisure uses.

Architectural Expression

The architecture is not a an imposition of form onto the site, but rather it manifests and heightens the conditions already present. Their relatively low construction quality has made people fearless in adapting their physical environment. Walls are painted over, facades are removed and informal structures are built on the rooftop, all attempts at disintegrate the monolithic building expression. Heightening the tendencies that are already present, the design transforms the tectonic expression from monolithic to planar. Occupying the architecture that occurs between planes, rather than confined inside volumes. The composition of planes expresses occupied volumes. Double height planes reference double height spaces and single height spaces are contained behind single height planes. The planes, in typical Athenian fashion are expressed as a series of canvases. Allowing for artists to express their thoughts and professionals to disseminate their ideas.

Beyond stronger connections between inside and outside, the expression of walls as planes rather that solids allows for greater light control. The majority of the opaque planar surfaces are positioned along the south, while the north has the most glazing. By combining planes of different angles, natural sunlight can be deflected against walls to provide a softer, more uniform interior lighting.

Figure 90: Euripidou street, Psiri. The climate and informality of the city results in highly customized architecture at the human scale, 2013
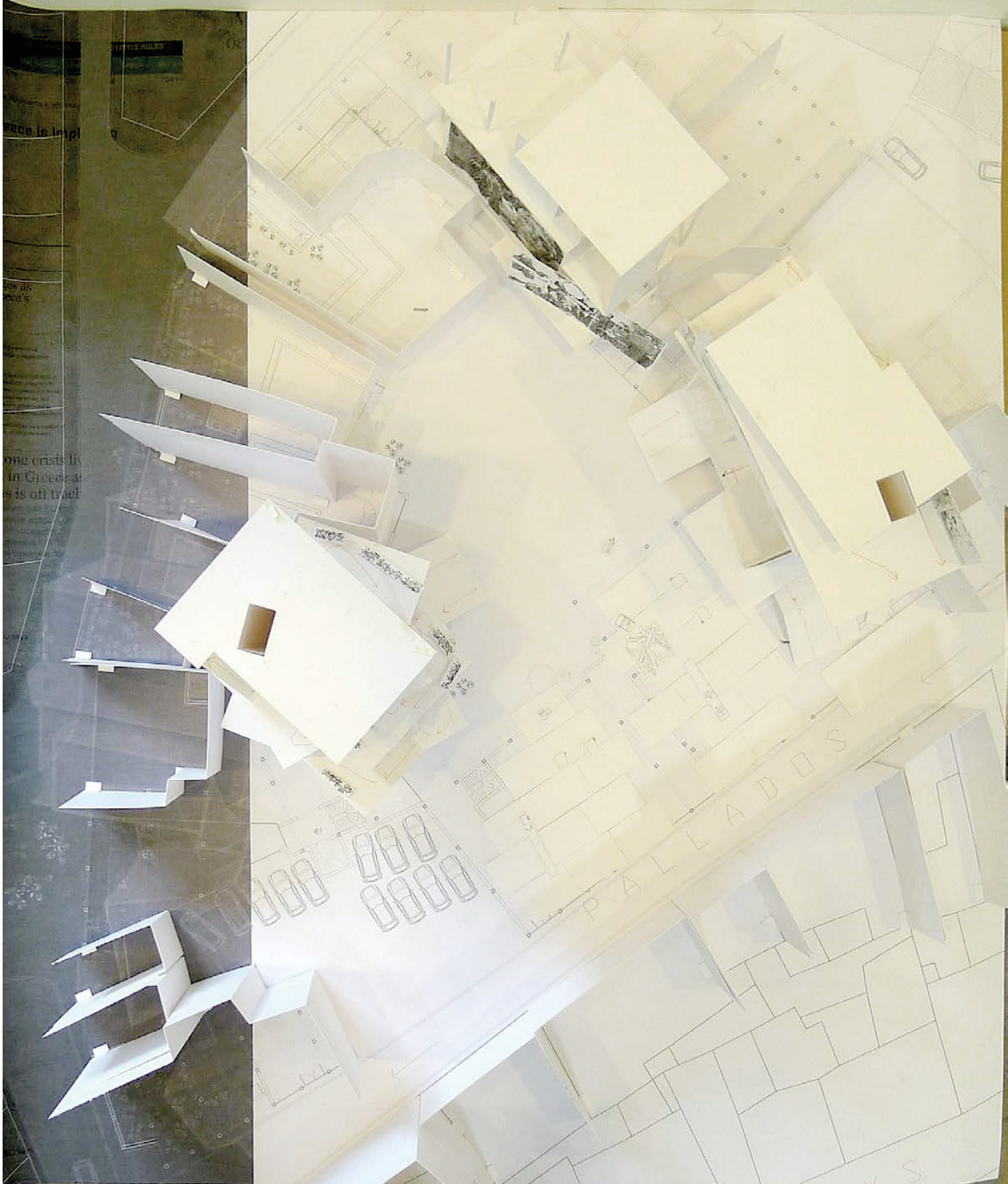
Figure 91: Process of planning and designing new architecture within the site.
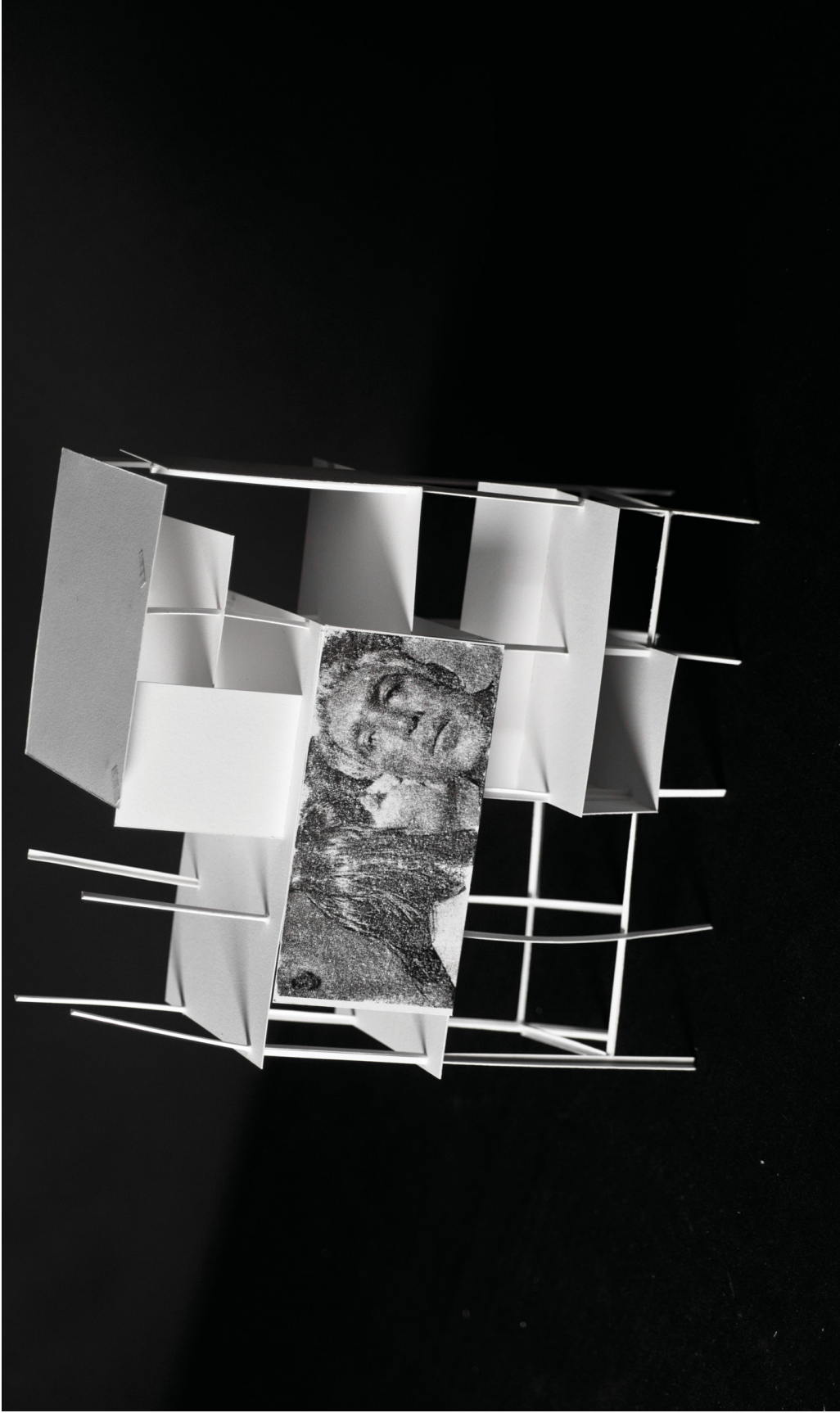
Figure 92: Original study model of bridge addition, illustrating the potentials for projecting films and conferences for the *platea*.

Figure 93: Intermediate study model, illustrating the hybridization of sketching and modeling as a process for unifying circulation and formal expression.
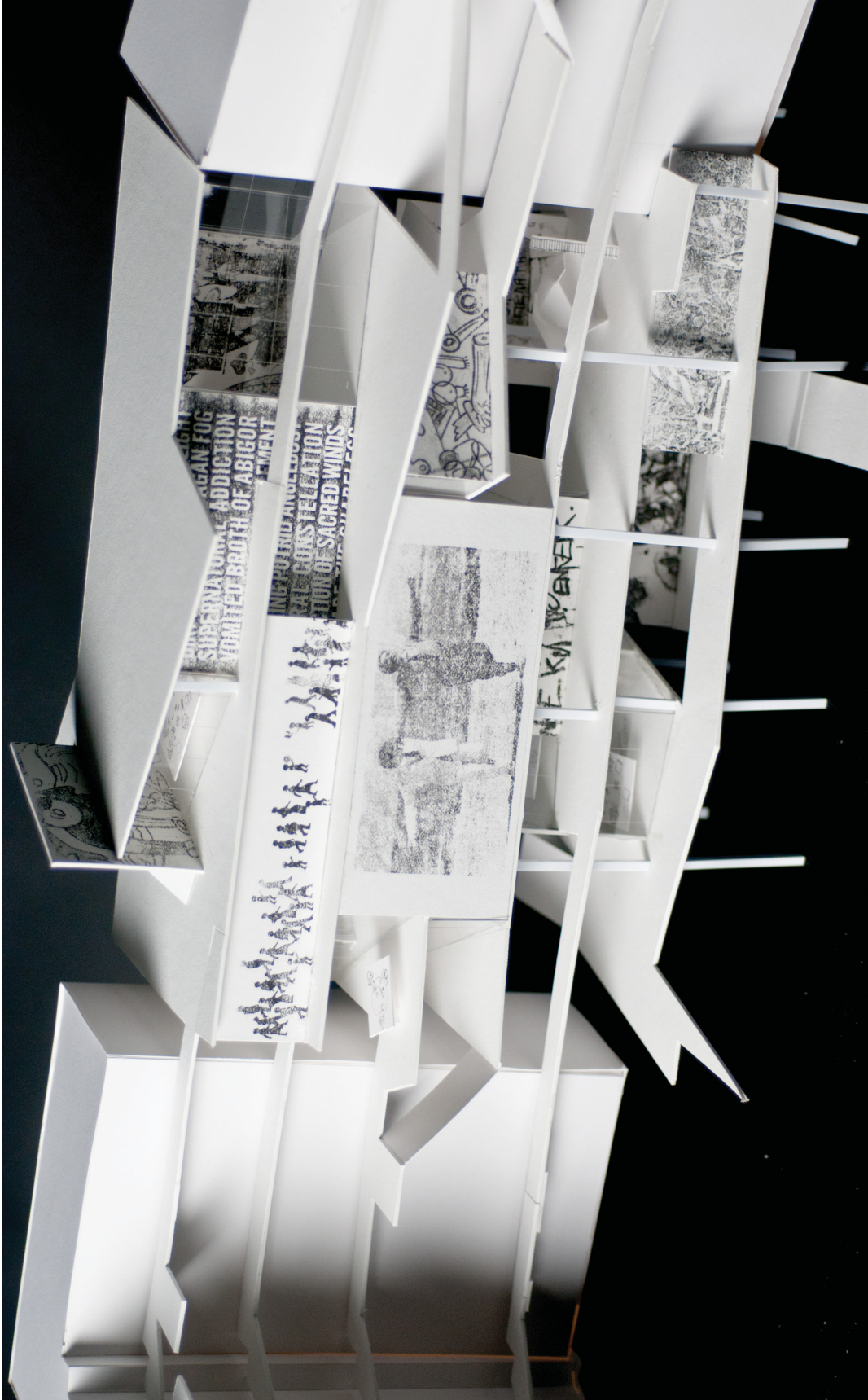
Figure 95: North facade of proposed bridge addition at 1:100.

Figure 96: North facade of proposed bridge addition, illustrating deflection of South light.

Proposed bridge

Existing NE and NW polykatikias

Figure 99: The new bridge not only weaves the existing polykatikias together, but its exterior spaces and stoa address the inner *platea.*

Figure 100: Proposed tower addition at 1:100
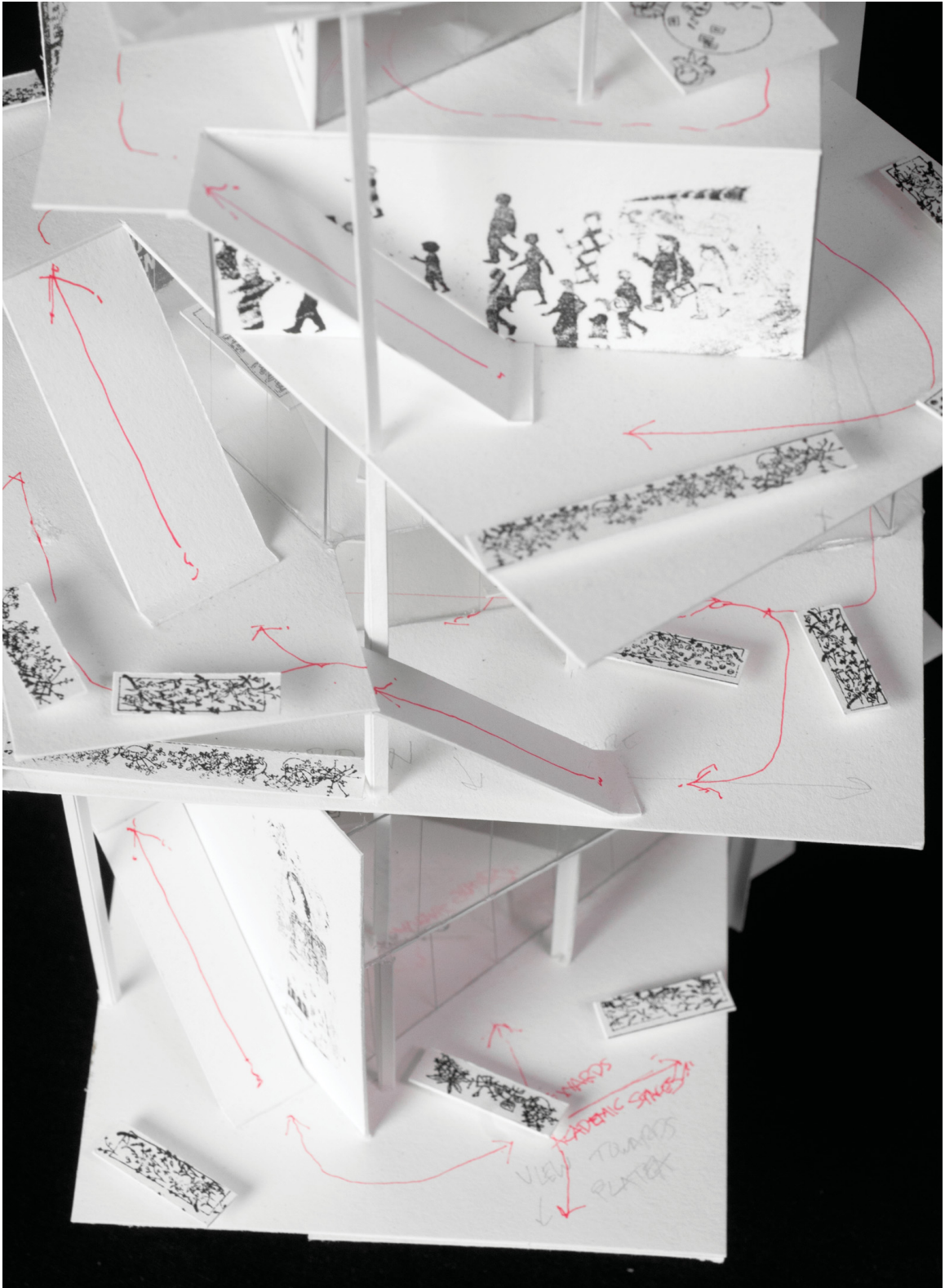
Figure 101: Proposed tower addition at 1:100 illustrating the spiralling circulation route through the building.

Proposed tower complex

Existing conditions of site

Figure 102: The tower complex transforms an awkward moment between barely touching buildings and transforms it into a switch between the triad of *polykatikias*.

Proposed tower complex

Existing conditions of site

Figure 103: The tower complex creates a new circulation core for the polykatikias to the southern city block. On the ground floor, the spaces have been adapted into stoas addressing the *platea.*

Figure 104: Longitudinal section through the micro-agora.

Figure 105: Transverse section through bridge addition.

Figure 106: Longitudinal section of *platea*.

Figure 107: Transverse section of tower complex. To the left
is a stoa providing connection to platea Iroon.
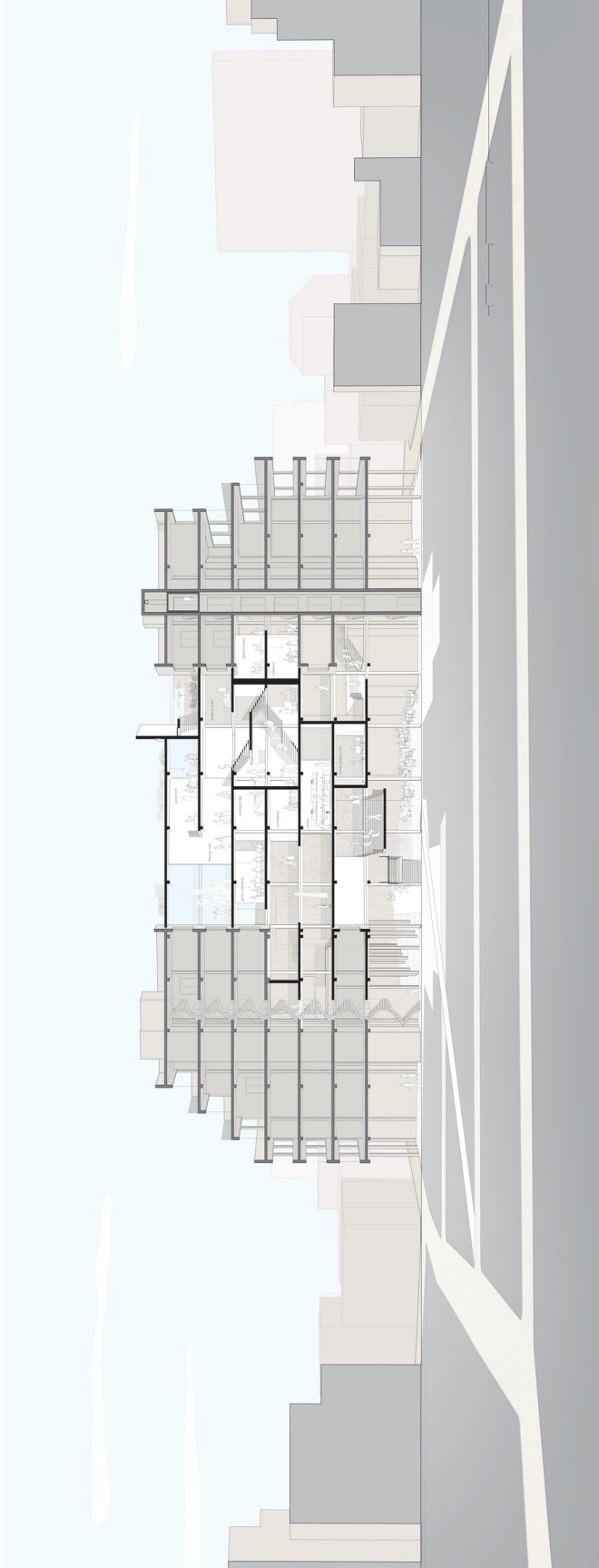
Figure 108: Longitudinal section of bridge addition.
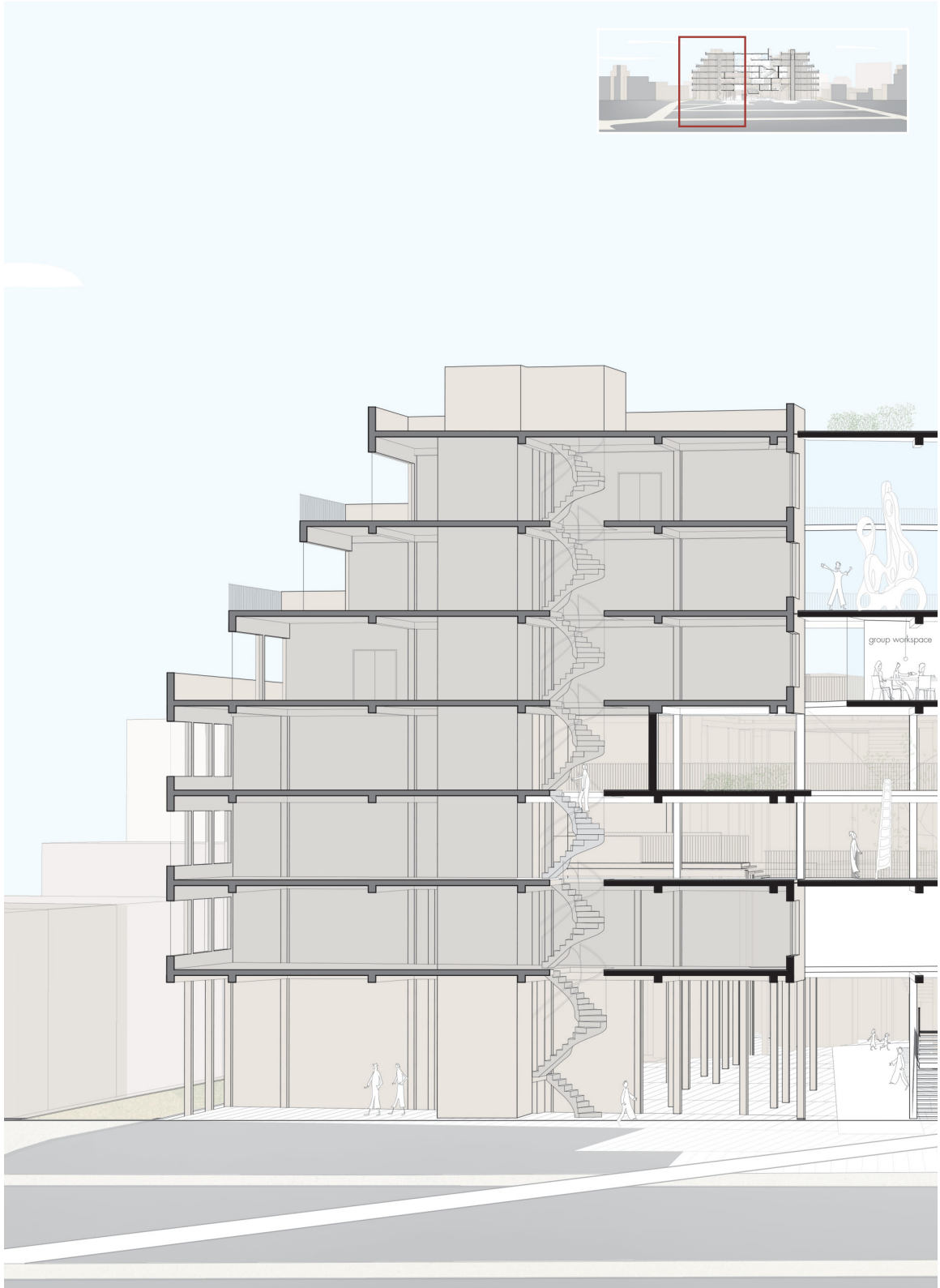
Figure 109: Longitudinal section illustrating connection be-
tween the NE *polykatikia*, the bridge addition and the street.
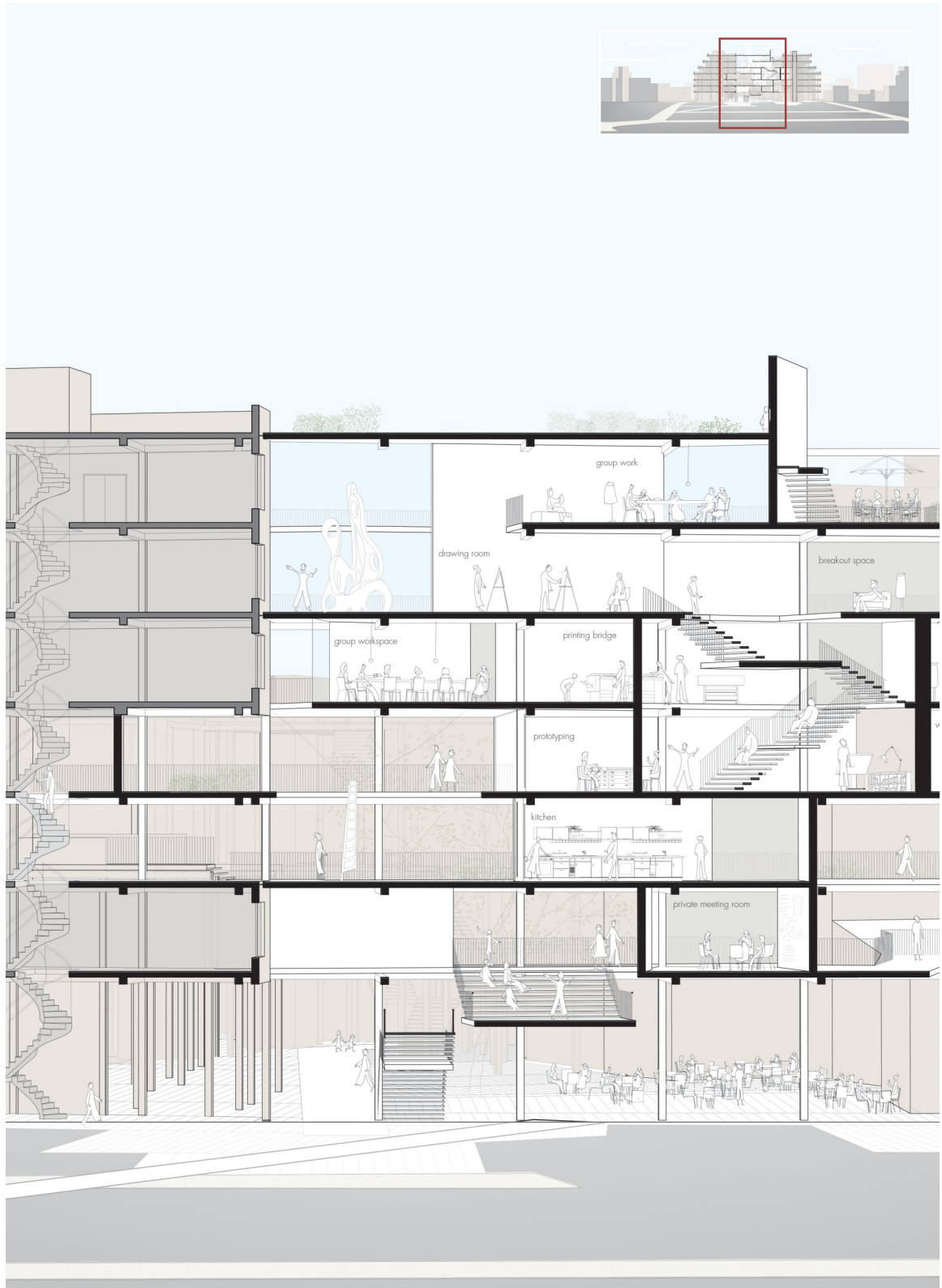
Figure 110: Longitudinal section illustrating interlocking
double height volumes within bridge addition.
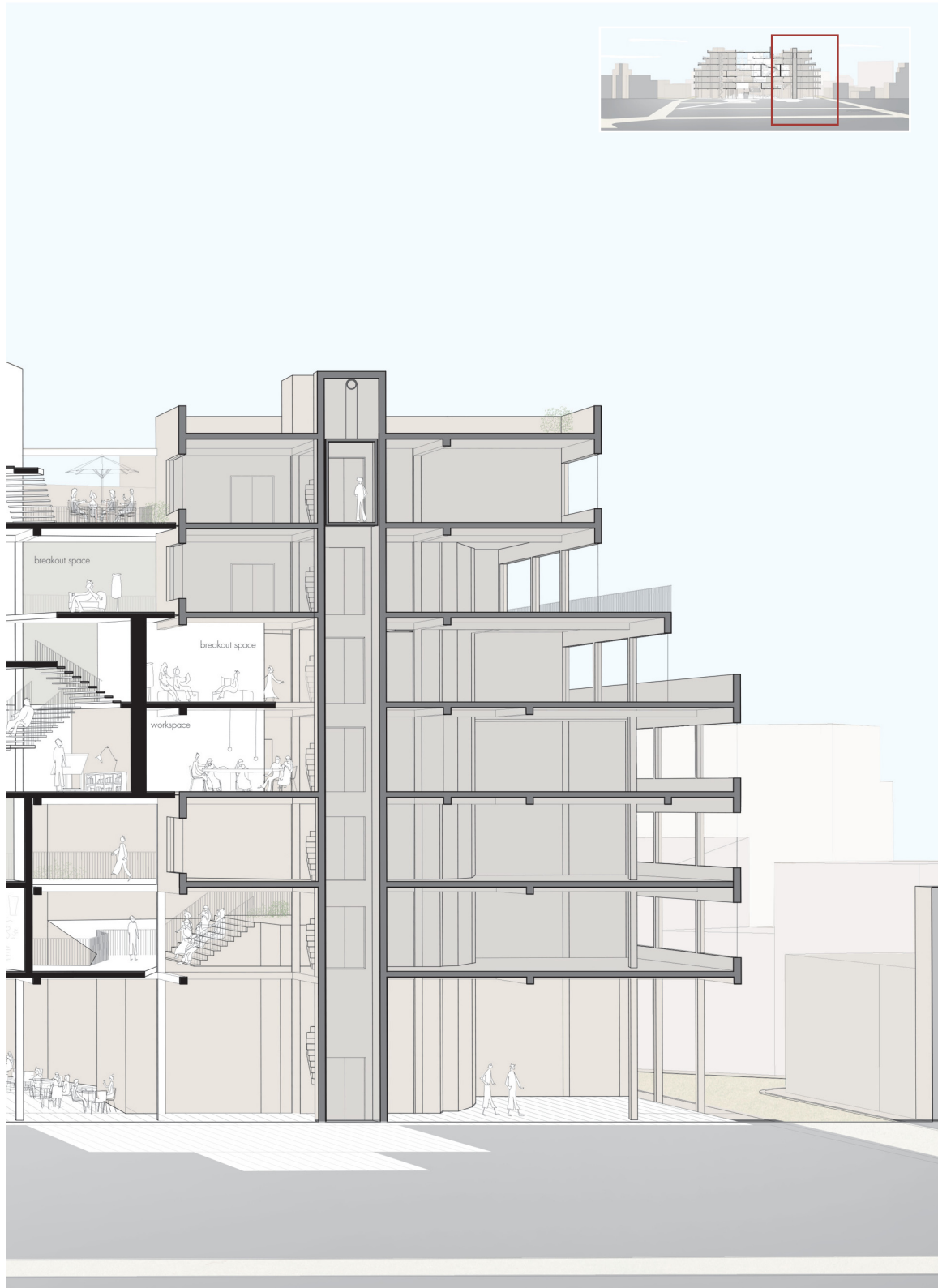
Figure 111: Longitudinal section illustrating connection between the NW *polykatikia*, the bridge addition and the street.

Figure 112: Existing workspace from NE polykatikia.

Figure 113: Proposed bridge addition from NE polykatikia into the exterior prototyping space.

Figure 114: Thesis in context. The planar architectural expression is a progression from the irregular geometries of Psiri.

CHAPTER 8: CONCLUSION

We often think of great architecture as specialized destinations intend-ed to be glowing beacons for the city. Places targeting activities outside people's daily routines. Spaces in excess of minimal requirements for the functionality of a city. They are places in which culture allows to flourish and are imperative in maintaining people's pschological integ-rity. No one doubts its importance, yet when an economic crisis arises, excessiveness is questioned. Do we need more public spaces? Should we even be building? What happens when we revert to a purely func-tionalist state of mind, does it yield stagnation in the road to economic recovery? Assuming so, the question became, what do we create in excess? and which parts of the city need to be thought in such terms not only to benefit the turbulent times of Athens, but for evolving the urban fabric?

This thesis challenges the notion of excessiveness in the workplace. It reflects on resources and facilities available to those in bigger compan-ies and strategized on a program aiming at resource sharing. As such, it provides spaces of larger companies while still allowing small scale businesses to operate autonomously, a model which closely resembles that of the ancient Agora. The necessity for sharing facilities and ideas amongst young professionals sparked a design which provided ser-vice spaces such as workshops, print labs, meeting spaces and social spaces, woven together with a circulation network in excess of minimal requirements. It was an injection of collaborative based workplaces into the already vibrant informal center's city blocks, where the high energy and presence of people with a myriad of expertise makes the archi-tecture worth investing in. It positions architecture within underutilized voids, allowing Athens to make better use of its spaces and therefore become a much smarter urban center. Flexibility of the polykatikia's concrete post and beam construction served as framework to the new system. Here, adapting the old structure was not an intention for the

thesis, but rather a vehicle for a structural solution which avoided the need for testing and investing time in new structural technology. Focus could then be diverted towards creating spaces and designing circulation networks, superimposed onto the existing system of Athens.

Since my research began in Athens, the city transformed from a platform for protests, to a place with a degrading social center, to now, an urban center with a focus on low cost community activities - transformations that have reflected Athenian's psychological state and has resulted in a city of constant change. The current tendencies have proved that resource sharing and collaborations are not a fad, but mechanisms for survival. They are fundamental principles of *desmos* which holds a special place in Greek culture. Therefore evolving Athens based on *desmos* not only fosters economic recovery, but becomes an opportunity to re-design the built environment reflecting Greece's cultural tendencies. By focusing on the workplace and the spaces that interconnect them, the discourse of Athens can evolve from the previous focus of dwelling towards innovating based on what the culture of Athens has to offer from within.

APPENDIX

future Athens

present Athens

past Athens
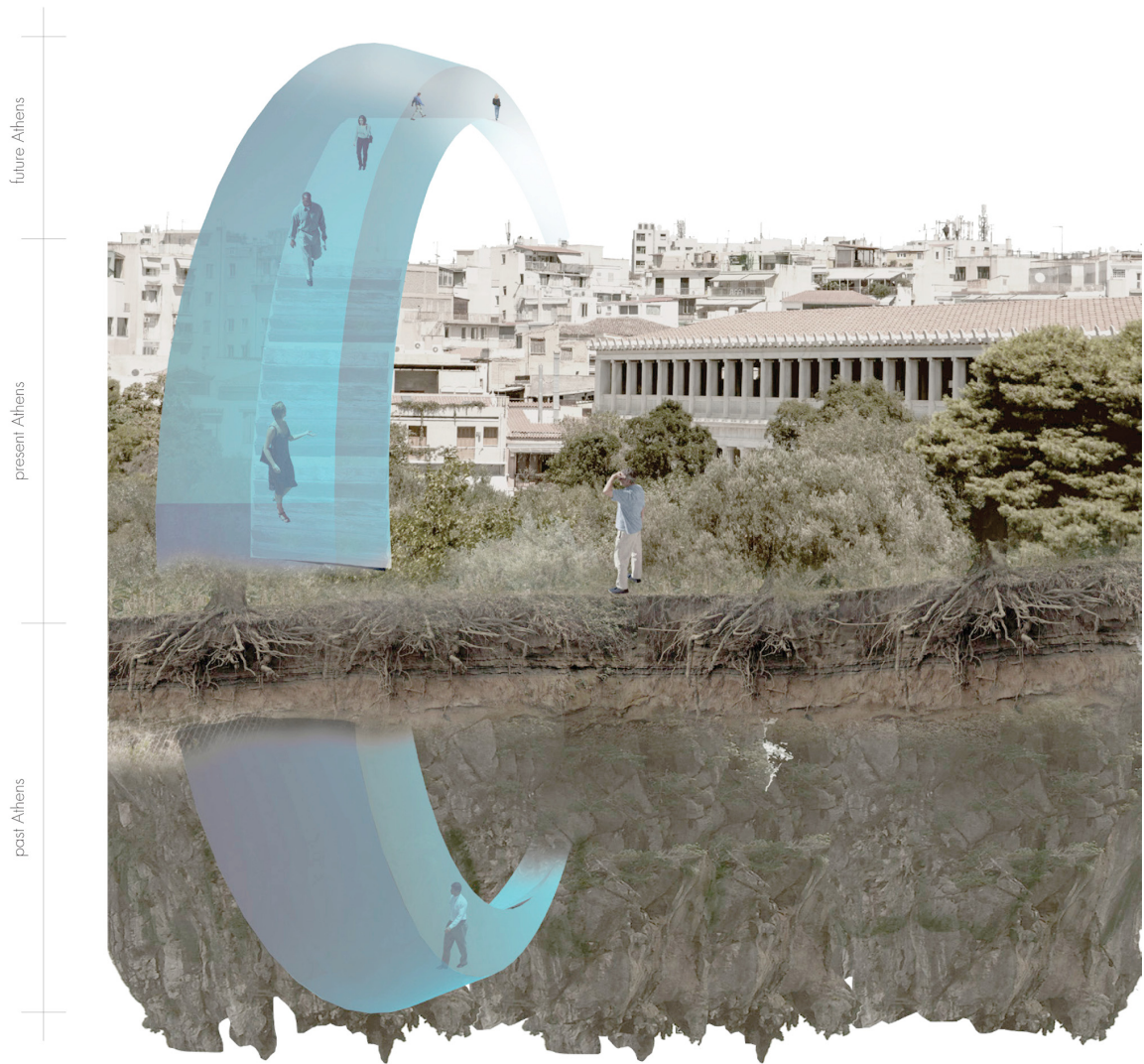
Figure 115: By considering the verticality of the city, not only can we engage with the now disconnected vertical layers of the city, but it can be used as a mechanism to consolidate the past, present and future.

86 - 267

1456 - 1687

338 - 86 b.c.
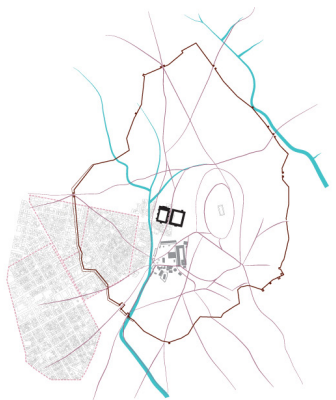
1205 - 1456

479 - 338 b.c.

408 - 565

3500 - 600 b.c.

267- 408

Figure 116: Growth of Athens over time.
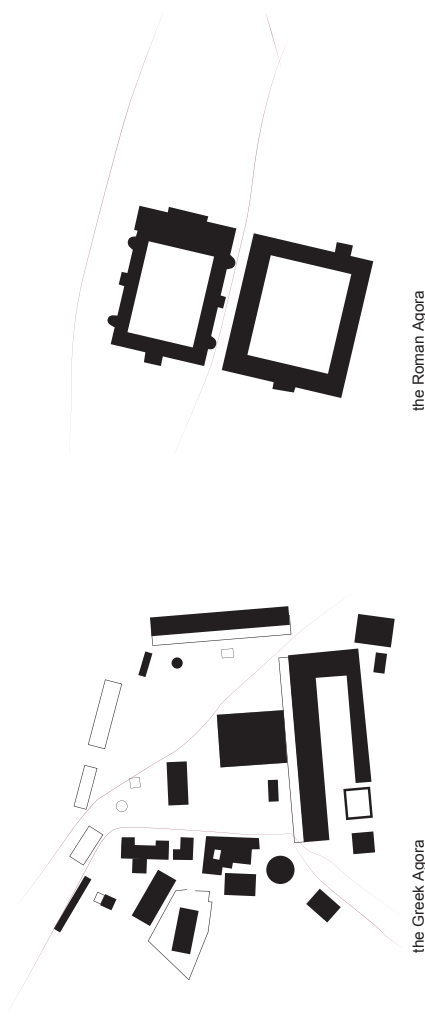
the start of Modern Greece's history

Bazar

1456 - 1687
Agora under Ottoman Rule

Agora

1205 - 1456
Agora during the Crusades

Hadrian's Library

86 - 267
Roman Agora under Roman Rule

338 - 86 b.c.
Athenian Agora under Greek rule

479 - 338 b.c.
construction of the Athenian Agora after Persian Innvasion

3500 - 600 b.c.
the ancient Agora under Greek Rule

the Roman Agora

the Greek Agora

Figure 117: Evolution of the market place from the Agora to the Roman Forum to the Bazar.

urban wall 2

Athens Market

Athenas Street

Athenas Street

formal athens

shopping

market

spice district

informal athens

chinese goods, imported and/or manufactured on site

view to acropolis

big flexible spaces

vibrant street culture

Top Floor:
housing

Middle Layer:
Workshops + Offices

Street level:
shops

Verticality of Euripidou

towards shopping center

towards metaxourgio

Figure 118: Study of Euripidou street. Euripidou not only represents a threshold along its cross section but is a gradient of culture along its axis. To the west, a strong presence of Chinese stores transitions into the spice district then Market while terminating into Athens' main shopping district. As a result, the street paints a picture of Athens from formal to informal, not only in terms of activity, but of architecture too. The *polykatikia* and equally represented and are the two predominate styles which compose the urban fabric.
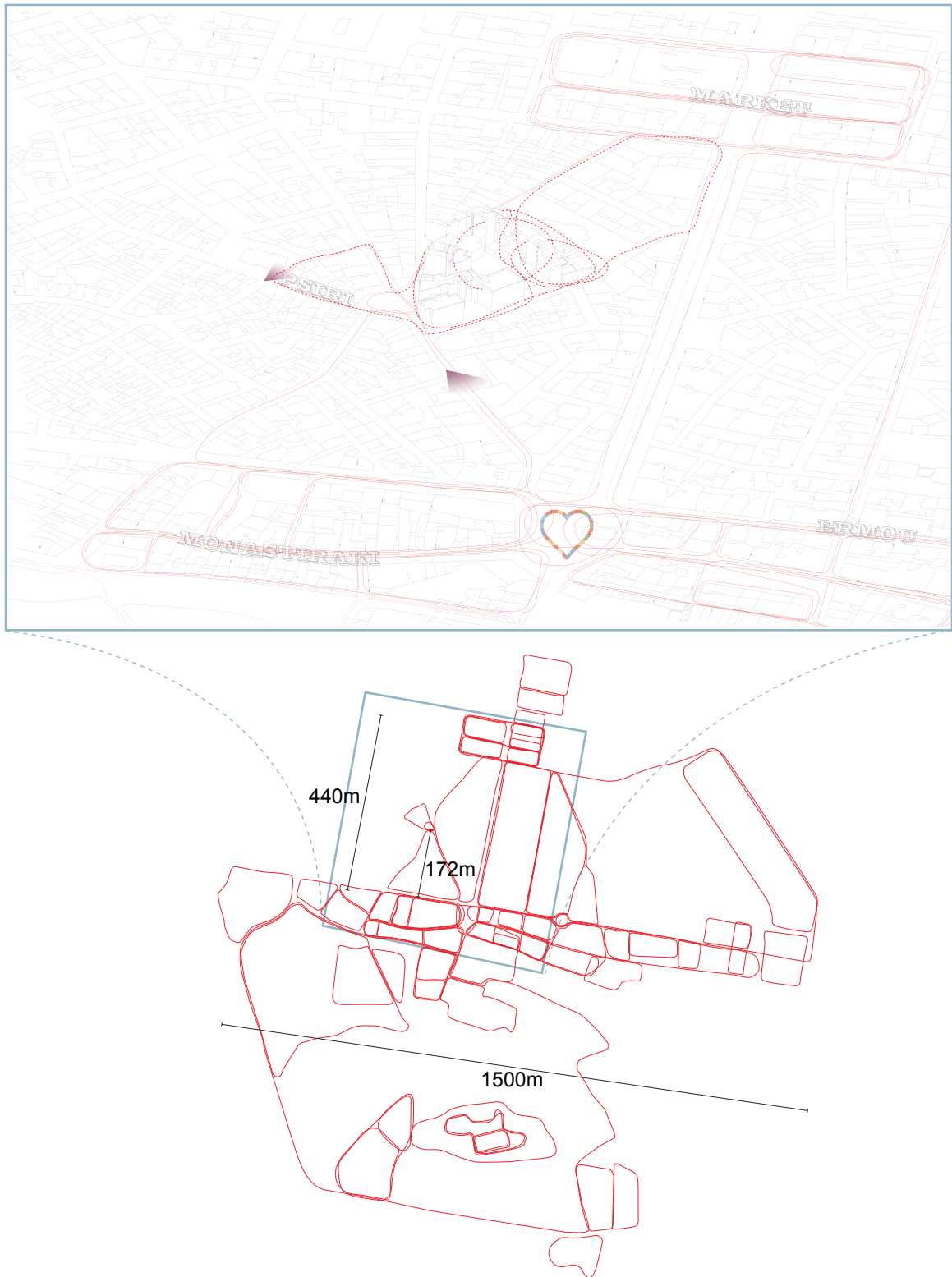
Figure 119: The network of Athens in relation to the thesis site in axonometric.

Metaxourgio

Psiri

abandonment +
vacancy from the
last twenty years

recent
abandonment

the clusiers of programatic
voids in the city

vacant buildings in
metaxourgio, psiri and
gerani districts

buildings that are are vacant,
dilipidated and building lots
are that use as parking

gerani

urban decay
accumulating
from last 8
years

psiri

urban decay
accumulating
from last 30 years

metaxourgio

dilapidated
abandoned
empty lots as parking

Figure 120: Occupied versus
unoccupied spaces in Athens.

cluster of
abandoned
buildings in Athens

green space
open/unbuilt space
parking lots
dilapitaed buildings
fully unoccupied buildings
occupied/partially occupied buildings
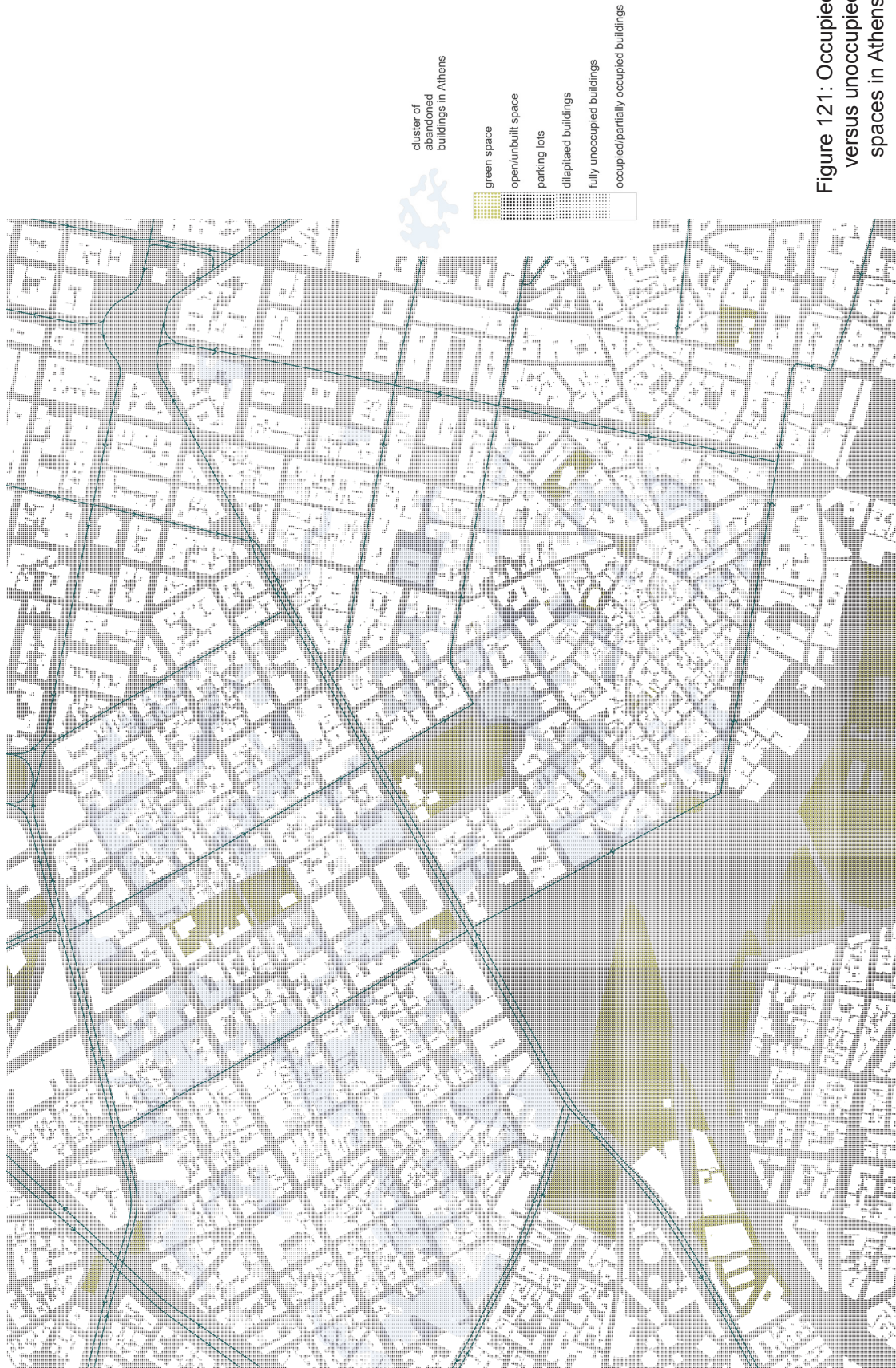
Figure 121: Occupied
versus unoccupied
spaces in Athens.

Athens Public Market

Monastiraki Square

Gerani

Psiri

Metaxourgio

Athenas street

Perios Street

site

urban wall 1

urban wall 2

urban wall 3

urban wall 3

urban wall 3

Psiri and Metaxourgio is sharp-
ly divided by two factors. A
strong row of large buildings,
and the busy Perios Street.

Ermou Street is yet another
"wall", where long lines of taxis
make it difficult to cross over
into Psiri from Monastiraki. The
Buildings along the Psiri side
are also very impermeable with
only a few very narrow street
present for access.

Athenas Street is the threshold
which divides the infomal
character of Psiri (to the West)
with the shopping and business
area to the East of Athenas
Street.

Figure 122: Although the four edges of informal
Athens have activity parallel to their axis, a
change in grain of city fabric and them being
automotive throughways transform them into
urban walls between districts.
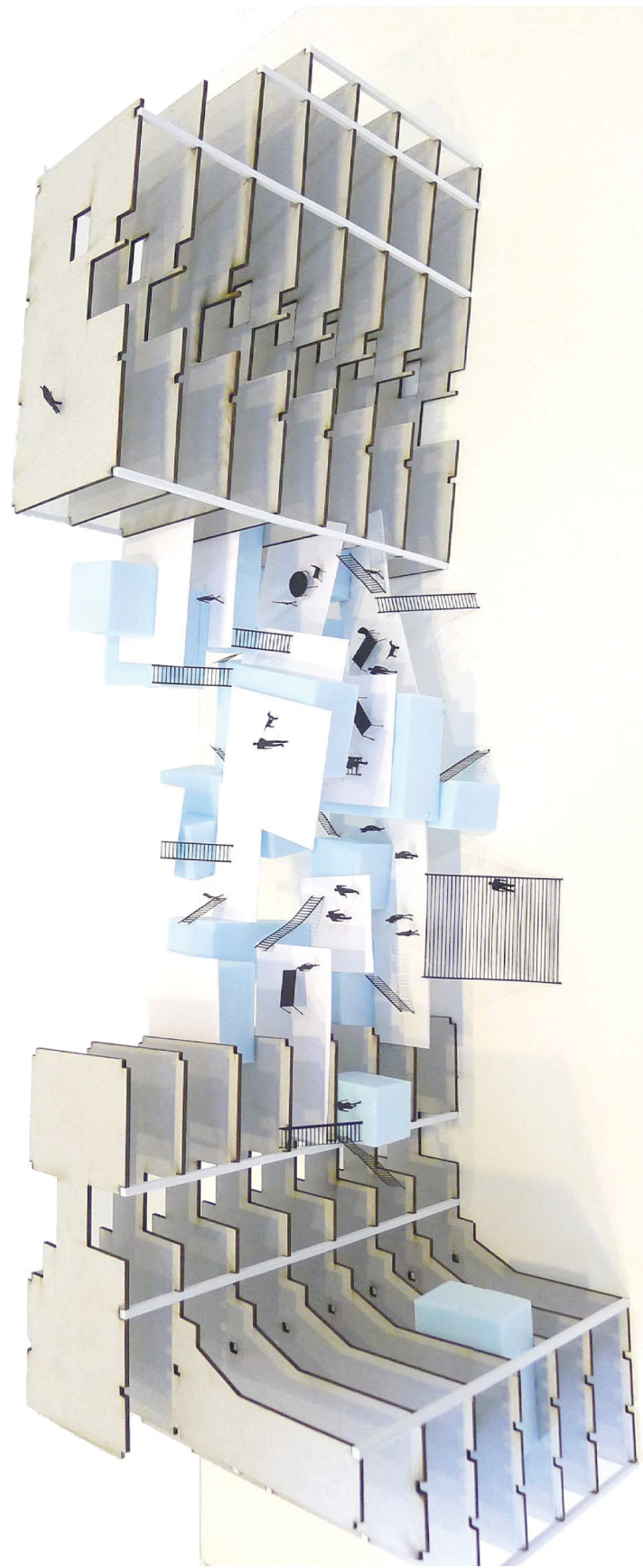
Figure 124: Exploring possibilities of occupying between polykatikias.
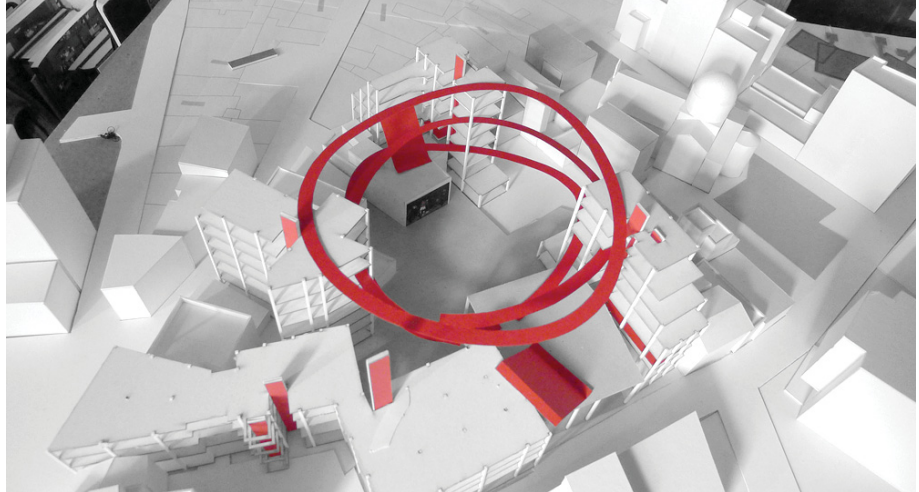
Figure 125: Circulation study 1, continuous loop.
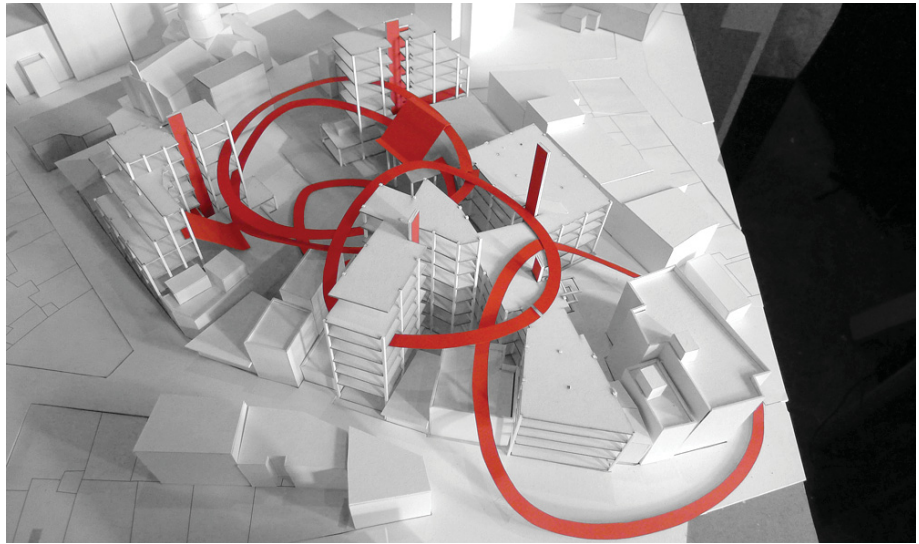
Figure 126: Circulation study 2, sequence of circulation
loops along North South Axis.
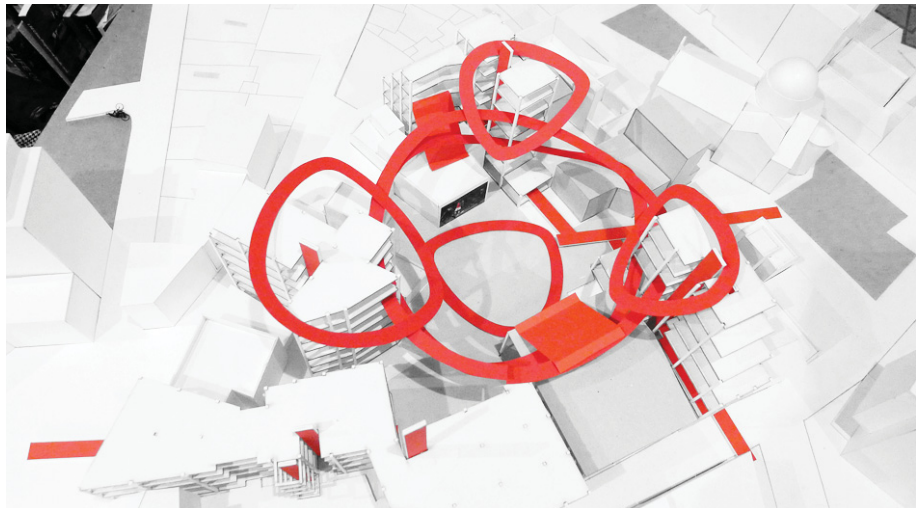
Figure 127: Circulation study 3, grand circulation loops
supported by smaller loops.
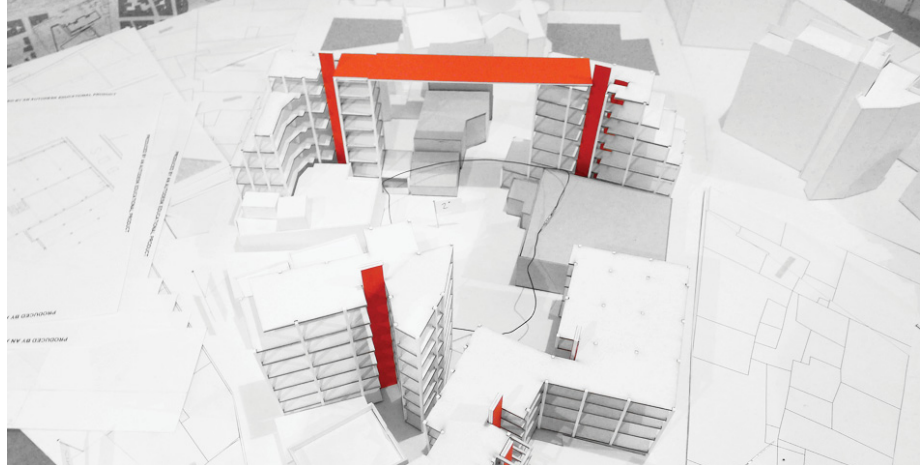
Figure 128: Circulation study 4, connecting existing circulation cores.
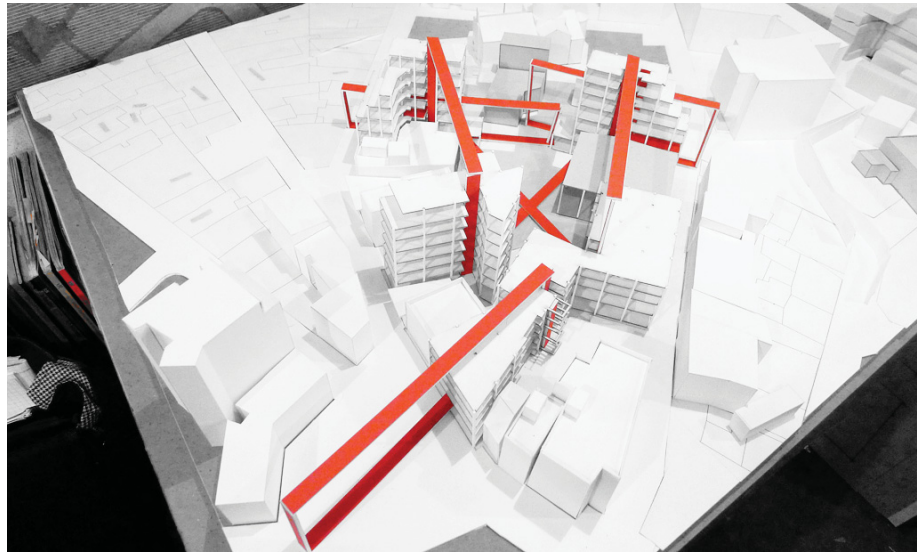
Figure 129: Circulation study 5, connecting to streets and Platea Iroon.
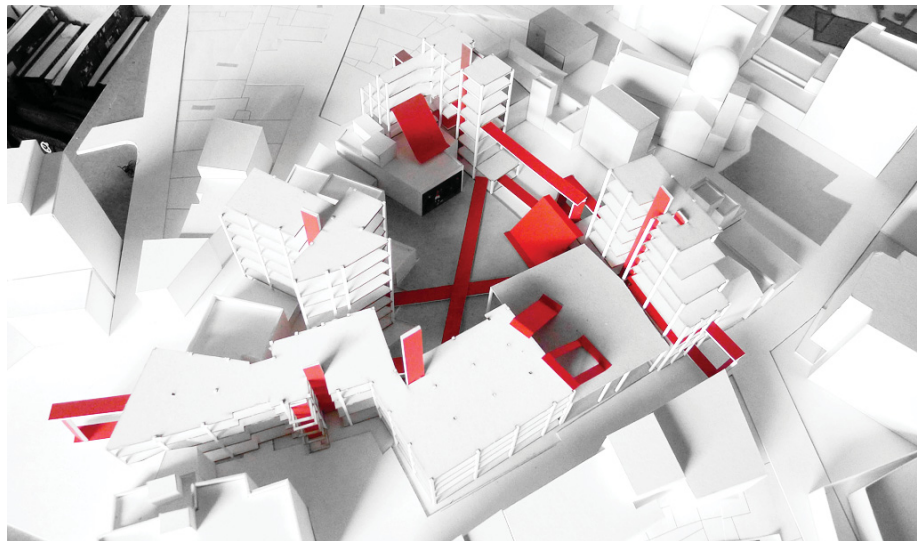
Figure 130: Circulation study 6, series of staircases between rooftops.
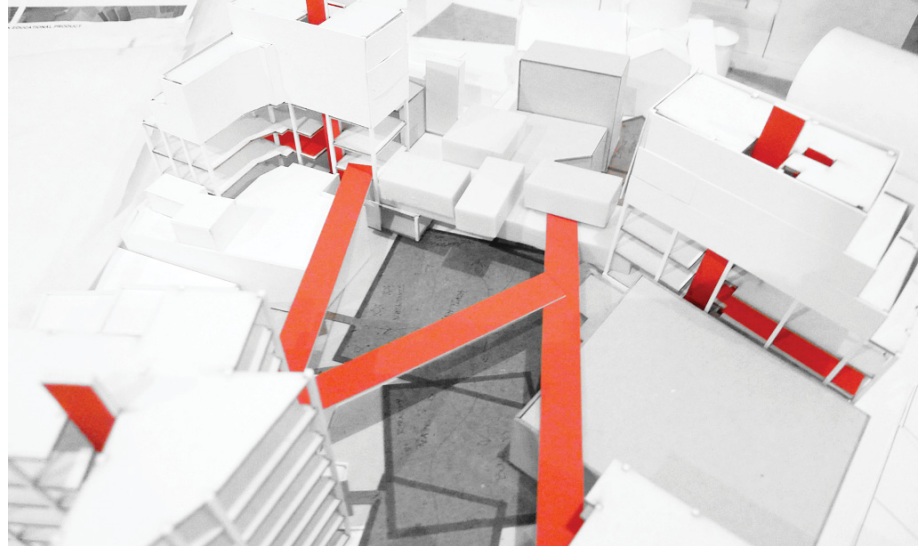
Figure 131: Circulation study 7, diagonal bridges.
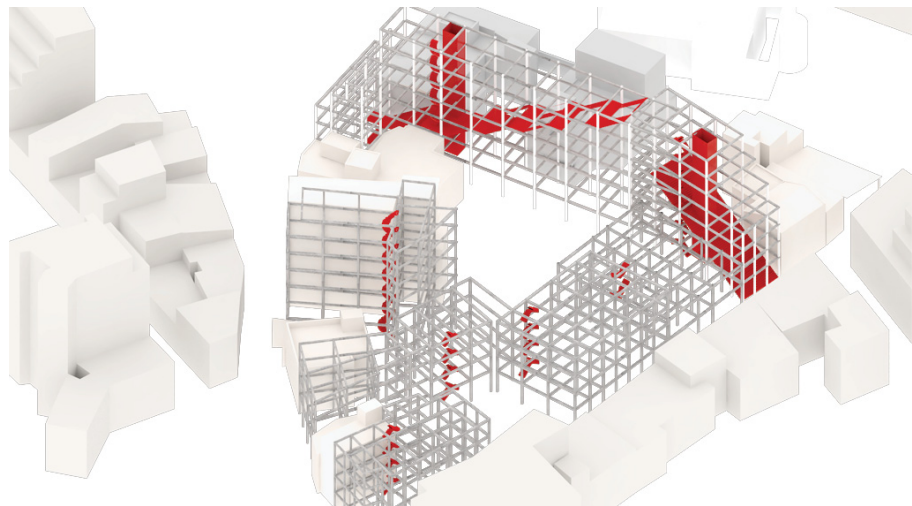
Figure 132: Circulation study 8, grande staircases from street.
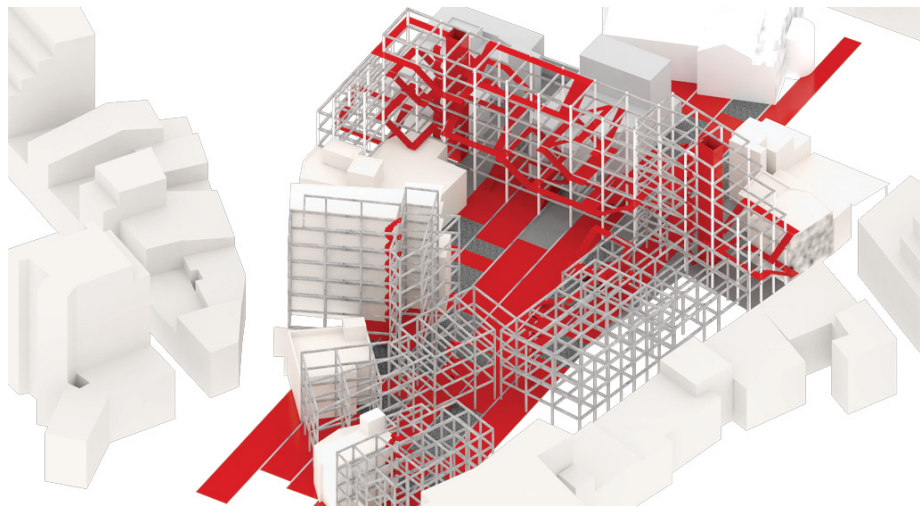
Figure 133: Circulation study 9, multiple paths through structure, axial movement on plaza.
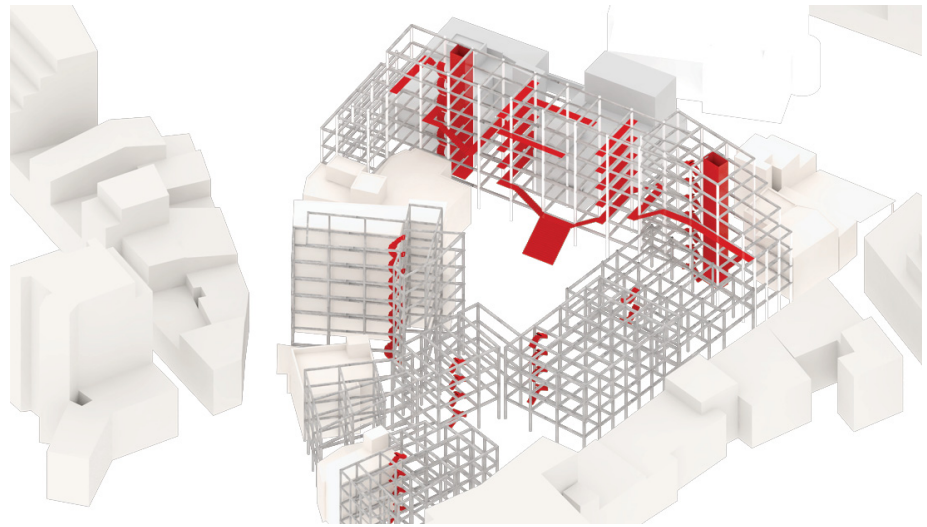
Figure 134: Circulation study 10, spiraling between structure.
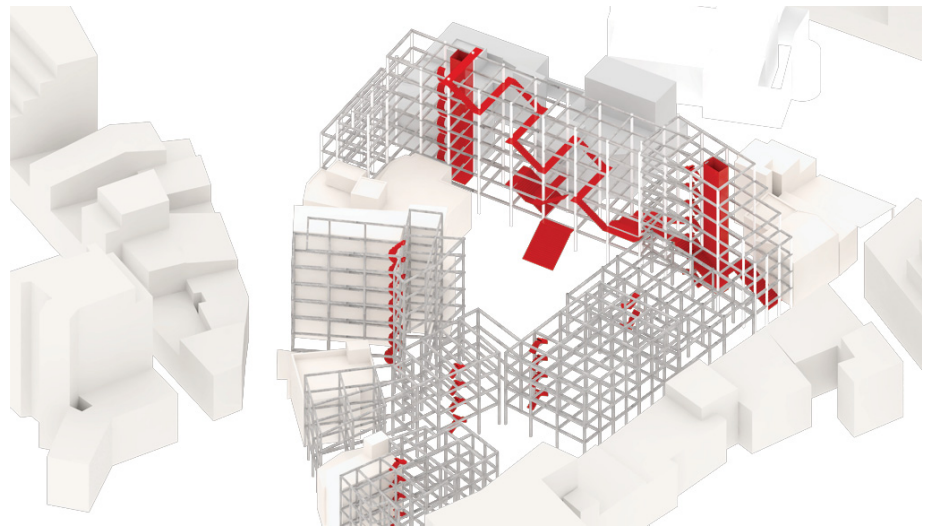
Figure 135: Circulation study 11, zig-zag movement.
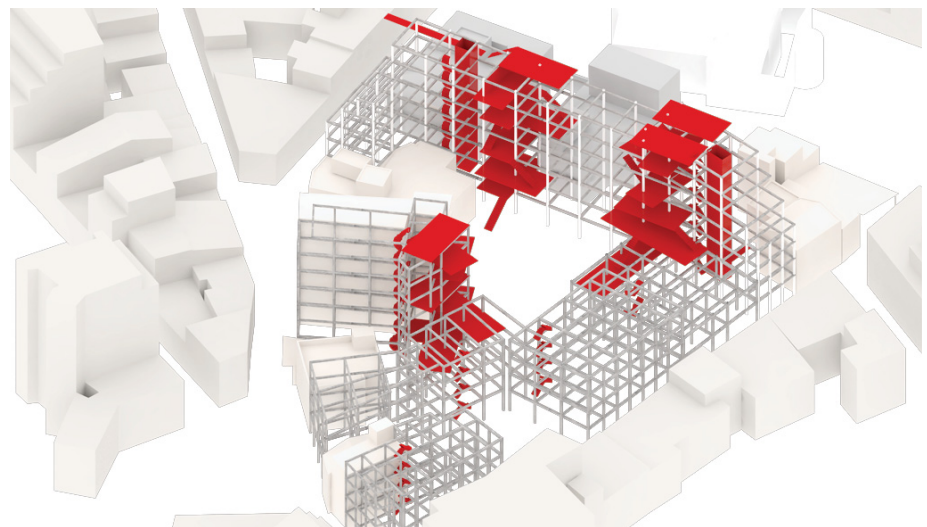
Figure 136: Circulation study 12, cores intersected with program.

Figure 137: Form study 1, solid extension of polykatikia.
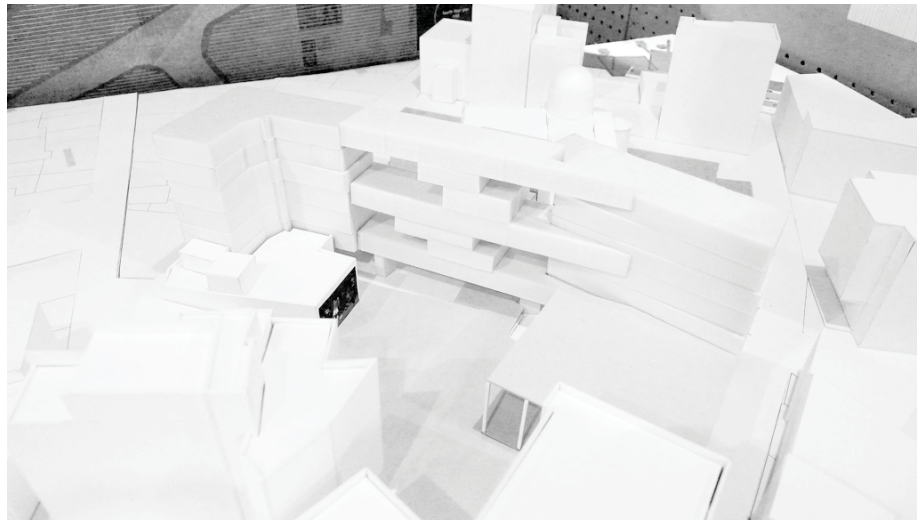
Figure 138: Form study 2, disintegrating the polykatikia.
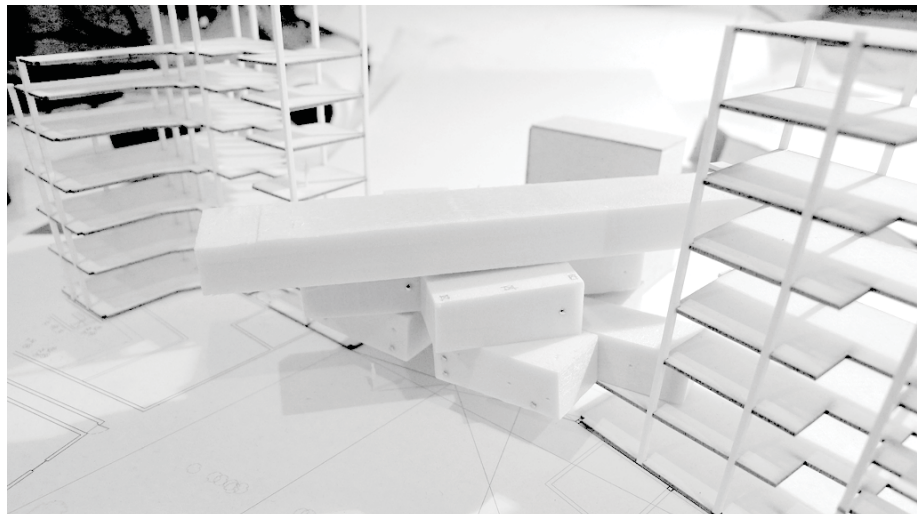
Figure 139: Form study 3, suspended volume by core.
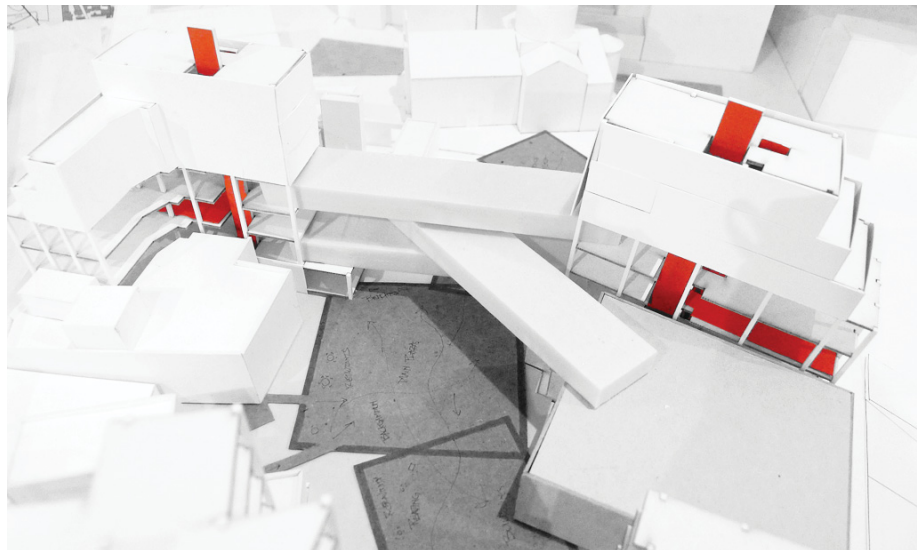
Figure 140: Form study 4, bridge penetrating from bridge.
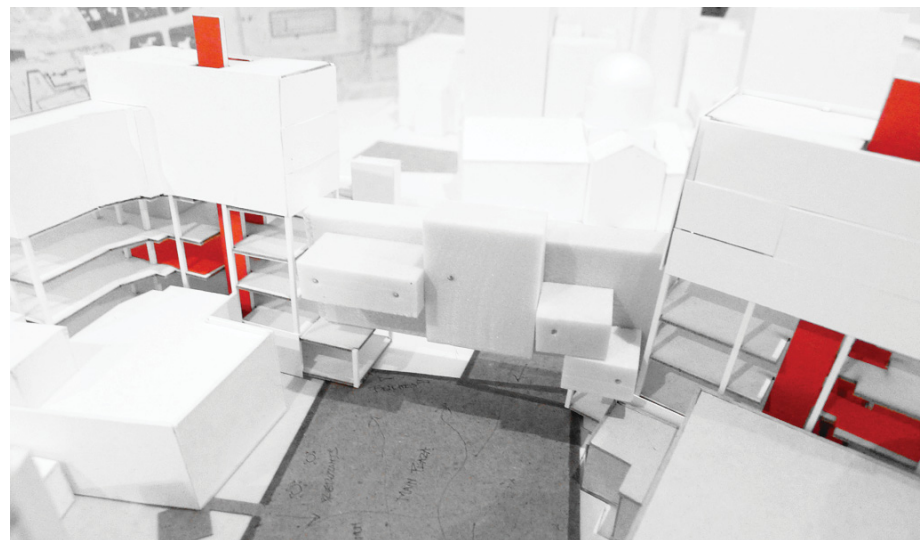
Figure 141: Form study 5, extruded volumes.
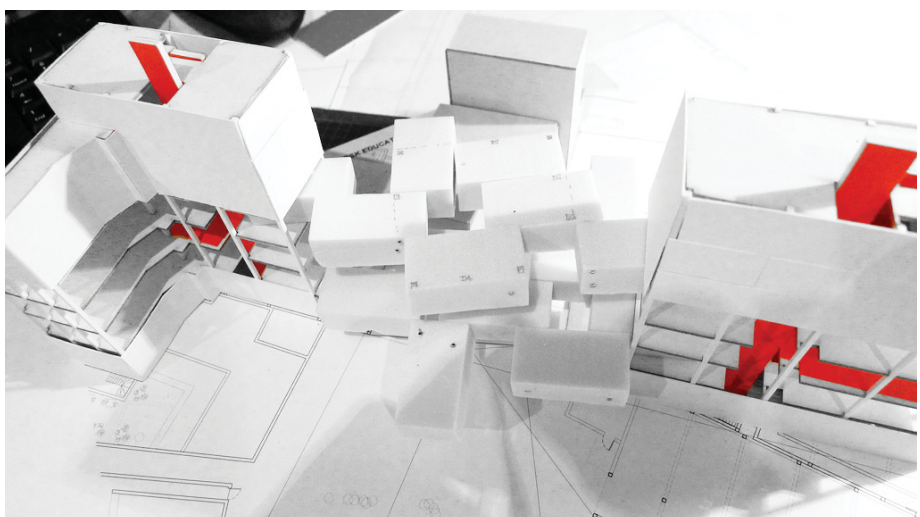
Figure 142: Form study 6, woven repeated units.
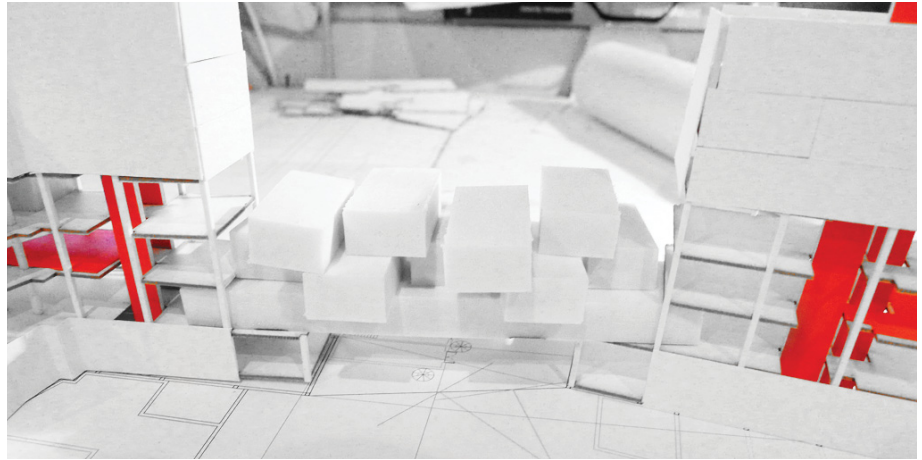
Figure 143: Form study 7, stacked repeated units.
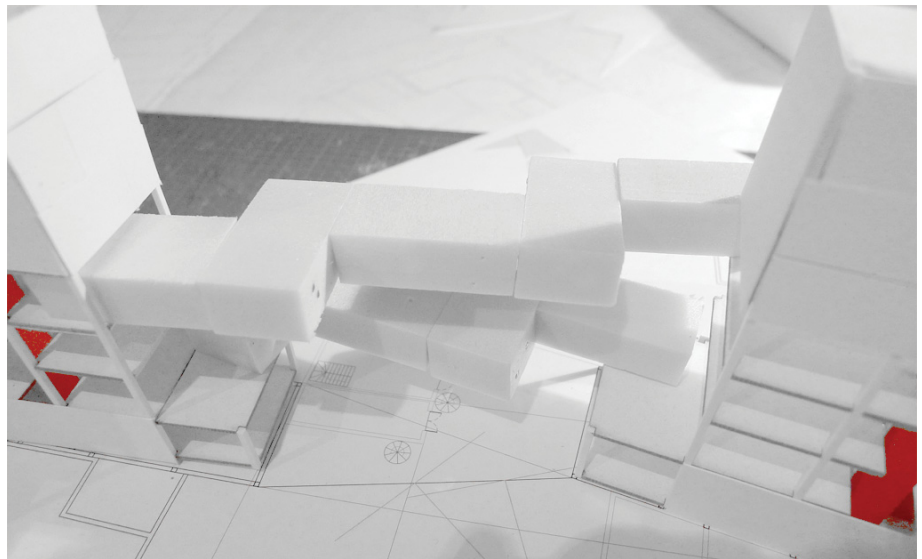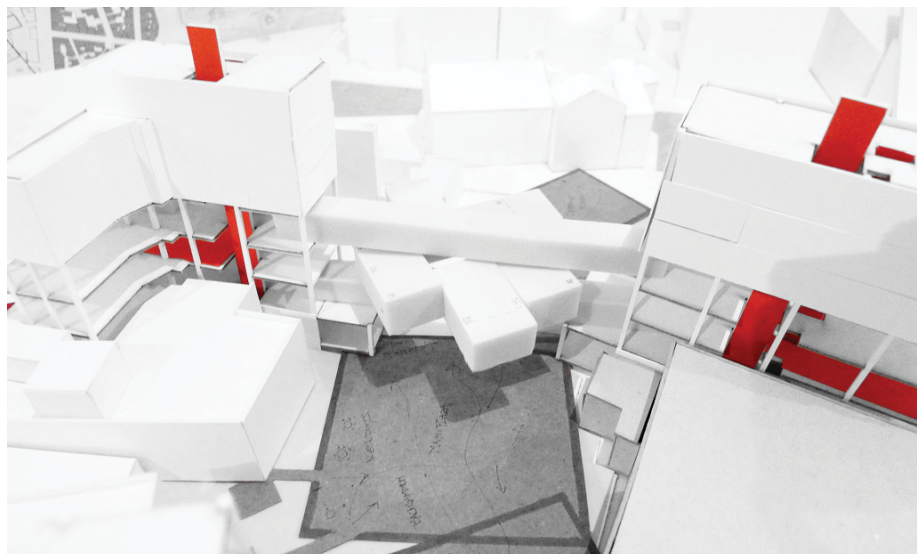

Figure 144: Form study 8, double bridge.

Figure 145: Form study 9, repeated units between bridge.
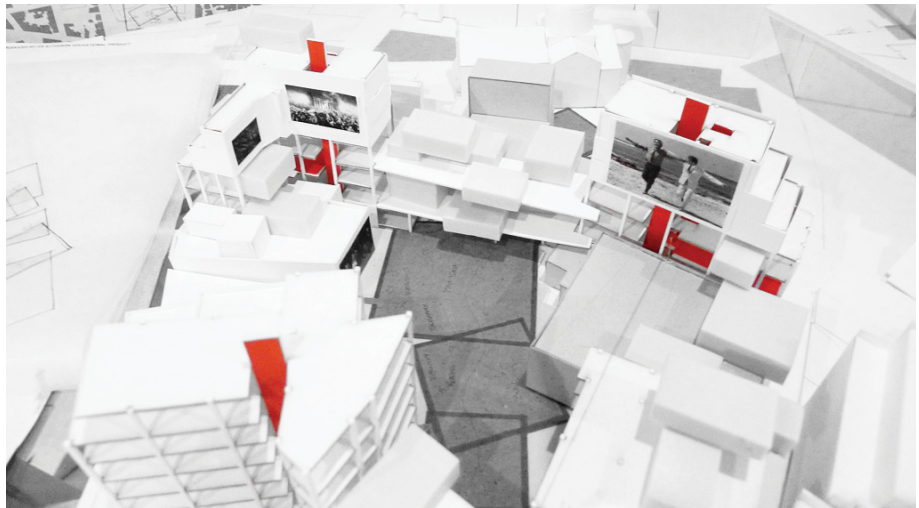
Figure 146: Form study 10, inverted *polykatikia.*

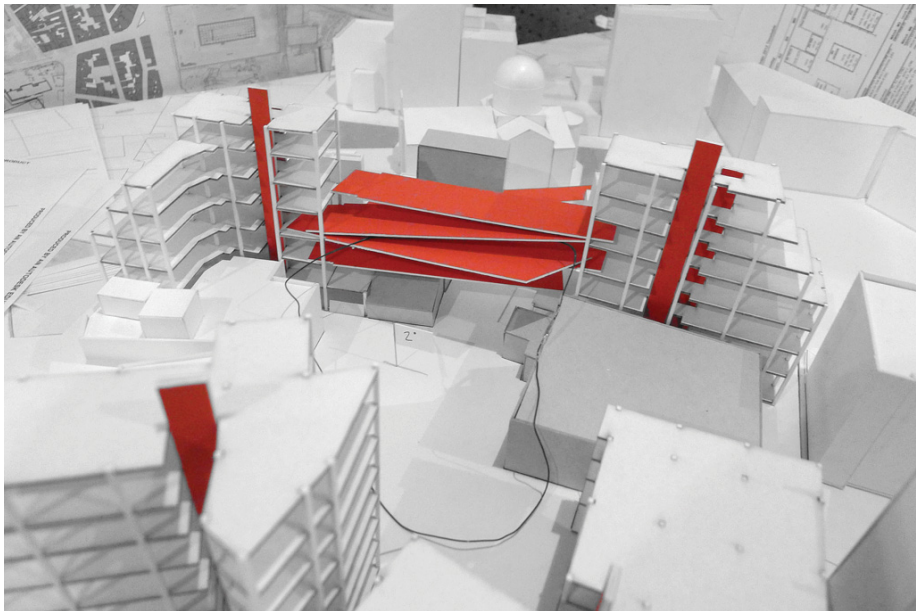Figure 147: Form study 11, trays for units to plug into.

Figure 148: Form study 12, slab concept.

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