

THE “COURTYARD HOUSE”: A SPATIAL READING OF DOMESTIC
ARCHITECTURE IN ANCIENT ANATOLIA AND GREECE

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

ELİF BİLGE

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF ARCHITECTURE

FEBRUARY 2019

Approval of the Graduate School of Social Sciences

Prof. Dr. Tlin GENÇZ
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.

Prof. Dr. F. Cn BLSEL
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

Assoc. Prof. Dr. Lale ZGENEL
Supervisor

Examining Committee Members

Prof. Dr. Suna GVEN (METU, AH)

Assoc. Prof. Dr. Lale ZGENEL (METU, AH)

Assoc. Prof. Dr. F. Gl ZTRK BKE (Çankaya Uni., ARCH)



I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: Elif, Bilge

Signature :

ABSTRACT

THE “COURTYARD HOUSE”: A SPATIAL READING OF DOMESTIC ARCHITECTURE IN ANCIENT ANATOLIA AND GREECE

Bilge, Elif

M.A., Department of History of Architecture

Supervisor: Assoc. Prof. Dr. Lale ÖZGENEL

February 2019, 206 pages

The courtyard house is one of the oldest dwelling types in the history of domestic architecture with examples found in geographies as diverse as the Middle East, Mediterranean, South America and Far East. While, in its early use, the courtyard was planned, most likely, as a protective space against wild animals and weather it has developed into a more sophisticated space, assuming further functions and regulating relationships. The aim of this study is to establish a spatial framework for evaluating and comparing the design and use of courtyard houses in ancient Anatolia and Greece in terms of focusing on the courtyard as a generic, adaptable and useful domestic space. The time span covers examples built in the Classical Period, in the 5th and the 4th BC. The design, use and architectural development of the courtyard house, in relation to the recurring spaces and their spatial relationships is discussed in reference to a group of better documented ancient sites corresponding to this time frame and include Priene, Kolophon, Klazomenai, Pergamon, Burgaz, Larissa and Latmos from Anatolia and Athens, Olynthus, Halieis, Morgantina, Piraeus and Abdera from Greece. By focusing on spatial aspects such as form, placement, size, decoration and functional aspects, the study provides a comparative reading of the case study houses in ancient Anatolia and Greece through the spatial nature of their courtyards, which provides an alternative reading to the studies based on typology.

Keywords: Ancient Greek domestic architecture, Ancient Anatolia, Ancient Greece, courtyard house, portico



ÖZ

“AVLULU KONUT”: ANTİK ÇAĞ ANADOLU VE YUNANİSTAN’DAKİ KONUT MİMARİSİNİN MEKANSAL BİR OKUMASI

Bilge, Elif

Yüksek Lisans, Mimarlık Tarihi Bölümü

Tez Yöneticisi: Doç. Dr. Lale ÖZGENEL

Şubat 2019, 206 sayfa

Avlulu konut, Orta Doğu, Akdeniz, Güney Amerika ve Uzak Doğu gibi birbirinden farklı coğrafyalarda bulunan örneklerle mimarlık tarihindeki en eski konut türlerinden biridir. Avlu, erken kullanımda çoğunlukla vahşi hayvanlara ve hava koşullarına karşı koruyucu bir alan olarak kullanılırken, zaman içinde karmaşık bir mekana dönüşmüş, yeni işlevler üstlenmiş ve sosyal ilişkilerin düzenleyicisi olmuştur. Bu çalışmanın amacı, Antik Anadolu ve Yunanistan'daki avlulu konutların tasarım ve kullanımlarını, üretken, esnek ve faydalı bir mekân olarak değerlendirmek ve karşılaştırmak için mekansal bir çerçeve oluşturmaktır. Çalışma Klasik Dönem’e odaklanmakta ve M.Ö 5. ve 4. yy’a tarihlenen örnekleri kapsamaktadır. Bu zaman dilimine karşılık gelen daha iyi belgelenmiş konutlar Anadolu’da Priene, Kolophon, Klazomenai, Pergamon, Burgaz, Larissa, Latmos ve Yunanistan’da Atina, Olynthus, Halieis, Morgantina, Pire ve Abdera kentlerinde yer almaktadır. Seçilen örnekler avlunun tasarımı, kullanımı ve mimari gelişimi ile tekrar eden mekanlar arasındaki ilişkileri tartışmakta ve değerlendirilmektedir. Çalışma mekanların konumu, büyüklüğü, bezemesi gibi mekânsal özelliklere ve işlevlere odaklanarak, Anadolu ve Yunanistan'daki konutları avlularının mekânsal özellikleri üzerinden bir okumasını yapmaktadır.

Anahtar Kelimeler: Antik Yunan konutu, Antik Anadolu, Antik Yunanistan, avlulu konut, portiko





To My Family

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisor Assoc. Prof Dr. Lale Özgenel for her expertise, encouragements, patience and constructive criticism guiding me on the way. Her excellent guidance helped me in all times of research and writing of this thesis. She also pushed me at all times of despair, sleepless night and exhaustion. Without her persistent editing I would not be able to express my thoughts well enough. Please continue to push me further.

I am also very thankful to the jury members Prof. Dr. Suna Güven and Assoc. Prof. Dr. Fatma Gül Öztürk Büke for their in-depth reading of the study and valuable comments and suggestions.

I would also like to express my utmost gratitude to my family for their unlimited love and support at every stage of my life. I was able to overcome all difficulties with their endless patience and moral support. I am especially grateful to my mother and my father who never left supporting me. I would also like to thank my sister Tuğba Hayat Bilge who gave me motivation and encouragement in moments of disbelief. I owe special thanks to my brother Ali Hayati Bilge for helping me to finalize the thesis. I would not be able to complete this thesis without his enormous support and contributions in the production of the visual material.

I would also like to thank all my friends for their encouragements and support throughout the study. I owe special thanks to some of them. I thank to my friend Busen Özgür who is going through the same experience at present, which made us share similar concerns. I am very thankful to Aylin Atacan for her warm and embracing support in every aspect of this journey. I am also grateful to Gizem Güner for sharing some of my academic work responsibilities. I would also like to thank to Nesrin Erdoğan and Gözde Yılmaz for being with me, even from miles away.

TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT	iv
ÖZ	vi
DEDICATION	viii
ACKNOWLEDGEMENTS	ix
TABLE OF CONTENTS	x
LIST OF FIGURES.....	xii
CHAPTER	
1. INTRODUCTION.....	1
1.1 Framework	1
1.2 Aim.....	5
1.3 Scope	6
1.4 Sources	8
2. THE “COURTYARD HOUSE”	11
2.1 Courtyard House as a Dwelling Type	14
2.2 “Form” and “Shape”: The Essence of Courtyard House	20
2.3 Privacy Control	24
2.4 “Settings” of Function and Spatial Efficiency	27
2.5 Accessibility	28
2.6 Enviromental Adaptability	29
2.7 Generic Space.....	31
3. THE ANCIENT GREEK HOUSE: AN OVERVIEW OF THE EVIDENCE AND ARCHITECTURAL DEVELOPMENT	34
3.1 Textual Evidence.....	34
3.2 Archaeological Evidence	38
3.2.1 <i>Megaron</i>	38
3.2.2 From Single Unit to Multiple Unit Houses Towards Spatial Complexity in the Archaic Period.....	40

3.2.3	<i>Pastas / Prostas / Peristyle: The Portico as Defining the Plan Typology</i>	46
4.	THE NATURE OF COURTYARD HOUSE IN THE CLASSICAL PERIOD	52
4.1	The Archaeology of Domestic Architecture in Anatolia: A Brief Introduction on the State of Architectural Evidence.....	53
4.1.1	“Form” and “Shape”: <i>Prostas</i> -Courtyard Scheme in the Classical Period Houses in Anatolia	59
4.2	The Archaeology of Domestic Architecture in Greece: A Brief Introduction on the State of Architectural Evidence.....	72
4.2.1	“Form” and “Shape”: <i>Pastas</i> -Courtyard Scheme in the Classical Period Houses in Greece.....	76
4.3	‘Setting’: The Greek <i>Polis</i> and the Development of Courtyard House.....	95
4.4	‘Privacy’: Spatial and Visual Control Through “Courtyard”	99
4.5	‘Environmental Adaptability’: Orientation and Climatic Factors in the Design of Courtyard Houses	109
4.6	‘Spatial Relationships’: Circulation and Movement Inside a Courtyard House	111
4.7	‘Courtyard as a Generic Space’ in the Ancient Greek House	115
5.	CONCLUSION	120
	REFERENCES.....	128
	APPENDICES	
A.	FIGURES	137
B.	TURKISH SUMMARY / TÜRKÇE ÖZET	193
C.	THESIS PERMISSION FORM / TEZ İZİN FORMU	206

LIST OF FIGURES

Figure 1: Reconstruction of Çatalhöyük Settlement, 7000-6000 BC.....	137
Figure 2: Reconstruction of Demircihöyük Settlement, 2000-1500 BC...	138
Figure 3: Plan typology of Turkish House according to Sedat Hakkı Eldem	138
Figure 4: Plan of three courtyard houses: (a) Roman <i>domus</i> in Italica, Spain, (b) traditional house in Fez, Morocco, (c) traditional house in Jilin, China	139
Figure 5: Diagram of ‘Form’ and ‘Shape’	139
Figure 6: Diagram of approximate location of “threshold” in three cultures.	140
Figure 7: Plan of a courtyard house from the Athenian Agora, Byzantine Period	141
Figure 8: Plan of an upper-class house, Korea.....	142
Figure 9: Diagram of courtyards and surrounding building(s) in traditional Korean house.....	142
Figure 10: Diagram of house-settlement system showing only some of the activities in Moslem town, Isphahan	143
Figure 11: Diagram of dwellings in Bangladesh, G. rural dwelling in Bangladesh H. urban house in Dhaka, I. urban fabric in Dhaka.....	144
Figure 12: Plan of traditional urban fabrics and basic house plans in Seoul, South Korea.....	145
Figure 13: Plan of the traditional urban fabric, Yazd, Iran	146
Figure 14: Diagram of a courtyard house in terms of access.	146
Figure 15: Isometric view of a courtyard house, Beijing, China	147
Figure 16: Plan of Saadi House, Shiraz, 19 th century, Iran	148
Figure 17: Axonometric section through the <i>zaguán</i> in the houses, Cordoba	149
Figure 18: Diagram of the dwellings in terms of systems of activities.....	150
Figure 19: Plan of Greek House according to Vitruvius.....	150

Figure 20: Plan of primitive Greek House according to Galen.....	151
Figure 21: Map showing the sites including the sampled <i>megara</i> in the study	152
Figure 22: Plan of <i>megaron</i> houses in Troy II	153
Figure 23: Plan of houses in Poliochni and Thermi	154
Figure 24: Plan of Troy I and Troy settlements	155
Figure 25: Plan of Thermi settlement.....	155
Figure 26: Plan of Mycenaean Palace at Tiryns.....	156
Figure 27: Plan of the <i>megara</i> section, Mycenaean Palace at Tiryns	156
Figure 28: Plan of houses, 8 th century BC, Zagora	157
Figure 29: Plan of houses, 7 th and 6 th century BC, Kalabaktepe, Miletus.	158
Figure 30: Plan of Bayraklı settlement, 6 th century BC	159
Figure 31: Plan of Bayraklı settlement, 4 th century BC	160
Figure 32: Double Megaron House, 7 th century BC, Bayraklı	161
Figure 33: Plan of a house, 6 th century BC, Onythe.....	162
Figure 34: Plan of Larissa Palaces, 5 th and 3 rd century BC, Larissa.....	162
Figure 35: Diagram of <i>prostas</i> houses in Anatolia and Greece	163
Figure 36: Reconstruction of a <i>prostas</i> house, House C, Abdera	163
Figure 37: Diagram of <i>pastas</i> houses in Anatolia and Greece.....	164
Figure 38: Reconstruction of a <i>pastas</i> house, House AVII 6, Olynthus	164
Figure 39: Diagram of <i>peristyle</i> houses in Anatolia and Greece	165
Figure 40: Reconstruction of a <i>peristyle</i> house, Maison de la Colline, Delos	165
Figure 41: Diagram of <i>herdraum</i> houses in Ammotopos	166
Figure 42: Reconstruction of a <i>herdraum</i> house: House 1, Ammotopos..	166
Figure 43: Map showing the sites sampled in the study	167
Figure 44: Plan of Basileia, 4 th century BC, Klazomenai.....	167
Figure 45: Plan of houses, 4 th century BC, Kolophon.....	168
Figure 46: Plan of houses, 4 th century BC, Priene.....	168
Figure 47: Plan of houses, 4 th century BC, Klazomenai.....	169
Figure 48: Plan of houses, 4 th century BC, Pergamon.....	170
Figure 49: Plan of a house, 4 th century BC, Larissa	171

Figure 50: Plan and reconstruction of a cave house, 4 th century BC, Latmos	172
Figure 51: Plan of a house, 4 th century BC, Herakleia, Latmos	172
Figure 52: Plan of houses, 4 th century BC, Burgaz	173
Figure 53: Plan of House of Many Colors, 5 th century BC, Olynthus	174
Figure 54: Plan of House A vii 4, 5 th century BC, Olynthus	175
Figure 55: Reconstruction of a courtyard house, 5 th century BC, Olynthus	175
Figure 56: Plan of The House of the Doric Capital, 3 rd century BC, Morgantina	176
Figure 57: Plan of The House of the Official, 3 rd century BC, Morgantina	177
Figure 58: Plan of House 7, 4 th century BC, Halieis	178
Figure 59: Plan of House A, 4 th century BC, Halieis	178
Figure 60: Plan of The Dema House, 5 th century BC, Athens	179
Figure 61: Plan of The Vari House, 4 th century BC, Athens.....	179
Figure 62: Plan of houses, 5 th century BC, Areopagus, Athens	180
Figure 63: Reconstruction of the houses, 5 th century BC, Areopagus, Athens	180
Figure 64: Plans of House C and House D, 5 th century BC, Athens.....	181
Figure 65: Reconstruction of House C and House D, 5 th century BC Athens	181
Figure 66: Plan of houses, 5 th century BC, Piraeus.....	182
Figure 67: Plan of House C, 4 th century BC, Abdera.....	183
Figure 68: Attic red-figure <i>hydria</i> , third quarter of 5 th century BC.....	183
Figure 69: Stele of Hegeso, first quarter of the 4 th century BC.....	184
Figure 70: Plan of a house, 5 th century BC, Athens	185
Figure 71: Reconstruction of House IV, Kolophon	185
Figure 72: Access maps of (a) House C and D, 5 th century BC, Athens, (b) House A vi 3 and A vi 5, 5 th -4 th century BC, Olynthus.....	186
Figure 73: The <i>pyxis</i> showing woman with distaff and woman with hand loom	186

Figure 74: The <i>pyxis</i> showing woman spinning and woman with <i>alabastron</i> and chest.....	187
Figure 75: The <i>pyxis</i> showing woman sitting by a <i>kalathos</i>	188
Figure 76: Reconstruction of daily life in a <i>prosta</i> house, Priene	189
Figure 77: Plan of courtyard houses in the Classical Period, Anatolia	190
Figure 78: Plan of courtyard houses in the Classical Period, Greece	191
Figure 79: Comparative plan of courtyard houses in ancient Anatolia and Greece	192



CHAPTER 1

INTRODUCTION

The question of how people conceptualized the private sphere and arranged the associated spaces in which they constructed their everyday life, is an interdisciplinary research field. Many scholars have described “house” as a residential unit based on its physical structure and structural components, a setting which is formed by socio-cultural factors and environmental conditions such as climate, geography, materials and building technology:

House means shelter, and implies edges, walls, doors, and roofs and the whole repertory of the fabric.¹

The house is the fixed point which transforms an environment into a dwelling place.²

The architectural aspects of a house and its spatial configuration are indicators of priorities of use and the related functional and social relationships of the residing social group; relationships that show differences from one society to the other.

1.1 Framework

Amos Rapoport defines the inclusive nature of house by analyzing aspects of built form in relation to a number of thematic insights: basic needs, family, position of woman, privacy and social intercourse.³ Beyond the physical structure of house, each of these factors provides a framework for a definition of house which depends also on cultural values:

One could speak of them in terms of the need to breathe, eat, drink, sleep, sit, and love, but this tells us very little; what is important with regard to

¹ Rykwert, 1991, p. 54.

² Norberg-Schulz, 1985, p. 91.

³ Rapoport, 1969, p. 6.

built form is the culturally defined way in which these needs are handled. It is not whether there will be a window or door, but their form, placement, and orientation which are important; it is not whether one cooks or eats, but where and how.

For the ancient Greek houses, Barbara Tsakirgis stated that the examination of architecture alone cannot answer the question “what is a house?” It can be understood by looking at human activities based on the architectural findings. According to her, the house was a flexible space in ancient Greece:⁴

the Greek house was more than the stone, wood, and mud brick from which it was made. For its residents, the house was a complex construction, determined in its physical form, plan, and details by both social and cultural norms. While human behavior prior to the construction of any house was a factor in determining its structure, the building and its details helped direct life and social interaction within, both in the present term and into the future life of the building and its residents.

Donald Sander, in this regard, mentioned that “a building is a cultural unit of meaning, before it is an object of practical function.”⁵ Guy Métraux also accepted that ancient houses are archives including social, economic and political events:⁶

Houses are the archive of antiquity, and in this respect, the history of housing provides an alternative to the histories of political and military events, of great men, of institutions, and great philosophical and literary discourses.

Accordingly, an inclusive analysis of some spaces such as courtyard which is a recurring space in the traditional and historical domestic architecture of many cultures, including houses in antiquity, may contribute to our understanding of the concept and use of “house” and hence to make an overarching spatial reading without using the set typologies.

The courtyard house is one of the oldest dwelling forms seen in many different regions of the world but traditionally, is associated with the

⁴ Tsakirgis, 2016, p. 34.

⁵ Sanders, 1990, pp. 43-72.

⁶ Métraux, 1999, p. 400.

Mediterranean and Middle East where it is commonly argued that climate and culture give shape to house form.

There is a substantial amount of study on traditional courtyard houses. To exemplify a few: Sedat Hakkı Eldem on Turkish houses Gholamhossein Memarian and Frank Brown on Arab and Iranian houses and Donia Zhang on Chinese houses give site-specific information about the development of courtyard house in different cultures. An influential scholar who has extensively worked on traditional houses in a cultural perspective is Amos Rapoport. He published comprehensively and exemplified several courtyard houses from various cultures and geographies and provided discussion frameworks and new insights on both form and function of courtyard as an inclusive and generative space. Rapoport's studies which highlight the common properties and advantages of courtyard housing that made it a preferred dwelling type in different cultures are inspirational and potentials for looking at the house types of the past by applying the same thematic approaches.

It is commonly argued that, in the beginning, the idea behind planning a courtyard in the domestic area, was to provide an enclosed area against outside forces such as wild animals and weather conditions.⁷ Over time, the dwelling unit with a plain courtyard developed into a more complex one that enabled to create compact residential clusters in urban zones. Susan Kent states that the spatial segmentation in domestic architecture was the result of an increasing social segmentation in a society based on specialization of social, economic and political spheres, so that the spatial divisions can be explained with specialised rooms to be used for different functions or by different gender, age and status groups.⁸ She claims that, with spatial segmentation, domestic architecture enabled to create typical and ideal behavior patterns in societies.

⁷ Özkan, 2005, Foreword.

⁸ Westgate, 2015, p. 50.

Houses being introverted around open courtyards allows the residing group to develop a lifestyle in a private setting that was linked to the outside world by means of the open courtyard. The courtyard as such, enable to create gender-specific areas or status-specific areas, a feature that contributes to the operation of cultural norms related to the separation of public and private in terms of gender presence; free and slave or insider and outsider in terms of status distinction.

The courtyard being defined by high walls and as an “open sky” space becomes an extension of the living area.⁹ As an airy, protected and well lit space it is treated as a domestic space usable for various functions. A courtyard can be equipped by water elements like wells, fountains and cisterns, and can also acquire garden characteristics by landscaping, plants and trees, thus creating a spatial pleasure. Often positioned as a central space, the courtyard functions as a node of circulation and provides access to the rest of house. Many rooms open to courtyard, also benefiting from its air and light. The kitchens, for example, open to this space from where the smoke can be taken outside the house immediately. Apart from the climatic and functional efficiencies, the cultural attributions associated to the use of courtyard is also an aspect of its conceptual significance and utilitarian focus.

The courtyard is one of the recurring spaces also in the ancient Greek houses. The functionwise and/or formwise identifiable domestic spaces in an ancient Greek house are *oikos*, *prostas*, *pastas* and *andron* which were all linked to an open courtyard. The plan types established are based on the architectural properties of these spaces and their relationship to the courtyard, factors taken as criteria for setting typologies.

In that sense, although common design principles and recurring spaces provide an architectural vocabulary applicable for an understanding of how domestic architecture was shaped and functioned, they alone do not create domesticity. To understand the ancient Greek house its social context also

⁹ Özkan, 2005, Foreword.

provides a set of data and taken together they suggest a more complete insight towards how the ancient Greek private sphere was culturally conceptualized, socially organized and spatially designed.

In the ancient Greek context, the development of city-states and an increasing spatial-social segmentation in domestic architecture is known to have happened in between the 10th and 4th centuries. According to Ruth Westgate, in small communities, the physical boundaries probably were sufficient enough to control interaction and create a social behaviour pattern; however, in the more complex communities as in the ancient Greeks, these boundaries needed to be supported by further features including semi fixed arrangements such as decoration and furnishings, and also by non-fixed elements operated in the form of behavior between the members of households.¹⁰ The courtyard, in that sense, acted as an useful and supportive space which enabled to control all movements and happenings within the domestic area. The repetitive usage of courtyard and the activities that took place in there and the linked spaces around, in that regard reveals some social and cultural behaviours, as Kent mentions. In ancient Greek house, the culturally constructed social aspects manifested in the form of separation between private / public, man / woman and free / slave.

1.2 Aim

The thesis departs from the seminal studies of Amos Rapoport on house form. By using the frameworks of analysis, particularly in his book “House, Form and Culture” and article “The Nature of the Courtyard House: A Conceptual Analysis” it aims to make a spatial reading of the ancient Greek house as an architectural concept that developed around an open courtyard which acted as a generative and adaptable space for typological variety. Rapoport, evaluates house form in a broader sense and looks at the cultural and social contexts instead of focusing only on architectural aspects. He provides an extensive and pionnering amount of study on vernacular courtyard houses

¹⁰ Westgate, 2015, p. 50.

from a variety of sites and periods. The initial research questions asked in this respect are: what is the nature of a courtyard house in terms of design, use and meaning? Are the constituent aspects and benefits of a courtyard house usable and/or adaptable to contextualize the ancient Greek house in a broader spatial perspective that can provide an alternative reading to the present typology based explanations? The study accordingly evaluates the courtyard houses in Greece and Anatolia in the Classical Period, in a comparative framework to highlight the “courtyard” as a generative space for organizing daily life and the culturally relevant norms that shaped the private sphere and guided the social relationship and communication.

1.3 Scope

The time span covers the houses built in the Classical Period when the courtyard became a sign of social and political change in the society and reached an architecturally distinctive, prominent and mature phase.¹¹ In the Classical Period, in this regard, the courtyard house was at its zenith. Thus, the courtyard house became subject of typological studies depending on its recurring architectural features such as the use of a semi open portico in association with a courtyard and the circulation relationships in the domestic area. The known classification on the plan types in Ancient Greek domestic architecture is based on portico design that is manifested as *prostas/pastas/peristyle/herdraum* house was made on a site-specific basis: Olynthus/*pastas* house, Priene/*prostas* house, Delos/*peristyle* house and Ammotopos/*herdraum* house; the *herdraum* being a relatively latecomer. On the other hand, while the *pastas/prostas* of houses had a more common usage in the Classical Period, and interpreted as the resulting schemes of a transition from *megaron* to courtyard house, the *peristyle* house was relatively sporadic, it became a popular and dominant plan type in the Hellenistic and Roman Periods.

¹¹ Westgate, 2007b, pp. 231-234.

The study makes use of examples chosen from Priene, Kolophon, Klazomenai, Pergamon, Burgaz, Larissa and Latmos from Anatolia and Athens, Olynthus, Halieis, Piraeus and Abdera from Greece and Morgantina¹² from Italy.¹³ Among these houses from Priene, Kolophon, Klazomenai, Pergamon, Piraeus and Abdera were defined as *prostas* house while those from Latmos, Olynthus and Athens as *pastas* type of houses. Others in Larissa, Burgaz, Morgantina, Halieis are mentioned relatively less, if not absent in the classification studies that took more canonical sites like Olynthus and Priene as references. There is, therefore a tendency to evaluate the Classical Period Greek houses according to the spatial relations between the courtyard and its porticos: *pastas*, *prostas* and later *peristyle*. The courtyard and its relation to the other common/distinctive spaces such as *oikos*, *andron*, commercial units or kitchen units did not always constitute the principal focus in the scholarly works. In this respect, the thesis aims to make contribution to our understanding of the ancient Greek courtyard houses by focusing on house form in the larger context of the courtyard plan typology and make a spatial reading of the relationships between the courtyard and the functionally diagnostic and identifiable spaces in the domestic area. In this regard rather than constructing a reading by focusing on a single space such as the portico or the *andron* it provides a wholistic approach that deconstructs the house form its form down to its constituent spaces. Although the courtyard remained as the main focus in this study, a discussion based on on the spatial components of the house set the framework to make a comparative reading of house form in the ancient Greek cultural sphere in the Classical Period. The chosen houses represent in this context, the better documented ancient

¹² The houses in Morgantina exemplify the *peristyle* portico and double courtyard house scheme in the early Hellenistic Period. These houses illustrate the changes in the portico style and courtyard design in the Hellenistic Period. Examples of domestic architecture that show a similar development in the Hellenistic Period, such Erythrai in Anatolia and Delos in Greece are not included in this study, to illustrate this change as a brief discussion Morgantina is used. This enabled to indicate also how the Greek cultural impact reached to beyond Anatolia and Greece.

¹³ The plan of the sampled houses from Anatolia, Greece and Morgantina in Sicily, are drawn by the author in the same scale and north direction. The spaces in the house plans are coloured in reference to the identifications provided by the excavators. Therefore coloring is not applied to spaces where a firm functional identification is not given by the excavators.

sites and also the more recently investigated ones that enrich the available site panorama.

1.4 Sources

Ancient cities, like modern ones, were exposed to catastrophies and natural disasters such as fires, earthquakes and wars, which changed their state of preservation in their own historical presence. In the case of ancient Greece, for example, Athens changed its urban character many times. The Archaic houses were demolished and rebuilt, houses in the 5th and 4th century BC were altered and newly constructed houses were added to the urban texture. In addition, the modern city has grown over the ancient one, thus making archaeological investigation harder and often impossible, especially for non-monumental architecture like houses. From Classical Athens, from the heyday of the culture in its peak, for example, only a handful of houses are investigated with some detail. The material, cultural and archeological information as in the example of Athens therefore is often fragmentary and case-based, thus giving unbalanced information for many sites. The archaeological evidence available for the sampled case studies likewise is not consistent and equally comprehensive for each site and is collected from the excavation reports and publications based on these reports.

Information about domestic architecture and daily life in ancient texts, though limited, include instances of domestic life and spatial descriptions. In the absence of narratives about the society in general and the cities other than Athens such texts can well be misleading to suggest assumptions about the Greek houses and households. According to Michael Jameson and Lisa Nevett, the material evidence of this sort should be examined in a conceptual way based on the conditions of each period, that is, the evidence cannot always constitute a common and harmonious language for Greek domestic architecture.¹⁴ The discrepancy between archaeological finds and texts, in addition, prevents drawing an accurate picture of the Greek house. For

¹⁴ Morgan, 2010, p. 8.

example, the presence of children's toys in a room can be an indicator of its use as a storage room instead of a child's room in which children might have spent time; yet the information can still be used to suggest that family members could have moved in between different domestic spaces.¹⁵ Similarly, while the presence of one loom weight cannot help to identify the function of a space as a textile production spot, loom weights found together with mirrors, *pyxis* and jewelry on the other hand could be indicative of a space used more commonly by women. It is therefore essential to look at the differences in the material evidence in both a contextual way and a cross-cultural one, instead of evaluating all Greek houses by using standard criteria.

Interdisciplinary studies that adapted a contextual approach provide useful information for understanding the Greek houses in thematic and conceptual terms. Studies of Lisa Nevett¹⁶ on the architecture and material culture of houses, of Janett Morgan¹⁷ on an overview of house and household activity, of Sian Lewis¹⁸ on vases with representations of domestic scene and gender distinction, of Ruth Westgate¹⁹ on the increasing segmentation and specialization of domestic space in between the 8th and 4th centuries BC and of Bradley A. Ault²⁰ on the Greek *oikos* show various aspects of the relationship of space and social relations in the Classical Period. In addition

¹⁵ Ibid., p.12.

¹⁶ Nevett, 1995, "The Organisation of Space in Classical and Hellenistic Houses from Mainland Greece and the Western Colonies", pp. 89-108; 1999, *House and Society in the Ancient Greek World*; 2007, "Greek Houses as A Source of Evidence for Social Relations" pp. 5-10.

¹⁷ Morgan, 2007, "Woman, Religion and The Home", pp. 297-310; 2010, *The Classical Greek House*; 2011, "Families and Religion in Classical Greece", pp. 447-464.

¹⁸ Lewis, 2002, *The Athenian Woman*; 2006, "Iconography and the Study of Gender", pp. 23-39; 2010, "Images of Craft on Athenian Pottery: Context and Interpretation", pp. 12-26.

¹⁹ Westgate, 2007, "House and Society in Classical and Hellenistic Crete: A Case Study in Regional Variation", pp. 423-457; 2007, "The Greek House and the Ideology of Citizenship", pp. 229-245; 2015, "Space and Social Complexity in Greece from the Early Iron Age to the Classical Period", pp.47-95.

²⁰ Ault, 1994, *Classical Houses and Households: An Architectural and Artifactual Case Study from Halieis, Greece*, 2000; "Living in the Classical Polis: The Greek House as Microcosm", 2007, "*Oikos* and *Oikonomia*: Greek Houses, Households and the Domestic Economy" pp. 259-265

to these studies that draw a general framework on the ancient Greek house, site-specific studies such as on Olynthus by Nicholas Cahill, on Halieis by Thomas D. Boyd and Wolf W. Rudolph, on Morgantina by Barbara Tsakirgis, on Priene by Theodor Wiegand and Hans Schrader, on Kolophon by Leicester B. Holland, on Burgaz by Numan Tuna, on Klazomenai by James Cook and Ekrem Akurgal provided information about the architectural characteristics and spatial organizations of houses and their material contents.



CHAPTER 2

THE “COURTYARD HOUSE”

The courtyard is one of the oldest spatial forms used in architectural design. It appears as a private, semi private/public and/or a public area in different types of buildings such as temples, palaces, mosques and houses in a geography that stretches from South America to Far East.²¹

The emergence and development of the courtyard, in this respect, is a research area that has been discussed in different disciplinary contexts, but it is a particularly rich one in the case of domestic architecture in which it features as a space that can be traced both historically and culturally; resulting in defining typologies that can be analysed in comparative, cross-cultural and cross-historical perspectives.

A study on the courtyard houses often starts from an analysis of traditional or vernacular houses planned with courtyards: ²²

Vernacular architecture is the product of a wide range of environmental, functional, social and cultural factors relevant at a given period. A vernacular house becomes the reflection of the spirit of an age by expressing the combined effect of these factors on a way of life. The study of the evolution of a vernacular type is an instrument to understanding the real significance of historical developments.

Each traditional courtyard house, in this sense, provides a case to understand the courtyard in a contextual way, that is, beyond the spatial content it offers. These houses are the products of influential factors such as religious beliefs, social conditions, cultural issues, climate, construction technology, economical background, thus showing that the courtyard as the common

²¹ For a general introductory book: Rabbat, O. N. (ed.). (2010). *The Courtyard House From Cultural Reference to Universal Relevance*, USA: Ashgate Publishing Company.

²² Fuchs and Meyer-Brodnitz, 1989, p. 419.

space, beyond its aesthetic purposes, is a functional and inclusive space that may respond well to satisfying such factors together. The use of courtyard however is not static, and might vary both culturally and functionally. Çatalhöyük, the largest Neolithic in ancient Anatolia, for example, settlement shows a continuous, uninterrupted urban form that included communal courts shared by individual houses entered through their flat roofs. (Figure 1) While the courtyard defined a common, open and usable space, it was the flat roofs and not the courtyards that were preferred by the inhabitants to do agricultural processing such as drying foods, and also to live in the summers.²³ The courtyards as multi-purpose areas were also used to garbage dumps.²⁴ With the increasing agricultural activities and animal husbandry, need for the storage of agricultural products and for protection of animals emerged. The continuous settlement form, as a result, was altered to create passages and the practice of entering the houses from their roofs was changed. They became entered by doors which opened to the courtyards. The courtyard located in between the houses became a more accessible space. This also enabled to get light and air into the houses from the small openings on the walls which faced the courtyard. Similar investigations are also made in the courtyard complexes dating to 10-11th century in Cappadocia. Here, the topography was a determining factor in the house design and the courtyards were formed by the rocky formations. A number of courtyard complexes are defined in the region. Although, the main contribution of the courtyard is to provide direct access to a number of rooms, here the usage of courtyards were related also to social status and religious factors.²⁵ The courtyards in the rock cut mansions of Cappadocia, for example, might have been used to accomodate military functions, food armed soldiers.²⁶ The existence of a courtyard plan therefore, despite the difficult topography, was a space of control and this

²³ Acar, 1999a, p. 14.

²⁴ Düring, 2007, p. 170.

²⁵ Öztürk, 2013, p. 848.

²⁶ Öztürk, 2010, p. 250.

indicates that its utilitarian aspects can sometime be more dominant than the environmental conditions or circulation advantages. The courtyard, in this sense, became both a functional area for economic and social activities and also the entryway to the houses.

Economic factors are among the significant parameters in the development of courtyard houses, both in the past and present. In the Bronze Age, for example, Anatolia became the center of the marine merchants of the Aegean and the Mediterranean and with the increasing economic activities, the spatial arrangement of both the cities and houses had changed.²⁷ In the settlement dated to Early Bronze Age at Demircihöyük, there was a circular ring of 25-30 *megara* which formed houses that faced a large central opening. (Figure 2) This courtyard functioned as a communal space for gathering and doing daily routines. In the Assyrian trade colony settlement at Kültepe (Kayseri), the two-story courtyard houses of mud-brick consisted of storage areas and barns on the ground floor and sleeping and living areas on the second. The courtyards functioned as storage areas for goods and animals and hence their presence was related, among other needs, to the increasing economic activities in the region.

Social practices and cultural norms influence the organization of the courtyard houses as well. In the traditional Chinese houses, for instance, the courtyard was designed in reference to the four themes described in the Chinese philosophy: “harmony with heaven”, “harmony with earth”, “harmony with humans” and “harmony with self”.²⁸ The courtyard design was mainly based on Ying Yang and Feng Shui theories that refer to the idea that there should be a balance in between the individual and the society, between the individual and the universe, and the individual and the natural environment. Accordingly, the humans are responsible for harmonizing Heaven and Earth and the courtyard is the symbolic and cosmological space

²⁷ Acar, 1999b, p. 28.

²⁸ Zhang, 2013, pp. 39-40.

of the private sphere. The social order of Confucianism dominated all aspects of domestic life and the courtyard serves for functional, practical, social and economic needs.²⁹ Responding to Confusian ethics, the inner-most part a house is set aside for women, while the outer part is reserved for the male owner. Accordingly, the size and number of buildings are determined by the social status and wealth of the householder.³⁰ In an upper-class house, the courtyard could be located in three functionally separate areas: the inner part of the house assigned for women and children, the front part assigned for the male head of the house and the spaces near the entrance for the servants, while in a modest house, the courtyard serves as the main central area for all. The courtyard, in that sense, is crucial in the physical arrangement of domestic space and the affirmation of social status.

The traditional courtyard house in many cultures, respectively, is a spatial revival of sacred beliefs, daily routines, and rituals beyond its architectural form; showing the spatial and semantic flexibility of the courtyard in different scales and dwelling types. Several more examples from past societies or modern contexts can be given, and in more detail, in terms of highlighting the development, use and conceptual significance of courtyard that generates the dwelling design. Its historical presence, multifunctional and symbolic significance made the courtyard type of dwelling a theme of research and study in both architecture and related disciplines.

2.1 Courtyard House as a Dwelling Type

The scholarly research on the courtyard house is based on studying the topic in relation to architectural typology, to the urban and social context, cultural norms and the spatial relation, behaviour of the occupants.

²⁹ Lee, 1991, p. 69.

³⁰ Ibid.

The courtyard accordingly, is portrayed to perform for a number of functions in domestic architecture of different cultures.³¹ For example, Memarian defines six functions with reference to shared characteristics of Iranian and Arabian courtyard houses:³²

1. the demarcation of limits of the property
2. the definition of a place of privacy for the family
3. the unification of spaces and elements in a house
4. the provision of a circulation element
5. the creation of a garden or cool place
6. the promotion of ventilation

In some rural houses of Iran, for example, the courtyard is a fenced plot within which the buildings are placed: its primary function is to define the boundary of the property. In the typical Iranian and Arabian courtyard houses, the courtyard can be utilized to perform a number of functions and enables to separate a number of functional spaces such as barns, storage and main living areas in the domestic sphere. It also provides an open space for the family. In both regions, the main entrances do not have a direct visual and spatial link to the domestic area for reasons of privacy and the external openings are restricted. The private and public areas are situated on different sides of the courtyard.³³ The houses are also embellished with small gardens with pools which provide climatic comfort in the house.³⁴

³¹ The courtyard houses built in climatically different regions such as the Far East and Mediterranean contribute to discuss 'climate' as a determinant factor in house form in a general framework. Similarly the sampled house from China and Korea for example, exemplify how cultural norms affect the planning and use of domestic architecture. In this regard, the houses presented as examples from different time periods and cultures in the study are chosen to illustrate these aspects as reminders; the study in this sense, do not aim for a comprehensive and wider sampling.

³² Memarian and Brown, 2006, pp. 28-29.

³³ Ibid.

³⁴ Memarian and Brown, 2006, p. 29.

The courtyard dwellings in Anatolia have been studied in similar frameworks.³⁵ Sözen and Eruzun for instance, discussed four factors influential in the development and use of houses planned with courtyards: ³⁶

1. physical environment (like climate and terrain)
2. cultural environment (like Anatolia, Mesopotamia and Persia)
3. house and its units (room, *sofa*, service and storage areas)
4. the evolution of Anatolian house plans

Asatekin likewise, suggested six factors that are effective in the planning and use of traditional Anatolian dwellings:³⁷

1. location and the size of the settlement
2. natural characteristics of the environment
3. economical condition
4. cultural and historical background of inhabitants
5. social composition and structure of inhabitants
6. technology

Both studies consider the influence of social, cultural and environmental factors in shaping the courtyard houses, and also emphasize the role of “locality”, through site-specific features such as construction technology, location and size of settlements. Accordingly, the traditional Anatolian domestic architecture that develops around a courtyard shows the socially accepted norms concerning privacy demands and religious practices. It can therefore be said that both the internal factors such as recurrent spatial elements, household compositions and daily life practices, and the external factors related to culture and environment mutually operate in the conceptualizing and design of houses; which in turn say things about the social environments in which they are produced.

³⁵ The studies on the traditional domestic architecture of Anatolia briefly noted throughout the thesis does not aim to constitute a major compilation but are used as representative examples of an otherwise extensive scholarship.

³⁶ Sözen and Eruzun, 1996 (as cited in Taşdöğen, 2006 p.19).

³⁷Asatekin, 2005, pp. 389-414.

Similar culturally specific investigations are done, albeit in a relatively limited sense, for the domestic architecture of past societies as well. Ancient Greek courtyard houses in this regard, have been subject to fresh insights. Ruth Westgate for example, discussed the planning of the ancient Greek houses not in terms of satisfying the physical factors of as climate, light and air but instead looked at the “ideology towards the status of citizenship” as an important cultural factor that influenced the house form.³⁸ She related the development of the state and its “ideal of citizenship and equality”, to the preference of a courtyard house as a dwelling type, as the enclosed form of this house type gave opportunity to its owner to show power in the specified area isolated from the outside. Marlyn Goldberg examined the ancient Greek courtyard houses according to physical features such as furnishing, materials and artifacts to understand the character of both the spatial organization of the inner spaces and the courtyard.³⁹ Lisa Nevett, focused on the concepts of house and household in Classical Antiquity to understand how social structure and cultural norms affected the physical structure of the house in different times and places.⁴⁰ By focusing on the architecture and social structure of early settlements. Mazarakis Ainian, claimed that the courtyard in the Greek houses provided spatial efficiency within the limited area by enabling light and air.⁴¹

On the other hand, more courtyard houses are often studied in terms of typology and architecture. For example, Vittorio Gregotti accepts the courtyard as an excellent architectural act and states that:⁴²

The enclosure not only establishes a specific relationship with a specific place but is the principle by which a human group states its very relationship with nature and the cosmos. In addition, the enclosure is the

³⁸ Westgate, 2007b, pp. 229-245.

³⁹ Goldberg, 1999, pp. 142-161.

⁴⁰ Nevett, 2010, pp. 3-43.

⁴¹ Westgate, 2007b, p. 241.

⁴² Gregotti, 1979, p. 6 (as cited in Petruccioli, 2006, p. 2).

form of the thing; how it presents itself to the outside world; how it reveals itself.

Reynolds and Lowry describe the courtyard house in a broader sense:⁴³

Courtyards combine beauty, social significance, and thermal comfort in such an integral way that they are powerful examples of that Vitruvian trio of “firmness, commodity, and delight”

They, accordingly, suggest that the courtyard emerged in reference to three broad categories and related sub-categories which show differences in different examples. By taking the courtyard houses in Cordoba as a case study, they discuss the architecture of courtyard houses according to aesthetics, social roles and technical performances, and the related sub-categories:

1. esthetics: proportion and symmetry, geometry and organic
2. social roles: centrality, activity, sanctuary,
3. technical performances: proportion, materials, plants and water, inhabitants

These factors emerge as the site-specific features of Cordoba houses. They take, for example, the courtyard as an essential aesthetic component of the house, and because of that, state that the courtyard is equipped with water elements and plants providing a peaceful, well-lighted space upon entering the house as its first space from the noisy and dark streets of Cordoba. (Figure 17) The entrance tunnel (*zaguán*) which gives access from the street to the courtyard, for example, is also a dark and quiet space, while, the courtyard features as a lightful and shaded area with the shadows of leaves and noise of water. This pleasure space was also the center of the house both physically and socially. As a central space, it gives access to all rooms and it is used as a space for performing daily activities by women or as a playing area by children. Its proportion, geometry, materials, plants and water are significant architectural planning properties for creating climatic efficiency in the house. According to Reynolds and Lowry “beauty”, “social significance” and “thermal comfort” are locally effective and operating parameters in the design of Cordoba houses.

⁴³ Reynolds and Lowry, 1996, pp. 123-137.

Perhaps the most significant contributions to our understanding of courtyard houses are made by Amos Rapoport. His "*House Form and Culture*" book published in 1969 is a seminal early study on house form and is used extensively as a source for later studies that focused on the topic. In this book, Rapoport claims that house form is not only a subject of architecture, it is also related to cultural and social sciences such as anthropology, geography, history and city planning and also benefits from cross-cultural studies. In this sense, it is possible to develop many alternative theories and factors determinant in house form such as climate, technology and materials, in reference to the socio-cultural norms of societies. The vernacular houses which are often anonymous built provide a good starting point to understand the specific circumstances in which the dwellings were formed. Accordingly, it would not be wrong to state that they are the products of a group or a society than an individual, so that they enable to reflect the socio-cultural factors influential in house form.⁴⁴ Rapoport in this regard, evaluates both the vernacular houses and historical and modern ones in a conceptual framework by looking at the variety of house types and forms. He makes classifications and sets criteria to find possible answers as to what the courtyard house means in different cultures.

According to Rapoport, for instance, there are several factors that needs to be taken into account for establishing typological approaches: ⁴⁵

Given at a certain climate, the availability of certain materials and the constraints and the capabilities of a given level of technology, what finally decides the form of a dwelling, and moulds the spaces and their relationships is the vision that people have of the ideal life. The environment sought reflects many socio-cultural forces, including religious beliefs, family and clan structure, social organization, way of gaining livelihood and social relations between individuals.

⁴⁴ Rapoport, 1969, p. 15.

⁴⁵ Ibid., p. 47.

In “The Nature of the Courtyard House: A Conceptual Analysis” published in 2007, Rapoport also introduced a set of criteria to identify the recurring features of courtyard houses in modern cultural contexts: ⁴⁶

1. distinction between form and shape
2. privacy mechanisms
3. subsystem of settings
4. means of access
5. efficient use of space
6. climatic efficiency

These criteria are based on the examination of a number of courtyard houses and draw a general framework to discuss the essence of a courtyard house. His study is based on a revealing the potentials of courtyard houses from various modern and past contexts including ancient Middle East (modern Turkey, ancient Mesopotamia including Ur and alike), China and Ancient Greece and Rome, basically in terms of the the economic and social attributes of the courtyard house.

To conclude, it can be said that each study foremost defines a set of possible criteria and then makes site-specific evaluations on the architectural, economical, social and cultural aspects of courtyard houses chosen as case-studies from different regions. While, these factors constitute the common main determinants in the form and function a of courtyard house; its site-specific features are defined by looking at the construction technology, use of materials, settlement pattern and the social structure of society. The courtyard accordingly defines, in a broader sense as presented by Rapoport, a private area for a household, is a climatically efficient space in hot regions, has an efficient use of space in dense urban settlements, acts a circulation space in the domestic area and thus is an inclusive space performing all these tasks within the confined boundary of the domestic realm. As thematic insights, these criteria, can be applicable to discussing the development of the courtyard house in different regions.

⁴⁶ Rapoport, 2007, pp. 57-72.

2.2 “Form” and “Shape”: The Essence of Courtyard House

For Rapoport the nature of the courtyard house is based on the “distinction between form and shape”. Accordingly, form is a fundamental organization of space and gives more information than shape which lacks the relationships among domains as well as among time, meaning and communication. For example, a courtyard might be rectangular, square or circular in shape but its boundaries show differences in terms of the organization of surrounding spaces. The spatial character of a house is basically determined around its formal aspects. For example, in Anatolia, the plan organization of the *piano nobile*, the main living floor level of the dwelling, is usually identify the typological characteristics of the traditional dwellings. Respectively, the houses generally have a rectangular and square plan, the ground floors are reserved as reception and living rooms serving for public usage while the second storeys are used as relatively private areas. Each example however, shows a different spatial arrangement. Sedat Hakkı Eldem in his canonic study described the “Turkish House” under five categories by focusing on the arrangement of a single spatial feature, the “sofa” which describes as multi-functional area:⁴⁷

1. plan without a “sofa”
2. plan with an “outer sofa”
3. plan with an “iwan and köşk”
4. plan with an “inner sofa”
5. plan with a “central sofa”

Eldem states that the plan organizations differ in term of the placement and the shape of the *sofa*, thus, “*sofa* is the main determinant of plan arrangement” in the Turkish houses and functions as an extension of the living area as well as a circulation space. (Figure 3) The first category refers to the historical houses which are commonly used in hot climates. In this type, the rooms are arranged in an order and the courtyard provides an entrance into the rooms. In the second category, the rooms are located on one side and are connected

⁴⁷ Eldem, 1954, pp. 27-127.

with a “*sofa*”; the open variations of this type are commonly used in hot climates. In the “*inner sofa*” plan type, also called *Karnıyarık*, the two sides of the sofa are surrounded with rooms and the *sofa* defines a communal space between them. This type is widespread in north Anatolia. Houses with “*central sofa*” consisted of four corner rooms around an open space/*sofa* and when this type was complimented with iwans to provide light into inner spaces it is named as “*plan with iwan and köşk*.” The form differentiation in the Anatolian houses introduced by Eldem is based on the spatial arrangement of a common space, *sofa*, and its relation to the remaining rooms and the courtyard. In fact, Eldem’s study mainly focuses on the spatial arrangement of a single space: *sofa*. His five categories, in this sense, only refer to position and usage of *sofa* in a house instead of focusing on the relation between the *sofa* and remaining rooms. Therefore, his classification can be accepted as a part of “shape” instead of “form” discussion in reference to Rapoport’s argument.

Form and shape distinction is also exemplified in the courtyard houses of other cultures. In the traditional houses in Jilin-China and Fez-Morocco and the Roman Period *domus* in Italica-Spain, the house form varies in spite of a generic similarity in their planning.⁴⁸ (Figure 4) The *domus* in Italica was organized around a colonnaded courtyard, a *peristyle*, in a symmetric way. The courtyard was the architectural center of the house, dominated the whole building and stretched between its entrance and *exedra*.⁴⁹ In the Chinese house, there are pavilions located on three sides of a courtyard; each pavilion defining an enclosure area within its border and are related to the main courtyard via their own courtyards and porticos. The house in Fez, on the other hand, is organized in an organic way. The house consisted of many interbedded units around a courtyard within the same plan. As different from the Italian and Chinese examples, there is no perpetual axis which guided the spatial arrangement in the house. The courtyard also set different spatial

⁴⁸ Petruccioli, 2006, p. 4.

⁴⁹ *Exedra*: an often square, recessed space opening to courtyard, sometimes adorned with columns at its entrance.

relationships with the rooms of which are in different size and shape. Based on their fundamental organization of space, all three houses are classified as courtyard houses dated to different periods, and seem to be identical in terms of shape characteristic, however, they vary in terms of their spatial organizations and form. So, the typological approaches based on a single spatial feature: the courtyard in three houses and the *sofa* in the study of Eldem, seems to have been associated with “shape”, in the context of “distinction of shape and form” argument. Because “form” as a more comprehensive term it can be reinterpreted in each example based on the spatial relations between the components of a house; between the outside and inside and between the public and private.

Rapoport also discusses ‘form and shape’ in the traditional courtyard houses by focusing on the public and private distinction. (Figure 5) He claims that different shapes can define the same public-private relations within the same form, or the same shape create different forms in terms of public-private sphere. In his argument, the public and private spheres are connected through a “lock” which is fundamental in the form of a house in terms of the relation between the private and public domains. The lock is a spatial feature, and can take the form of a semi public/private space, or it can be a bordered/controlled/closed area. It can also refer to physical arrangements or sequence of architectural elements; such as walls, windows, doors and passageways. In ancient Greece, for example, the courtyard itself, as an indispensable part of the house can be evaluated as a “lock” which regulated the spatial relations between public and private. It also regulated the social interaction between the members of the household and the guests, and also between the members of the household themselves. As discussed in the coming chapters, the spatial organization of the courtyard, in this sense, was the main determinant in the ‘form of a Greek house’.

The form and shape distinction can be evaluated by looking at distinctions other than public and private as well. Separation of functions spatially can be seen necessary in terms of demarcating other spheres. In the pre-industrial western world, where work and living were not distinguished as separate

spheres, for example, there was a clear differentiation between functions and users which was done in a number of lock mechanisms: the spaces of work and living were made independent and unconnected by means of providing separate entrances to commercial units and domestic quarters; the sleeping quarters for apprentices and workers placed on the first floor and thus become separated from the sleeping and living area of the family that was often a large room on the second floor; and a further separation was provided in between the living spot and the sleeping spot in the family quarter.

Rapoport's argument on the distinction between 'shape' and 'form', acts indeed, a useful tool to analyze the courtyard house at different levels and in relation to different scales, that is, to make a spatial and social reading of the courtyard house in an integrated and contextual way. As mutually definitive terms the distinction between shape and form, as stated above, highlights profoundly how private sphere is constructed, used and managed by means of various mechanism regulating 'privacy control', 'setting of function and spatial efficiency', 'accessibility', 'environmental adaptability' and 'generic space'.

2.3 Privacy Control

An important attribute of a courtyard house is its capacity in operating the "privacy mechanism".⁵⁰ This mechanism is used in two ways for a house. The first mechanism works to provide privacy as a spatial control between inside and outside. The second refers to the privacy of a house in the inside; through spatial divisions and also in terms of the relationship between time and usage of domestic spaces. In India, England and United States, for instance, the public and private character of a house is related to a "threshold" or a "lock", as previously introduced. (Figure 6) In each case, the threshold enabled to separate the two domains: public and private in a specific manner. In India, the threshold itself defines the transition in between public and private domains, in England the threshold takes the character of a semi-private/public

⁵⁰ Rapoport, 2007, p. 58.

domain in the house with the existence of a fence, in the houses in America, there is an open lawn which defines a semi-public area before entering the private realm. The concept of threshold, in that sense, is defined variously in different cultures. The threshold is spatially defined with physical elements such as entrance, fence and grass-plot to set the border between inside and outside. The privacy control in the three types of houses, in that sense, seems to be achieved by implementing the first mechanism which was introduced above.

A historical example where privacy was provided with the arrangement of physical elements in a house is the Byzantine Period dwellings found in Athens. (Figure 7) The house exemplifies the second mechanism of privacy control which refer to spatial organization of inner spaces. Here the location of the inner rooms and the distance of the courtyard from the street indicate a desire for a high level of privacy for the household. The entrances of individual rooms and their relation to the main entrance were arranged to limit visibility from the street. Windows were not much used, but if existed their location at a higher position on the wall would have contributed to the level of privacy in the house. The organization of the spaces, the architectural layout of the house, indicates that there was a spatial control on the social interaction between the family members and foreigners in the domestic area. This shows that, in the Byzantine Period, as in many other cultures, the family was accepted as the core of the society and the physical structure of a house was linked with the social behaviour of the family.⁵¹ The spatial organization of the courtyard was associated with the family intimacy and especially female seclusion. The distance of the courtyard from the outside world and its role as a communication and activity area mainly focused on maintaining high level of privacy. The visual control based on 'the strategic value in accessing or concealing the remainder of the building'.⁵²

⁵¹ Sigalos, 2003, p. 199.

⁵² Ibid., p. 203.

Similarly, in the traditional courtyard houses in Korea, responding to the Confucius ethics, the courtyard functions as the main passage from the public domain to the private area. Access from outside to inside of a dwelling is only possible by entering the main gate of the house and passing through the courtyard. The upperclass dwellings consisted of three courtyards which served for women, men and servants in the functionally separated areas. (Figure 8) Each courtyard has a single entrance and there is no transitional area in between the courtyards. The courtyard functioning as a “lock”, defines a bordered area between the public and private realm. In the exemplified schemes, (Figure 9) almost all houses oriented their openings to the courtyard, in this way, the courtyard eliminated the need for corridors and separate entrance halls. As such the courtyard in the traditional Korean houses serves to shelter the house from the street by maintaining privacy.

In the Islamic world, similarly, the courtyard is the spatial symbol of “privacy and seclusion, showing a minimal display of the occupant’s social status to the outside world”.⁵³ The urban pattern of Islamic cities thus, is mostly composed of courtyard houses.⁵⁴ The house is accepted as an absolutely private area and is generally organized according to gender separation. With well-defined gender areas in the house, the courtyard becomes the private common sphere which is used by all family members. As in the house-settlement system in Moslem town, the public-private areas are also defined based on the usage of men and women. While, the mosque, bazaar and coffee house define the public areas, the courtyard serves as the women’s social space within the house. (Figure 10)

Although it is a fact that the two-dimensional plans lack information concerning the cultural and social environments of times, they are useful contexts to develop an insight into aspects of society, family and private

⁵³Abass, İsmail and Solla, 2016, p. 2559.

⁵⁴ Özkan, 2005, p. 14.

sphere in terms of spatial behavior. The establishment and organization of spatial relations in a domestic environment respectively, are linked not only to privacy but also to issues like gender, age and status. The house, in that sense, is a container of several social relations that develop and operate spatially.

2.4 “Settings” of Function and Spatial Efficiency

A major contribution of a courtyard house is its ability to allow a more efficient use of space by reducing the settlement area.⁵⁵ The comparison between the rural and urban courtyard houses reveals that while the rural courtyard house is built as an isolated unit, the courtyard is formed as a part of the settlement in the urban area. By eliminating the need for more rooms, corridors, passageways or halls, it establishes a buffer zone which is an important factor in especially dense urban fabrics as seen in the examples from Bangladesh. The rural dwellings in Bangladesh are built in a free way, the courtyard is an open public space in between while in the urban fabric, the courtyard regulates the outside-inside relations and enables to create a more compact area. In the densely developed urban patterns, the courtyard supplies air and light and hence also enables to built houses adjacently; this housing scheme in turn results utilizing a less amount of land compared to building separate houses with spaces in between. (Figure 11)

The courtyard as an architectural form provides efficient use of space in both the house and the settlement. In the traditional Korean houses that are often found in dense settlements, for example, the courtyard serves as the main route from the public sphere to the interior of the dwelling, and it connects all indoor and outdoor spaces within the house. (Figure 12) Almost all inner spaces have their openings towards the courtyard which gives access to the street. It supplies good ventilation and privacy within its own system. That is,

⁵⁵ Rapoport, 2007, p. 59.

the courtyard acts like a room without a roof which is well adapted to the complicated environmental, social and cultural situations.⁵⁶

The courtyard as the setting of functions relates to larger systems such as street(s), neighborhood and micro-neighbourhood.⁵⁷ In the traditional Iranian city, Yazd, for instance, the courtyard encompasses the streets with the corridors and doors between the dwellings.⁵⁸ (Figure 13) It allows both for implementing a dense urban fabric and also social clustering of kin groups, by enabling direct access between the houses.

2.5 Accessibility

The courtyard is a central space that provides access to the rest of the house. (Figure 14) It is an organizational space that enables spatial distinction and regulates the circulation pattern in the private sphere. As such most, if not all, interior spaces have equivalent access to the courtyard as the central area in the house. In the traditional Korean houses mentioned above, for example, the courtyard defines a central space around which there are surrounding rooms. Though the organization of houses is different in terms of the size of courtyard and inner rooms, the circulation pattern and the courtyard being a central space remains same in each house.

The courtyard as mean of access and connecting node defines a central space both spatially and socially. In many cultures, privacy is a determining factor in the conceptualization and design of dwelling and the courtyard house with a single entrance enables to control movement and hence privacy in the domestic area. The degree of access and the idea of centrality however, can change depending on the existence of more than one court and entrance.

⁵⁶ Lee, 1991, p. 68.

⁵⁷ Rapoport, 2007, p. 59.

⁵⁸ Rapoport, 1987, p. 265.

The typical courtyard house in Beijing, China, consists of three courtyards, the southern courtyard opens to the street and is defined as the “external court”, while the northern two courtyards are “inner courts”. (Figure 15) The external court serves for male servants or as reception areas for guests, the second courtyard is used by the owner of the house for family meetings, while the third court defines a private area for members of the family.⁵⁹ Each courtyard with its surrounding rooms define a focal point in the domestic setting, but the courtyards are a part of the central circulation pattern that connects the entrance and the back rooms.

In this regard, the circulation pattern in the domestic area reveals not only the architectural structure of the domestic layout, but also the level and intensity of social interaction between the public and private, inside and outside, and between the members of the household

2.6 Environmental Adaptability

A strong attribute of a courtyard house is that it provides climatic comfort especially in hot climates. It is an utilitarian space, in that sense, it supports the infrastructure of the house by taking rain water inside and providing day light and natural ventilation to the rooms placed around and as such creates private outdoor milieu inside the houses.

The courtyard house plan, in that sense, becomes a more characteristic dwelling form in regions with hot and barren climate. In the Mediterranean which has a mild climate suitable for outdoor life; the courtyard house becomes favorable as it provides a climatically comfortable area by offering a protected open space, while the rooms located around and open into the courtyard benefit from its light, air and ventilation. In the traditional houses of Iran, for example, the climate is perhaps one of the most determining factors in the organization of the domestic area where the north-east and south-west orientation are commonly preferred in the layout of the houses.

⁵⁹ Chan and Xiong, 2007, p. 45.

The positioning of the courtyard and the orientation of rooms are generally arranged with respect to the sun. While, the southern rooms provided climatic efficiency in summer months, the north side becomes more suitable for the winter months, where the rooms are warmed by the low winter sun. The climatic efficiency in the houses is achieved not only by the orientation of rooms, but also the organization of inner spaces that are used at different times.⁶⁰ The modular and repetitive rooms (Figure 16, rooms 3, 4, 5) traditionally has little furniture and could therefore easily change their function to suit the shifting patterns of movement associated with the time of day according to the season. A room used for sleeping at nights can change function at other times, with the mattresses and bedding rolled up and stored. Three-door rooms have a storeroom at the back specifically designed for this purpose; other rooms may have alcoves built into the walls to hold bedding, clothing, kitchen utensils, and other household possessions. The three-door room commonly functioned as a bedroom, a winter and autumn sitting room, and, especially in the evening, as a guest room.⁶¹ The five-door room can be a reception room, a family meeting room or a dining room.⁶²

In the Iran example, the climatic efficiency is provided with the spatial arrangement of the house. That is, the season rooms, private and reception areas are organised on different sides of the courtyard, a principle beneficial to obtain a cool and shaded common usage area. Other studies show that the components of courtyards such as plants and fountains also contribute to achieving climatic efficiency in the domestic area. For example, Reynolds and Lowry made study on such components in the traditional Cordoba Houses, to understand their contribution to the climatic comfort of the house.⁶³ (Figure 17) They observed different parts of the courtyards in summer and winter months through temperature sensors. In a sunny day, the temperature

⁶⁰ Memarian and Brown, 2003, p. 186.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Reynolds and Lowry, 1996, pp. 129-131.

clearly showed that the presence of the larger plants, running water from a fountain or small pots as in courtyard 1 and courtyard 2 contributed to cooling the atmosphere in the house. The larger plants (which is absent in courtyard 1) provide a shady area and they became significant in air circulation. The south-west location of the courtyard and the orientation of the house, furthermore, eliminated the wind effects in the domestic area. In the densely settled cities of many cultures, with narrow and noisy streets, the courtyard also provide a calm enviroment in an enclousure area.⁶⁴

In Iran and the Arab countries, the usage of seasonal rooms and different parts of the courtyard during the day is the most commonly practiced solution for achieving climatic comfort. In Cordoba, this is achieved with some additional green and water elements situated at the courtyard.

Although climate adaptability is a significant attribution of a courtyard house, it does not explain the development of different types of courtyard houses in similar climate zones or its anti-climatic usage in some other regions. As Rapoport said, similar site conditions can also result in very different house forms, and similar forms in areas having different climatic conditions.⁶⁵ In the Eskimo culture, to give an example, the summer and winter dwellings share a common plan consisting of a central space with surrounding rooms showing that the courtyard plan is not specific to mild climates only.

2.7 Generic Space

Rapoport suggests that the courtyard is an important part of a larger system of activities and settings. When the courtyard house, the detached house, and the compound house or minimal house is compared, it becomes obvious that the courtyard extends the use of space in the domestic area, enabling a spatial setting for different activities. (Figure 18) Although the courtyard and surrounding units are two essential elements found in all cultures, the form

⁶⁴ Reynolds, 2002, p. 26.

⁶⁵ Rapoport, 1969, p. 29.

has multiple uses such as drying clothes, socializing, cooking as a children's play space, water source, toilet or bath area.⁶⁶ In this regard, the significant contribution of the courtyard house to its residents is that the courtyard itself creates a sub-system of settings in which different activities including economic production, social and domestic ones can take place; the dwelling in turn becomes a larger system of activities in the urban fabric in terms of its relation to the surrounding buildings, streets and other neighborhoods.

The courtyard is an ideal space for the social interaction of family members, especially of women and children. In the Cordoba houses mentioned above, the arcades around the courtyard were used for many activities. There is more daylight in the arcades than in the rooms behind and they also provided access to the courtyard. The courtyard as an enclosed space was also used as a safety area for some outdoor activities such as for children to play, for parents to grow and dry products, wash and dry clothes and cook, and for family to eat and even sleep.⁶⁷ Moreover, the prayer corners and related status placed in the arcade or the courtyard show that it was also used for ritual purposes. In China, on the other hand, the traditional Chinese cultural festivals are mostly celebrated in the courtyard. These festivals include the celebration of seasonal change and commemoration of ancestors and the members of family, and many visitors come together for celebration in the courtyard.⁶⁸ Some familial rituals such as the celebrations of weddings and births are also practised in the courtyard.

The spatial capacity of the courtyard house is suitable to accommodate economic activities in the houses as well. In Jordan, for example, the courtyard as a significant part of the peasant economy served as a workshop that facilitated and organized the economic processes including production

⁶⁶ Goethert, 2010, p. 175.

⁶⁷ Reynolds and Lowry, 1996, p. 125.

⁶⁸ Zhang, 2013, p.128.

and storage.⁶⁹ The tools used in cultivation and the surplus of products are stored in the courtyard. The roofed part of the courtyard also housed the cows used for the transportation of agricultural products from the field to the house. The courtyard, at the same time, enabled for a division of labour; while men is working in the field, the women did the storing, grinding and drying of agricultural products in the house.⁷⁰

The courtyard, in reference to all such happenings, can be described as diverse activities are performed by the members of the family. Beyond that, it is also a functional and inclusive space in terms of satisfying the domestic well-being that is associated with privacy control, settings of function and spatial efficiency, accessibility, and environmental adaptability together within the same area.

All the factors introduced briefly; privacy control, settings of function and spatial efficiency, accessibility, environmental adaptability and generic space, undoubtedly play a collective role in the preference of courtyard house as a favored dwelling form in both past and at present. An extensive amount of research discussed these in the context of traditional houses in modern societies. The ancient courtyard houses, as archaeologically and architecturally documented historical examples constitute another potential contextual domain to investigate the benefits of the courtyard plan. This is an equally rich and hence comparable context to discuss the nature of the courtyard in the ancient dwellings and hence to make a spatial reading based on the significance of courtyard as a generic space, and the courtyard house as the overarching typology.

⁶⁹ Alhusban and Al-Shorman, 2011, p. 6.

⁷⁰ Ibid.

CHAPTER 3

THE ANCIENT GREEK HOUSE: AN OVERVIEW OF THE EVIDENCE AND ARCHITECTURAL DEVELOPMENT

3.1 Textual Evidence

The early Greek texts in which there is a reference to 'house', in terms of architecture, space, household and use date to 4th and 3rd century BC and include the description of *Euphiletos' House* by Lysias (1.9); a description of *The House of Ischomachos* by Xenophon (*Oikonomikos* 9.2); the passage on *Greek Houses* by the Roman author Vitruvius (*De Architectura* 6.7. 1-2), a description of a *Greek House* by Galen (*De Antidotis* 1.3) and *Demosthenes (Olynthiacs)*. In these texts three terms emerge: *oikos*, *andron/andronitis* and *gynaikonitis*. Accordingly, *oikos* was used to mean; the physical structure of house, the main room in a house in which the family mostly spend time during the day, and the private sphere for all members of the household within a broader context. Both the *andron/andronitis* and *gynaikonitis* are terms associated with gender. The *andron* refers to a specifically male-oriented space used for festive dining and drinking, the *symposion* while *gynaikonitis* was portrayed as a space/area used by women.

Euphiletos describes the plan of a Greek house as consisted of a central courtyard with surrounding rooms and mentions that the stairs and doors enabled to separate the men's and women's areas in the house⁷¹:

I have a little two-storey house, the upper storey the same size as the lower, as far as women's apartments and men's apartments are concerned... When the baby was born, my wife breast-fed it. So that she should not run any risks going down the stairs when the baby needed washing, I started to live upstairs and my wife down. That was what we'd got used to that my wife would often go downstairs to sleep by the baby, to feed it for it not cry.

⁷¹ Lysias, 1.9. (as cited in Morgan, 1982, p. 115, 117).

Ischomachos, describes a house based on the organization of spaces, its residents and context. The house is separated into different parts according to frequency of use, time and functions. The *diaiteteria* as a living room provided a climatically comfortable area while the *thalamos* served as a safe area for the valuable materials and also a storage area for some products. The *andron* and *gynaikonitis* defined the gendered areas in the house, though the spatial division between the two sections seems to have been temporary and was arranged by a sliding door. Ischomachos in fact, described the Greek house as a medium to organize gender relations and domestic activities: ⁷²

[our house] is not decorated with many ornaments ... the rooms are built to house the things we want to put in them, and so each room is suited to its purpose. So the *thalamos* ['inner chamber'] is in a secure place and calls for the most valuable blankets and equipment, the dry rooms of the building are for the corn, the cool ones for the wine, those that are well lit are for the work and equipment that need light. I showed her [sc. 'my wife'] decorated *diaiteteria* ['living rooms'] for people, which are cool in the summer but warm in winter. I showed her how the whole house extends southwards, so that it was clear that in the winter it is sunny, but shady in summer. I also showed her the *gunaikonitis* ['women's apartments'], divided from the *andronitis* ['men's apartments'] by a bolted door, so that nothing can be taken from inside which should not be, and the inhabitants cannot have children without us knowing.

In the first century BC, the Roman Architect Vitruvius defined the Greek houses of the 5th, 4th and 3rd centuries as “built around an open courtyard, which usually has a portico along at least one side”: ⁷³

The Greeks, not using atria, do not build as we do; but as you enter, they make passages of narrow width with stables on one side, and the gatekeepers' rooms (*ostiariis cellas*) on the other; and these immediately adjoin the inner entrance. The space between the two entrances is called in Greek *thyronon*. You then enter the *peristyle*. This has colonnades on three sides.

As we pass in, there is a large room (*oeci magni*) in which the women of the family sit with the spinning women. Right and left of the north colonnade are the bedchambers (*cubicula*), of which one is called the *thalamus*, the other the *amphithalamus*. Round the colonnades are the ordinary dining rooms, the bedrooms and servants' rooms (*triclinia, cotidiana cubicula, etiam cellae familiaricae*). This part of the building is called the *gynaekonitis*.

⁷² Xenophon, *Oikonomikos* 9.2-55 (as cited in Nevett, 1999, p. 17).

⁷³ Vitruvius, *De Architectura* 7.1-7.

Next to this is a larger structure with more splendid *peristyles*... In the colonnades which face the north are Cyclic *triclinia* and picture galleries (*pinacothecas*); on the east the libraries, the *exedrae* on the west; halls and square entries (*quadrata ostia*) face the south that there may be ample room for four *triclinia*, and for the servants who attend them and assist in the entertainments.

In these halls men's banquets are held, for it was not customary for women to join men at dinner. Now these *peristyles* are called *domus andronitides*, for in them men meet without interruption from the women. Moreover, on the right and left suites are situated with their own entrances, dining rooms and bedrooms, so that guests on their arrival may be received into the guest-houses and not in the *peristyles*... Now between the two *peristyles* and the visitors' quarters there are passages called *mesaulae*, because they are between the two *aulae* or halls. But we call them *andrones*.

It is very remarkable that this suits neither Greek nor Latin usage. For the Greeks call *andrones* the halls where the men's banquets take place, because women are excluded...

According to him, the Greek house consisted of two main parts: *andronitis* and *gynaikonitis*. (Figure 19) The former was linked to the street and included a large *peristyle* section with spaces reserved to men's dining parties. The rooms that faced the street were used as guest apartments and hence the guests could use these rooms without entering the *peristyle* court. The latter, on the other hand, defined the private sphere of the house including two chambers - *thalamos*, *amphithalamos* and the surrounding rooms which served as dining rooms for everyday use and chambers for slaves. A transitional passage, *thyropion* provided a link between the inside and outside.

Vitruvius defined the Greek house according to his cultural view and knowledge of various disciplines. The original treatise did not have illustrations and his architectural definitions are not always coherent to a specific place and time. He defines the typical Greek house as having two courtyards; the archaeological evidence for houses with two courts however comes from only few sites, indicating that it was not a common and all-encompassing type in all periods or sites.

Galen who was a Greek physician, described the primitive Greek house form as a farm-house.⁷⁴ (Figure 20) His description shows architectural features

⁷⁴ Galen, *De Antidotis*, 1.3 (as cited in Gardner, 1901, p. 303).

similar to the spatial arrangement seen in the Greek houses found. The house accordingly was organized around a court which is separated from the street by a wall, and was entered directly via a door from the street. The space opposite the door is called *pastas* or *prostras* that functioned as the main portico. The border between the courtyard and the portico was defined with two columns and two adjacent rooms opened into this portico. The other rooms surrounded the central court. In the court, an altar of Zeus Herkeios was situated, while in the *pastas* those of Hestia and Eschara were found. The plan defines a single entrance-courtyard house which was commonly used in the Classical Period; yet there is not supporting evidence about the existence of Zeus Herkeios and Hestia⁷⁵ altars as being commonly found in the known houses.

In a speech against Euergus and Mnesibulus, Demosthenes⁷⁶ gave information about the spatial arrangement of a Greek house. Consequently, when burglars broke into the house by the garden door, they came across the children and wife who were having their lunch in the court. The residents defended themselves with some furniture and household objects, the female slaves who were in the tower heard the noises and saved the belongings from the burglars. According to this text the house was organized around only one court and was entered through a door from the garden. The women of the house used the court and female slaves had a place in a tower-like high structure linked with the house.

Based on these descriptions, it can be said that all the houses narrated were organized around a single courtyard which was generally located on the south part of the house. Xenophon who provided the clearest architectural account of an early fifth and fourth century house, also did not mention about the existence of more than one court.⁷⁷ Multiple courtyards are indeed seen more

⁷⁵ Hestia symbolized the inner spaces of the house, hearth and marriage in the Greek world. It is found in only few examples in the Classical Period. (Özgenel, 2006, p. 205).

⁷⁶ Demosthenes, *Olynthiacs* i.6 (as cited in, Gardner, 1901, p.299).

⁷⁷ Xenophon, *Oikonomikos* 9.2-55. (as cited in Nevett, 1999, p.17).

commonly in the houses of the Hellenistic and Roman Periods, rather than the Classical Period. In this regard, the ancient sources provide only a general and perhaps a personal/ideal view of the Greek house. By highlighting the only common design principle, that is, house being a courtyard type, they created architectural accounts according to the associated reason and situation; the layout of domestic space in the ancient Greek world shows a greater variety in certain aspects than the examples told in these texts.

3.2. Architectural Evidence

The development of the courtyard house has a long history in ancient Greece. From the Bronze Age (3500-1200 BC) to the Classical Period, an architectural form named *megaron* or spaces arranged in a similar form shows a continuity which is interpreted to have developed into a courtyard scheme. Examples of *megaron* structures are exemplified in both ancient Greece and Anatolia.

3.2.1 *Megaron*

The origin of the courtyard house in ancient Greece is traditionally traced back to the Bronze Age and to the *megaron* type of house. The *megaron* is a rectangular or square plan that defined a single-unit dwelling in the early Greek settlements. Examples of the plan type are found in several sites such as in Troy, Thermi, Poliochni V, Beycesultan, Karataş-Semayük, Mersin and Tarsus. (Figure 21)

In Thermi V settlement, the rectangular narrow houses were located side by side and some of which had a back room and a fore-court linked to the street. In Troy II, some isolated units were designed in the form of a *megaron* which is accepted as the oldest *megaron* house in Anatolia.⁷⁸ (Figure 22)

With reference to Poliochni and Thermi settlements, Rudolf Naumann defined five types of *megaron* houses in terms of the spatial organization of

⁷⁸ Acar, 1999b, p. 34.

additional room(s): the *megaron* house with one room (1-4), the *megaron* house with two rooms (5-7), the house with an expanded courtyard, the *megaron* house with multi-rooms (10-12) and the house without a *megaron* (8-9)⁷⁹ (Figure 23)

In the settlement at Troy VI, there are three types of *megara*; A, B, C and G exemplify the *megaron* house, megaron V, W, M illustrate the megaron houses with many rooms while E, F, Q represent the *megaron* house with one room.⁸⁰ (Figure 24) Megaron M, on the other hand, is accepted as the first courtyard house found in Troy.⁸¹ This classification can be taken as an initial and general framework on the early form of courtyard house as well. In this classification although most of the houses were designed in a rectangular *megaron* plan, their spatial arrangements related to their form show differences, a fact that recalls the form and shape distinction discussed by Rapoport.

In Thermi dated to 3000-2400 BC, on the other hand, the houses comprised of a front room and a large main room at the back. They placed adjacent to each other generally opened directly to the street. The houses, as different from the *megaron* houses, had a closed front room next to the main room.⁸² (Figure 25)

The *megaron* plan was also used in the Mycenaean and Minoan palaces in the Bronze Age. In the Mycenaean place at Tiryns dated to the 13th century BC, the *megara* were the main units in the architectural arrangement of the palace. (Figure 26 and 27) The larger *megaron* comprised of a larger room with a central hearth (D), a small front room and a portico located in front of them. The *megaron* was the dominant spatial unit in the plan and opened to the large

⁷⁹ Naumann, 1975, p. 360.

⁸⁰ Ibid.

⁸¹ Ibid., p. 361.

⁸² Ibid., p. 350.

fore-courtyard (B). The other *megaron* located to the east side of it, included a hall (C') with an *eschara* (D') and a portico in front of them. Its fore-court (B') was also linked to the courtyard on the south side. (A').⁸³

The rectangular house plan including many rooms or the *megaron* house type was seen in both Anatolia and Greece in the Bronze Age. Some *megaron* houses had a fore-court as in Troy and Thermi. In the Mycenaean palace, the *megaron* with its fore-court was also linked to the large courtyard. The fact that *megaron* functioned as the main living unit planned in association with an open courtyard, therefore, can be seen a forerunner of the later courtyard houses.

3.2.2 From Single Unit to Multiple Unit Houses Towards Spatial Complexity in the Archaic Period

In the Geometric and Early Archaic Period, the *megaron* was still the common house type in both Anatolia and Greece.⁸⁴ In the Early Iron Age, the *megara* were single isolated units as seen in Troy I and VI, whereas, in the Archaic Period, the adjacent *megara* came to define multiple unit houses. The *megaron* houses found in Sardis, Larissa, Old Smyrna and Latmos from Anatolia, and Zagora, Onythe and Vroulia from Greece, show how the dwellings became spatially elaborated in comparison to the earlier single-unit scheme.

In the Archaic Period, the single unit *megaron* form was developed into more complex houses. It is best exemplified in the houses dated to the 8th century BC in Smyrna from Anatolia and Zagora from Greece. The examples of dwellings excavated in both regions were courtyard houses with multiple rooms. In Miletus, Kalabaktepe, the houses dated to the 7th and 6th centuries BC also display a similar spatial development.

⁸³ The duplication of all parts of house – *megaron*, forecourt, hall and *eschara* is interpreted as spaces for women and men usage. (Gardner, 1901, p. 295).

⁸⁴ Abbasoğlu, 1999, pp. 48-50.

In Zagora, the majority of the visible remains of the houses date to the Late Geometric Period and the second half of the 8th century BC; the settlement was abandoned around 7th century BC. In the first phase, with the exception of house H18-H20, all houses were in *megaron* form. (Figure 28) Some of the *megara* had a narrow front with a back room, such as H34-H35, but the majority were wide-fronted, consisting of a single large room: H24-H25-H32. These rooms probably served as multi-functional spaces for living, working and sleeping. H19 had a stone bench and a large central hearth, probably served as the local leader's house or a reception room.⁸⁵ In the second phase, during 735-700 BC, the population of Zagora increased dramatically and the wide-fronted *megaron* type of houses developed into courtyard-centered houses.⁸⁶

The *megaron* H19 was developed into a complex structure by combining three existing houses H22, H28, H29 and possibly H23, to a central courtyard H21. The excavators identified different functions for all the rooms according to the archaeological contents. Room H19 served as a multipurpose living room, while room H22 was used to entertain guests, and the newly acquired room H28 for storing and preparing food. However, even it seems that each room had served for a different activity, there were also some overlaps between the activities that took place in the rooms.⁸⁷ For example H19 had a hearth and a bench with *pithos* nests, and the existence of objects related to cooking, drinking, storage and also loom-weights, spindle whorls that suggests a female presence. Likewise H28 contained some cooking equipments and H22 had a hearth and fine wares as in H23.

It seems that the architectural segmentation and room differentiation in the second-phase of the courtyard houses that took place in 8th century in Zagora, was achieved by combining the existing structures with additional rooms and

⁸⁵ Coucouzeli, 2007, p. 169.

⁸⁶ Ibid., p. 170.

⁸⁷ Cambitoglou *et al.*, 1971; pp. 45-50.

also by reducing the size of the original *megara* H24/ 25/ 32 and H26/ H27. While both units were used for living and storage, by adding new rooms, they became surrounded around a courtyard. The living and storage areas were separated and courtyard emerged as a transitional area in between them. The aim here was obviously to provide functionally differentiated rooms or activity areas for different purposes; production and storage areas for economical use and living and sleeping areas for social and private use.

In the first phase, the existence of multi-usage units H 24/ 25/ 32, H/ 26/ 27 and H 19 refers that there was no need to subdivide areas which was a sign of social convention.⁸⁸ It means that the division between men and women or old and young was not an issue. Privacy which was often defined in relation to spatial separation in the Classical Period, did not exist in the houses.⁸⁹ There was no strict boundary between the inside and outside and the daily activities took place also outside in suitable weather conditions.⁹⁰ In the second phase, a spatial segmentation occurred in the domestic area. Each house was re-planned around a courtyard and the functionally differentiated rooms such as living and storage were located around this central area. This indicates that the development of courtyard result in both spatial efficiency by creating more usage area in the same building plot and also enriched functional settings by creating open, close and semi open/close spaces for different activities.

The houses at Miletus and Old Smyrna in Anatolia are also exemplary for illustrating a transition from the *megaron* type dwelling to the courtyard-centered house. (Figure 29) In the settlement at Kalabaktepe, for example, the *megaron* defined a single-room dwelling at the beginning of 7th century BC. Towards the end of the 7th century the house was enlarged by building additional rooms on the front and south; the sub-division of the inner space

⁸⁸ Lang, 2005, p. 22.

⁸⁹ Ibid.

⁹⁰ Ibid.

was probably related to the desire for functional separation and specialization of the rooms.

Single unit houses of 10th century BC in Bayraklı, are the first examples of this type in Anatolia. It is discussed that the oval and apsidal single-space houses were replaced by rectangular houses and *megara* in the Archaic Period.⁹¹ The transformation in the house forms was related to the rising commercial and economic activities in the city. From the 7th century onwards, Old Smyrna became a significant commercial port and its population increased with the growing economic activities. The houses, correspondingly and gradually, became signs of wealth and status in the society. The single-unit houses became replaced with adjacently planned multiple-room houses organized around a courtyard. (Figure 30) The city became urbanized, receiving streets and public functions and many houses were expanded and then transformed into more complex dwelling units. The courtyard house with many rooms emerged as the common house type in this period would become widespread later in the Classical Period. (Figure 31)

In the Double Megaron House at Old Smyrna, there was a unity between the separated units. (Figure 32). It is believed that the larger room XIII served as the main living room with reference to the hearth found at its corner.⁹² Its front room XIV defined a fore-court which was probably used as a cooking area and an open space for domestic activities in suitable days. The Room XIIa with its fore-room XIIIb defined a distinctive and a kind of prestigious space, probably used by the head of the family. This is similar to the spatial organisation of *andron-anteroom*. The unit seems to have been separated from the courtyard and room XIII and could have been reserved for public gatherings. The largest room XIII might have been used as the main living room in reference to its size which is comparable to the known examples of *oikos*. Remains of a staircase indicated the presence of an upper floor which

⁹¹ Abbasoğlu, 1999, p. 44.

⁹² Özgenel, 1997, p. 16.

must have been used as a relatively private and/or sleeping area and the existence of few windows show that privacy was as important consideration. The earlier *megaron* unit as the multi-functional private setting of a household developed into complex structures with specialized rooms arranged in connection to an open space that acted as a courtyard in the later houses of Old Smyrna. The courtyard as an open space and having semi-open extensions, in the form of porches/modest porticos in front of the large rooms provided connection and integration in between the all spaces.

Two Archaic Period houses are also worth considering illustrate the transition from single unit scheme to multiple unit one. The rows of *megaron* houses dated to the 7th century BC in Onythe show the use of the multiple-room houses in this century.⁹³ (Figure 33) The southern house consisted of three adjacent *megara* which opened to a portico extended in front of them. This portico seems to have been combined as a narrow fore-court to each of the three *megaron*. It served as a transitional area between the rooms and the courtyard. The house located on the south, on the other hand, is interpreted as the ancestor of a *pastas* house type.⁹⁴ The Double Megaron House in Smyrna dated to the 7th century BC, likewise is seen as an initial attempt towards a *prostas* house type,⁹⁵ both types became widespread in the Classical Period houses in both Anatolia and Greece.

From the 10th century to the 4th century BC, the development of the ancient Greek houses can be thus studied in relation to the increasing social segmentation in the society.⁹⁶ The social segmentation served to separate the members of the household men from women, free from slave; the spatial segmentation that emerged enabled to control the interaction of the family, that is, it regulated internal social encounters and relationships by creating

⁹³ Graham, 1966, p. 6.

⁹⁴ Ibid.

⁹⁵ Akurgal, 1983, p. 41.

⁹⁶ Westgate, 2015, p. 47.

differentiated patterns of the private setting. The emergence and the continuity of the courtyard house, in this sense, is tightly associated to the interrelated social and spatial segmentation in the Greek world. The most concrete and visible change in architecture was the increasing number of rooms, sometimes by subdividing the existing rooms or by adding new ones, or by doing both. In time, the number of spaces increased, the functional matrix of the domestic setting got complicated and required organizational spaces to regulate the spatial and social relationships. As spaces became more separated and differentiated, a small or elementary courtyard came to existence as a necessity to distribute both the spaces from within as well as to make connections between the rooms and also between the inside and outside. With the number of rooms increased, the small courtyards gradually transformed into larger areas and became defined as more distinct spaces. In other words, the courtyard as an initially un-designed open area, became in time, a dominant space, sometimes more than the other spaces in the house. This is achieved by means of increasing the spatial content of the house via adding rooms around an initially modest court; in the resulting scheme the new rooms were combined with transitional passages / semi open spaces, such as porticos accentuated the courtyard as a central focus. The earliest houses at Zagora and Attica from Greece; Old Smyrna and Miletus from Anatolia followed these patterns in the time span between the Archaic and the Classical Periods. In Zagora, the courtyard seems to have emerged following the functional and social segmentation in the society, while in Old Smyrna, the economic activities and the increasing monetary wealth might have been more determinant in the development of the new house forms. The houses from Ontyhe and Old Smyrna show that the adjacent *megaron* spaces arranged in a single house were emphasized and distinguished by semi-open portico areas that created a transitional area between the rooms and the courtyard in the domestic setting. The portico besides being a transitional area also became an extension of the courtyard as a usable space. In conclusion, it can be suggested that, the courtyard as a central space evolved together with the increasing architectural complexity of dwelling, manifested in the form

of subdivision of existing rooms, addition of new ones or a combination of *megaron* type of spaces starting from the Archaic Period.

3.2.3 *Prostas* / *Pastas* / *Peristyle*: The Portico as Defining the Plan Typology

The *megaron* despite being used in temple architecture in the Classical Period, lost its popularity in the domestic architecture of the period. It featured sporadically, and is seen in few sites. The palaces in Larissa dated to the 4th century BC, is one example, which consisted of two *megara* on both north and south that opened to a central courtyard.⁹⁷ (Figure 34) The presence of the *megaron* and its combination with a courtyard was similar to the plan of the Mycenaean palaces. However, the four room complex including two rooms of *megaron* combined with two adjacent rooms is accepted to show a similarity with the *oikos-prostas* scheme exemplified in Priene.⁹⁸ In Priene, the northern part of the houses also consisted of a four unit suit including an *oikos*, *prostas*, *andron* and an auxiliary room. The *prostas* gave direct access both to *oikos* and *andron* and it served as a transitional area between these rooms and the courtyard. The border between the courtyard and *prostas* was defined by column(s). This scheme was later seen in the many houses of the *prostas* type in both Anatolia and Greece. In this regard, Larissa palaces can be taken to exemplify the development from the *megaron* type house to the courtyard house in the Classical Period in a larger and palatial context.

With the increasing number of excavated houses and spatially elaborated house plans it became possible to define further typologies other than *megaron*, in ancient Greek domestic architecture in the Classical Period. Accordingly, there are four established types differentiated according to the design of a courtyard in relation to a portico.

⁹⁷ Gönül, 2008, p. 20.

⁹⁸ Ibid., p.21.

The first type is the *prosta* house. The term *prosta* defines the portico that extends in front of a single room and is seen extensively in the houses at Priene and Abdera.⁹⁹ The plan type was more common in Anatolia for which the houses at Priene, Pergamon, Kolophon and Klazomenai constitute a good sample. (Figure 35) The porticos in Priene and Kolophon extended along only one room and was more in the character of an ante-room. In Priene, the courtyard divided the domestic area into two; the north section seems to have had a more private usage, while the south part of the house was assigned for secondary rooms and shops and had a public usage. The *prosta* which was situated on the northern part of the house, provided some degree of privacy and it defined a semi public / private area in the house. In several cases two columns demarcated the *prosta* house. In the Pergamon examples, on the other hand, the *prosta* defined a different spatial organization in terms of its relation to the connected rooms and the courtyard. The *prosta* in these houses connected the two rooms and had limited relation to the courtyard, instead of extending fully along their long sides. There are few examples of *prosta* type houses in Greece; the houses dated to the 4th century BC in Piraeus and Abdera. In all these, the *prosta* gave access to one or two rooms. (Figure 36)

A second house plan identified by another type of portico-space, was the *pastas* house. (Figure 37) The term *pastas* was first used to define the porticos extending along two or more rooms in the houses at Olynthus. (Figure 38) The term defines a portico, but the form and position of *pastas* was different than a regular portico in terms of function, use and design. In the examples from Athens and Olynthus, the *pastas* which gave access to four or five rooms served as an extension of the private spaces instead of being a transitional area. *Pastas* existed also in the houses built with *prosta*, however, the most identical feature of *prosta* is that it extended in front of only one room. *Prosta* was linked to furthest two rooms and it was in the character of an

⁹⁹ Zeyrek, 2005, p.16.

anteroom. For this reason, indeed there is an inclination to relate the origin of houses defined with a *prosta* to the *megaron* houses.¹⁰⁰

The excavations showed that the houses with *pastas* were common in the Classical Period in Greece and South Italy. The *pastas* is also seen in the rural houses at Athens and in though more rarely in Delos. Current research demonstrates that its spread into Anatolia is sporadic. There are few examples of *pastas* type houses in Anatolia. For instance, the house dated to the 4th century BC in Herakleia at Latmos is interpreted as a house with a *pastas*. Another house with a *pastas* dating to the Late Classical Period is identified in Neadria. For the time being we can say that while *prosta* was used mostly in the Ionian cultural sphere, the *pastas* was found in the Greek mainland, Aegean Islands and Sicily.

Pastas and *prosta* actually define the spaces that extended from the open courtyards surrounded often with porticos on two sides in the Classical Period, and usually dated to the 4th and 5th centuries BC. Courtyards with colonnades on all four sides are named as *peristyle* and constitute the third type of house plan. This type was defined with reference to the houses found at Delos and occasionally also at Olynthus and Priene which had colonnaded porches on three or four sides.¹⁰¹ It is suggested that this surrounding portico was a variant of the *pastas* type.¹⁰² In the Greek houses, both the *pastas* and *prosta* were located in front of the main living spaces, the *oikos*, that is, they extended along the major room/s and later took the form of a columned portico.¹⁰³ The addition of more spaces and porticos on the other sides of an open courtyard made the courtyard a more central and elaborate domestic space.

¹⁰⁰ Graham, 1966, p. 6.

¹⁰¹ Nevett, 1999, p. 22.

¹⁰² Ibid., p. 23.

¹⁰³ Zeyrek, 2005, p. 19.

In Anatolia, the *peristyle* scheme is seen mostly in the large, palatial buildings, for example in Larissa. In addition, Miletus, Kolophon, Phokaia and Priene in the Classical Period, had houses with *peristyle* courtyards and porticos but differently. In Priene, for example, the *peristyle* had a central position in the courtyard and it was linked *pastas* on the northern side of the house. (Figure 39)

The *peristyle* courtyards became common in Anatolia in the Roman Period. Antiokheia, Perge, Side and Ephesus which are dated to the Roman and Late Roman Periods, were important centers with a Hellenistic past and had residential districts with *peristyle* houses. The *domus* in the Terrace Houses 1 in Ephesus is known to have been built on the Hellenistic *peristyle* houses.¹⁰⁴ The Terrace Houses 2 in Ephesus and the houses at Side, Perge and Allianoi, similarly, were built upon the foundations of the pre-Roman period houses.¹⁰⁵ In many houses at Priene too, all sides of the courtyard became surrounded with porticos at the end of the 4th century BC.¹⁰⁶ The Palaces IV and V dated to the reign of Eumenes II (2nd century AD) in Pergamon had rooms planned around a *peristyle* courtyard. The emergence of four sided colonnades in these houses are probably related to the changes in the political and social spheres.¹⁰⁷ The *peristyles* were taken as evidence for the deterioration of the ‘modest and equal urban and housing plot standards of the Classical Period as exemplified in Priene, Kolophon and Klazomenai towards a more personalized, decorated and luxurious house concept.’¹⁰⁸ While, the urban populace lived in houses that were planned with plain and modest central courtyards, as a sign of social and political equality in the *polis* of Classical

¹⁰⁴ Ibid.

¹⁰⁵ Ibid., pp. 20-21.

¹⁰⁶ Graham, 1996, p. 13.

¹⁰⁷ Zeyrek, 2005, p. 19.

¹⁰⁸ Abbasoğlu, 1999, pp. 54-58.

Period, the houses with a *peristyle* courtyard became a means for the rich to show economic and social superiority in the Hellenistic Period. (Figure 40)

The *herdraumhaus* or *hearth-room* house is a relatively recent type and refers to a group of houses found in Greece.¹⁰⁹ (Figure 41) As different from the earlier three types, this plan type defined depending on the design of a portico. The transitional passage seems to have been eliminated and a large room with a hearth enabled direct access to the courtyard. House I in Ammotopos, shows the characteristic features in which there was a large internal space that contained a central hearth. (Figure 42) Although, rooms including hearths are also exemplified in the Priene houses, they were not identified as houses with a *hearth-room*. This plan type is associated with Ammotopos and exemplified almost always with House I.

The key point to take into consideration is that, the type-houses introduced within the scholarship became site-specific, despite the fact that the house types may occur in broad regional, chronological and even typological possibilities. For example, the courtyard house was a common house type used in the Mediterranean region, but the classification of the courtyard houses was site-specific as seen in the case of ancient Greek context which shows a variety: the schemes coined with Olynthus / *pastas* house, with Priene / *prostas* house, and with Delos / *peristyle* house. The type - definitive features, such as the portico and common specialized rooms can well be found in many examples that come from different regions and sites.

The portico design as defining the typology in the ancient Greek house provides a starting point to evaluate the distinction between shape and form in the Greek context. As in other typological approaches concerning traditional architecture introduced before, the typology used is just a formal definition and lacks a discussion of thematic aspects referring to house form. In the following chapter, accordingly, ‘privacy control’, ‘settings of function and spatial efficiency’, ‘accessibility’, ‘environmental adaptability’ and

¹⁰⁹ Nevett, 1999, p. 23.

‘generic space’ as determinant mechanisms in house form, will be evaluated in the ancient context by focusing on the spatial organization of houses in Anatolia and Greece.



CHAPTER 4

THE NATURE OF COURTYARD HOUSE IN THE CLASSICAL PERIOD

Versions of courtyard houses planned in reference to different forms of courtyards are found abundantly in both ancient Anatolia and Greece, starting from the Archaic Period. In the Classical Period the courtyard house as a distinctive space reached its maturity with recurring spaces featuring in different plan compositions, and domestic routines and rituals being set in relation to the spatial organization. In this regard an analysis of Classical Period houses through their courtyards and in terms of the benefits of this plan type provides a broader spatial reading and an architectural discussion of ancient Greek domestic architecture beyond the set typologies. The case-study houses for this purpose are selected from Miletus, Priene, Burgaz, Klazomenai, Kolophon, Latmos, Pergamon and Larissa from Anatolia, and Athens, Olynthus, Halieis, Morgantina, Piraeus and Abdera from Greece and Morgantina from Sicily / Italy. (Figure 43)

Although the known courtyard houses are classified under *pastas* / *prostras* / *peristyle* schemes, depending on the portico type in the house, the spatial organization of the houses in which they were planned varied. Hence, Rapoport's "shape" and "form" distinction can be utilised as a useful analysis theme in the Greek context to look at the spatial relationships between distinctive / common spaces, porticos and courtyard, between the courtyard and its surrounding rooms and also, between the outside and inside. This reading can also include the role of city planning and geographic conditions as significant determinants in shaping domestic architecture and influencing house form.

4.1 The Archaeology of Domestic Architecture in Anatolia: A Brief Introduction on the State of Architectural Evidence

In Anatolia, as in many contemporary cultures, migrations, invasions, increased trade capacity and density, and the growing network of transportation were among the main determinants in the development of house forms in the Classical Period. In 545 BC, Anatolia was invaded by the Persians and their dominance continued in the region until 333 BC.¹¹⁰ In the aftermath of this invasion several cities were re-organized and houses were re-built or altered. Some cities such as Miletus, Priene, Burgaz and Klazomenai were re-established. In these newly planned cities, the domestic quarters were planned to receive equal house plots.¹¹¹

Miletus was under of the sovereignty of Persians in between the 6th and 4th centuries BC during which it was demolished and re-established with a grid plan in 479 BC. It might be expected that the houses in Miletus were designed according to the grid plan; however the houses are not documented in detail. Information about the early settlement comes from the 7th century BC houses found in Kalabaktepe. The spatial organization and plan of the houses found in Kalabaktepe were not defined in detail.¹¹² There is no clue for the use of *megaron* plan in Miletus, but there were some houses which were composed of a courtyard in a square plan.¹¹³ As in Zagora and Bayraklı, they exemplified the development from the single unit house to the courtyard house. When the rooms were combined, the courtyard emerged as a central area and in this regard, the earliest houses defined as courtyard house is suggested to have come from Miletus.¹¹⁴

¹¹⁰ Abbasoğlu, 1999, p. 50.

¹¹¹ For the cities planned with a grid-iron plan in ancient Anatolia: Yılmaz, N. (2006). *Izgara Tasarlı Kent Gelişimi ve Anadolu Örnekleri*, Erzurum: Atatürk Üniversitesi.

¹¹² Usman, 1955, p. 39.

¹¹³ Gürler, 1999, p. 235.

¹¹⁴ Von Graeve, 1991, p. 7.

Priene was another city re-organized in a grid plan in the 4th century BC. The first excavations in the city was made by Olivier Rayet in the years 1899-1931 and then by Theodor Wiegand and Hans Schraeder in between 1968-1969 that revealed around 70 houses. Some houses including House VI, House VII, House VIII, House XV, House XXII, House XXIV, House XXV, House XXVI, House XXXII, House XXXIV, House XIII and House XVIII are dated to the Classical Period and give information about the domestic architecture of the period in the site. (Figure) The Hippodamian grid system, provided an equal division for the building plots and 8 sub-divisions created equal lots. The equally parcelled lots enabled to create a standard house type. The House XV, in that sense, is probably the best example of the type house resulted in this planning system. The house included three parts: on the northern part were the living quarters, the central part consisted of a courtyard and the southern part contained shops and auxiliary rooms. Almost all excavated houses of the site follow this pattern, however, they were differences in term of size, circulation pattern, the direction of entrance and the number of rooms, architectural details that will be examined further in the coming section.

Burgaz was destroyed and rebuilt in an orthogonal plan in the 5th century BC. Until its abandonment in the 3th century BC, the city preserved its general settlement layout of the 5th century BC, despite some alterations. The archeological research in the city was made through a project of METU and the city was systematically excavated in between 1993 and 2012.¹¹⁵ The residential quarters including Classical Period houses are found in two areas; NE and SE sectors. In both sectors, the remains of the 6th century BC settlement was demolished because of the building activities in the Classical Period. At SE sector, houses of two *insulae* were completely unearthed and 11 houses were completely excavated in the biggest *insula* on the West. Of these, House 3, House 4, House 5, House 6, House 7 and House 8 were examined in detail based on their artefacts and in-situ arrangements, while

¹¹⁵ Tuna, 2012, p. 49.

House 1, House 2, House 9, House 10, and House 11 provided less information.¹¹⁶ In the NE Sector, there are four excavated houses; House 1, House 2, House 3, House 4 which are studied in detail. (Figure 52) In Burgaz, the houses were roughly rectangular and surrounded by *peristasis*, alleys (roughly 0.80m) located in between the rows of houses in an *insula*.¹¹⁷ Such alleys are interpreted to have been used possibly for drainage and heat insulation purposes.¹¹⁸ Although the city was re-built in a grid plan, there is almost no consistency in form and size of the houses in terms of the number and location of the rooms. The most general feature is that the houses were organized around a courtyard which was surrounded with many rooms.

In Klazomenai, it is possible to follow the development of houses until the 6th century BC, which was interrupted because of the Persian invasion, as in almost all West Anatolian cities in the 5th century BC. The city was re-planned in the Hippodamian grid, after the invasions, in the Classical Period.¹¹⁹ The first intensive topographic surveys in the settlement was made by J. M. Cook in 1953. Ekrem Akurgal later carried out excavations in Limantepe and Khyton and continued to excavate the site until 2000. The excavations revealed that there were two building phases; the first covers the period between the 5th and 4th centuries BC in which the city was totally re-organized in a grid plan. In the second building phase, the houses were spatially divided, possibly because of the population increase and lost their earlier *prostas* scheme.¹²⁰ Some *prostas* houses were transformed into houses which were organized around a courtyard in an irregular way, while some others were still in use in the Classical Period.

¹¹⁶ Atıcı, 2013, p. 55.

¹¹⁷ Tuna, 1997, pp. 446-452.

¹¹⁸ Tuna, 2003, p. 265: the *presistasis* were filled in the Late Classical Period.

¹¹⁹ Bakır *et. al.*, 2003, p. 105.

¹²⁰ Özbay, 2010, p. 112.

In the first building phase, six *insulae* including 15 houses were discovered in the city, each was defined as a *prostas* house. The excavated *Basileia* dated to 4th century BC, is a significant building because it was used as a reference to define the *prostas* house type used in the Klazomenai. (Figure 44) The building consisted of three adjacent *prostas* houses. The eastern two *prostas* houses had a common spatial arrangement; both houses were organized around a courtyard, while the southern part included a four-unit suit identifies as *prostas*, *oikos*, *andron* and an auxiliary room and the northern rooms were assigned for secondary functions. The western House 3 was not fully enearthed. The continued wall from House 2, might be accepted as the northern rooms have similar plan arrangement with the second *prostas* house. Similarly, there is a large southern room and the house was organized around a courtyard. The main differences between House 1 and House 2 is that the width of the *oikos* and *andron* was same in the eastern house (A), while it was not in the other (B). With reference to these houses that composed the *Basileia*, the former *prostas* houses are classified as Type I and the latter as Type II. (Figure) The Type I was not common in Anatolia and hence is site-specific belonging to Klazomenai, it is best exemplified by House 1C¹²¹ It is seen in only few houses at Priene such as in House XXIV, House XXV and House XXXIV Type II, on the other hand, is seen in many houses in Priene, Abdera and Piraeus, for which House 1D is a typical example from Klazomenai.¹²²

It has been suggested that the Double Megaron House in Old Smyrna which is accepted as an ancestor of the *prostas* house type¹²³ refers to the Type I house in Klazomenai.¹²⁴ In the Double Megaron House, while the left *megaron* remained same, the right *megaron* was altered presumably to satisfy a newly emerged need. Accordingly, the large room XIII could have been

¹²¹ Ibid., p. 23.

¹²² Ibid., p. 114.

¹²³ Akurgal, 1987, pp. 34-35.

¹²⁴ Özbay, 2010, p. 114.

used for daily purpose and room XIV could have been transformed into a central courtyard. The *megaron* comprising rooms XIIIa and XIIIb was probably used as an *andron* and room XV probably served as a family living space. The house consisted of two-storeys and the second floor was probably used as the more private quarter. This spatial organization is very similar to Type I houses of Klamozmenai, and it reveals also that the spatial organization of houses, with some differences, remained little changed from the Archaic Period to the Classical Period.

Kolophon, in the Classical Period, differing from its counterparts, was not planned in the Hippodamian plan. Instead the city was re-organized within its Archaic Period boundary, during which the spatial layout of the houses were also changed. The city was first discovered and investigated by Schuchardt in 1886 and the excavations continued by an American team from ASCSA (American School of Classical Studies in Athens) starting from 1922. In between 1922-25, Carl Blegen and Hetty Goldman found a group of houses in Kolophon and published the preliminary finds. For the residential quarters found in the northern part of the city, Christine Özgan from Mimar Sinan Fine Arts University started an archaeological survey in 2010 and provided further and recent information about the ancient city. The adjacent houses; House II, House III and House IV situated in between streets C and D, in this regard provided information about the settlement pattern and domestic architecture of the city. (Figure) These courtyard houses were not consistent in size, plan and spatial organization. The courtyards were situated near the southern part of house. The northern parts were assigned to *oikos*, *prostas* and the adjoining rooms, while the *andron* was on the south; the existence of staircases in all three houses indicated that *andron* was two-storey unit in the Kolophon houses.

The Archaic settlement in Latmos, was built on a rocky topography which affected the organization of both the city and its houses. (Figure 50) Latmos and Kolophon, in this sense differs from the newly founded cities in the Classical period, in terms of their city planning and domestic architecture, as both cities were not planned in a grid system. They were built by means of

adapting to the environmental and geographic context. In many examples, for instance, rocks were used as walls of spaces.¹²⁵ In the 7th and 6th centuries, there were houses of square form which were scattered throughout the settlement and hence were not organized in a regular plan.¹²⁶ The houses were generally designed as isolated units with a single room or multiple rooms. Only few examples were spatially more complex. Most of the houses in Latmos are discovered during the excavations carried out by Anneliese Peschlow the beginning of the 1980s. The excavated houses are dated to 4th-7th century BC and as in the other cities of Anatolia, they were basically shaped with rooms planned around a courtyard. A “large house” with many rooms dating to the Classical Period was designed as part of a cave.¹²⁷ The larger houses were mostly situated to the west side of the city. Perschlow describes these houses as: “larger room on the north side, a portico on the south, a courtyard in front of them”.¹²⁸

In Pergamon as well, the grid plan was not implemented for which its mountain side location and sloping land might have been the reasons. Almost all houses built upon high terraces on the south side. The first excavations were carried out by Carl Humann and Alexander Conze between 1878-1886 and then by the German Institute of Archaeology between 2005 and 2010. After more than 100 years of excavation, four palaces and around ten houses, dating to a time span between the 3rd century BC and the 3rd century AD have been discovered and are published.¹²⁹

Larissa was re-built in the 4th century after the Persian invasions and was occupied until its destruction in the 3rd century BC. The first excavations were carried out by Swedish and German archeologists in 1902. During the

¹²⁵ Peschlow, 2005, p. 93.

¹²⁶ Özgen, 2002, pp. 13-18.

¹²⁷ Gönül, 2008, p. 14 .

¹²⁸ Peschlow, 1985, p. 159 (as cited in Gönül, 2008, p.15).

¹²⁹ Wulf-Rhedit, 2014, p. 337.

excavations a residential quarter and the palaces dating to 4th century BC found. The palaces in Larissa, introduced briefly before, constitute an exemplary case illustrating the organization of *megara* around a central courtyard in the Classical Period. The excavated houses, despite their differences in plan show a similar spatial arrangement: a portico that extended along a main living room and is reminiscent of the spatial arrangements seen in *prostas* houses at Priene, Klazomenai and Pergamon.

4.1.1 “Form” and “Shape”: *Prostas*-Courtyard Scheme in the Classical Period Houses in Anatolia

The Classical Period houses in Priene, Kolophon, Klazomenai, Pergamon, Burgaz, Latmos and Larisa illustrate the form-shape distinction in many ways. In the sites; Priene, Kolophon, Klazomenai and Pergamon, the courtyard houses are classified as *prostas* houses.¹³⁰ In some houses also the *oikos*, *andron* and the storeroom are the recurring spaces.

The houses from Kolophon were similar in their plan organization, all had courtyards at their center. The courtyard, divided the domestic area into two and opened to the street through a single entrance. Among the recurring spaces, *andron* was identified in three houses: Room IIg in House II, Room IIIh in House III and Room IVi in House IV. (Figure 45) *Androns* are identified as such in reference to their close location to the street entrance, to the presence of double-winged doors and also to the red cement paving found on the floor of House IV.¹³¹ The *andron*, as a significant space serving for men’s dinner parties was a prestigious space for the owner of house and it would be expected to have decorative and distinctive features like paved floors, painted walls or large door openings, often not seen in other rooms. In the selected three houses, the *androns* were situated on the south-eastern corner of the house and opened directly to the courtyard. Based on the evidence of an external staircases, it is mentioned that the *androns* had a

¹³⁰ Zeyrek, 2005, p. 16.

¹³¹ Holland, 1944, p. 130.

second-story in all the houses. These two-story *andron* units, are likened to the tower structures known as *pyrgos*.¹³² It was also noted that the second floors were attached to the houses during the re-organization period of the city in the Classical Period.¹³³ There are two proposed functions for the second story: a secured slaves quarters.¹³⁴ and a *gynaikonitis*, women's quarter. Both suggestions however are not verified by evidence.

The courtyards of House II and House IV included hearths. Their placement in the courtyard, rather than in an *oikos*, however led the excavators identify them as altars.¹³⁵ This interpretation was based on the ancient literary sources that emphasize the importance of hearths for obtaining heat and light, and also as the locus of ritual activity in the house.¹³⁶ The hearths located in the courtyards of houses in Kolophon, in this regard could have served also as altars for domestic rituals. House II, in addition, had two stone wells, on the east and west side of the hearth in its courtyard. The *pithos* found in the courtyard and in room IVi in House IV showed that the courtyard could have been used for storage purposes as well.

The Priene houses also show a similar variety in terms of spatial organization. (Figure 46) In all the selected examples, the southern rooms are identified as *oikos* and *prostas*. Except House VII, both the *oikos* and *prostas* opened to adjoining rooms, the functions of which are not clarified. The four rooms altogether constituted a separate wing, a living quarter on the north side. The courtyard was situated on the southern part of the houses in all examples and was entered from a single entrance. In House XXXIV, House XV and House XXIV, there was a long corridor/passage in between the street entrance and

¹³² Ibid., p. 132.

¹³³ Ibid., p. 126.

¹³⁴ Westgate, 2015, p. 80.

¹³⁵ Holland, 1944, p. 124.

¹³⁶ Tsakirgis, 2007, p. 225.

the courtyard. In House VII and House XII, the courtyards had direct access from the street. The shops and the storeroom were situated on the southern side of the house. In House XXIV, there were three rooms on the west side of the courtyard, which opened directly to the street, but their functions are not clear. Some in-situ arrangements such as hearths, were found in the *oikos*, courtyards and other inner spaces. In Priene houses, the hearths were located at the corner of the *oikos* and it is suggested that the smoke was let out by means of a chimney.¹³⁷ Because the *oikos* was described as the main living space it would be logical to use the same space to prepare and consume meals. The fixed hearth was generally situated at the center of the *oikos* which was a common practice in both Olynthus and Athens.¹³⁸ Their central positions, in fact made them an ideal source for both heating and cooking. In the *herdraum* type houses there were central hearths in large rooms as seen in Ammotopos. The hearth in these houses, could have been used for practical reasons such as heating and cooking. On the other hand, the *herdraum* located on the south occupied almost one-third of the total area in Ammotopos, while the *oikoi* with hearths found on the northern area in the houses at Priene, Athens and Olynthus were relatively modest spaces. Although the definition of a *herdraum* is based on the existence of a hearth in the living space, this was not used as a criteria to identify these latter houses as *herdraum* type houses; perhaps only the dominant position of the hearth and its size in the Ammotopos house resulted in seeing this house as another type house.

In Klazomenai, as in Priene and Kolophon houses, the courtyard served as a transitional area between the relatively private wings on the north and the secondary rooms on the south. (Figure 47) In the selected houses, *prostas* and the courtyard acted as the dominating spaces of the private settings. Here, as oppose to some examples elsewhere, all the rooms excavated are identified in terms of their function and are the recurring spaces: *andron*, its fore-court, *oikos* and *prostas* occupying the northern part and shops the south area are

¹³⁷ Hoepfner and Schwandner, 1994, p. 216 (as cited in Tsakirgis, 2007, p. 226).

¹³⁸ Tsakirgis, 2007, p. 226.

the recurring spaces. In House D, the *prosta*s was identified according to the remains of a stone column. Because the *prosta*s was separated with column(s) in the houses at Priene and Pergamon, the presence of a column here is taken as a similar evidence for a columned porch. Room 1 which opened to the *prosta*s was interpreted as an *oikos* while Room 3 with reference to its plastered walls and location an *andron* with Room 4 situated in front as its fore-court. The large courtyard was planned at the center of the house and contained a well which supplied water for the household. In House C, similar types of archaeological and spatial evidence are used to identify the rooms: largest room, Room 2, as an *oikos*, and Room 3 an *andron*. A stone pavement found in the latter room belonged to the first building stage, which was replaced with a raised and lime plastered pavement in the second building phase.¹³⁹ The *andron* was commonly coupled with a fore-room which was a convenient space for service during the dinner parties. The *pithos* found in one of its corners shows that the room was also used for storage purposes when it was not used as a servicing spot during the dinner parties. In all the Klazomenai houses which dates to 4th century BC, the courtyards were equipped with a well or a cistern mostly in stone which enabled the collection rain water to supply the water needs of the residents.¹⁴⁰

In Pergamon¹⁴¹, two fully excavated houses (1-2) under the Heroon dedicated to the worship of Pergamon kings, the two houses from the excavations within the city (3-4) and a house near the Upper Agora (5), indicated that the courtyard-*prosta*s scheme was applied in there.¹⁴² (Figure 48) In all the houses, the courtyard and *prosta*s were spatially defined, but the function of the other rooms is not clarified. The four-units spatial wing situated on the north side resembled Priene, Kolophon and Klazomenai *prosta*s houses but

¹³⁹ Özbay, 2010, p. 115.

¹⁴⁰ Özbay, 2006, pp. 454-455.

¹⁴¹ The houses in the text and the related figures are labelled by the author to facilitate spatial description.

¹⁴² Wulf-Rhedit, 1998, pp. 304-305.

the clues such as size, location, decoration and in-situ arrangements used to for identify as *oikos*, *andron* or anteroom were not applicable there. For example, in Priene, the small rooms east of *prostras* are identified as *andrions*, the major room north of the *prostras* as *oikos* and the room accessible from *oikos* as a secondary room.¹⁴³ The anteroom which defined which stood in front of *andron* is identified in reference to Piraeus¹⁴⁴ and Abdera¹⁴⁵ houses. In Pergamon houses, the north room of *prostras* was not much larger than others as common in many examples, so it is difficult to identify them as *oikos*.¹⁴⁶ According to Wulf-Rhedit, the arrangement of houses and usage of rooms in Pergamon were relatively flexible compared to its counterparts.¹⁴⁷ Although the houses were still organised in a *prostras*-courtyard scheme and in accordance with the ancient Classical Period models, it is suggested that the *prostras* houses including specified rooms went out of fashion in the late Hellenistic Period with the usage of *peristyle* houses becoming more common.¹⁴⁸

Despite the irregular settlement pattern of the city, all the houses included five to six rooms that were almost square. The courtyards had direct access to the street in except one house found within the city in which there was a portico which gave access initially to *prostras* then to a courtyard. This is not a typical arrangement, because the *prostras* extended along only a single room and generally served as semi-private area between the inner rooms. In this example, the *prostras* can be interpreted to have had a semi-public character which opened both to the entrance portico and also a large room in the house. It also indicates that Pergamon houses resembled the *prostras* houses in

¹⁴³ Ferla, *ed.*, 2005, p. 184.

¹⁴⁴ Ibid. pp. 40-41.

¹⁴⁵ Ibid. p. 185.

¹⁴⁶ Wulf-Rhedit, 1998, p. 305.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

Priene, Kolophon and Klazomenai but the interior organization and usage of rooms varied.

In Larissa, a small house dated to the 4th century BC, had a similar architectural layout: the courtyard divided the domestic area into two; Room D presumably the main living area was situated in the south and the northern part included two rooms and possibly secondary living spaces while Room B was interpreted as a workshop due to its close link to the street; Room C which was not identified could have been an independent unit.¹⁴⁹ (Figure 49) The presence of an *andron*, *oikos* and *gynaikonitis* on the other hand, are not clarified as in other sites.

There are also other examples in Anatolia which were organized around a courtyard but could not be classified under a type in terms of their portico design. The houses found in Latmos and Burgaz, in that sense, differ from their counterparts in terms of spatial arrangement and their relation to the urban pattern. In both sites, topography played a significant role in the planning of houses and the city.

In Latmos, the houses adapted themselves to the rocky topography in a free plan. A house dated to the 4th century BC in Herakleia at Latmos likewise was located on a rough topography but planned in a regular form. (Figure 50) It is identified as a house with a *pastas*, a plan type which was common in Greece and South Italy.¹⁵⁰ The excavators defined the portico that extended along the two rooms in this cave house as a *pastas*, a layout which is one of the main characteristics of a typical *pastas* house. The *pastas* as such is linked to three of the four rooms in the house. The function of the rooms are not clearly defined but it seems that the four units together with the *pastas* defined the main living quarter in the house. There is no clear suggestion for the presence of an *oikos*, *andron* or a *gynaikonitis*. According to Peschlow, there

¹⁴⁹ Gönül, 2008, p. 21.

¹⁵⁰ Wulf-Rheidt, 1998, p. 305.

are two construction layers; the units on the north including the single rooms, were probably built in the Archaic Period, while the other two rooms were probably added to the south side in the Classical Period in the 4th century BC.¹⁵¹ Another house from the same site and dating to 4th century BC exemplifies the larger houses built on the northern part of the city. It is comprised of four rooms and a courtyard which was only accessible from the southwest side. All the rooms opened directly to the courtyard. (Figure 51) The *pastas* as a plan type was not common in Latmos and the *pastas* in the house at Herakleia is probably defined as such in reference to the two rooms added later.

In Burgaz, on the other hand, the excavated houses are not be classified by the excavators under the *pastas*/courtyard or *prostas*/courtyard schemes, the two common plan types used in ancient Anatolia and Greece.¹⁵² (Figure 52) In all the found houses the courtyards are clearly defined but the *oikos*, *andron* and shop/storage spaces are identified in only a few houses. The pottery used for storing and drinking wine that were found in the domestic area is taken as an evidence for the presence of *androne*s. In the houses of NE sector, on the other hand, Room 2 in House 1, Room 1 in House 2 and Room 4 in House 3 were defined as *androne*s.¹⁵³

The *oikos* commonly defined with reference to a hearth and as being the largest room in the house is not securely suggested. In Burgaz houses, as there is no evidence for the existence of fixed hearths. *Oikos* being the main living area is also expected to demonstrate some cooking activities for which Room 8 in NE- House 1 and Room 5 in NE- House 2 present evidence and hence they are identified as *oikos*¹⁵⁴

¹⁵¹ Gönül, 2008, p. 14.

¹⁵² Tuna, 1997, pp. 446-452.

¹⁵³ Atıcı, 2013, p. 258.

¹⁵⁴ Ibid., p. 257.

The existence of *amphora* and *pithos* are used as an evidence for identifying the storage rooms in Klazomenai; in Burgaz houses however there are no similar finds. It is suggested that some room(s) were also used for storage.¹⁵⁵ In the NE-House 1 in which no room was identified as a storage space, it is suggested that the courtyard and *oikos*, Room 8, were used for this purpose. In NE-House 2, Room 6 which was connected to the courtyard through a narrow corridor, was interpreted also as a storage area. In NE-House 3, in addition a well was found in the courtyard and its location on the roofed south part of the courtyard shows that it was used for collecting rain water from the eaves.¹⁵⁶

The houses in Priene, Kolophon, Klazomenai and Pergamon are generally rectangular in shape, some like in Priene and Klazomenai, more precisely than the others, and had common/recurring spaces arranged around a courtyard. Though they are shapewise similar, the spatial relationships within show differences. Although all are classified as *prostas* houses, the spatial arrangement between the inside-outside, between the inner spaces and the courtyard which is significant determinant in the house form with reference to Rapoport's scheme varied.

The differences in the architectural layout of the houses indifferent sites can be explained foremost with the culturally operating spatial boundaries between the outside and inside. This operation is based and regulated by the architectural arrangement of the courtyard and the street entrance. All selected examples were single entrance-courtyard houses, and there is no firm evidence for more than one entrance. In Priene, Kolophon, Klazomenai, Pergamon, Larissa and Latmos, there were two types of houses: one in which the courtyard was directly accesible from the street door and the other in which there was a vestibule between the courtyard and the main entrance. In Priene and Burgaz, both types of entrances are exemplified. In House VII and

¹⁵⁵ Ibid., p. 259.

¹⁵⁶ Ibid.

House XIII in Priene, the courtyard was the first space entered from the street and there were no vestibules. In House XV, House XXIV and House XXXIV the main entrance initially opened to a long corridor and then to the courtyard. (Figure 46) In Burgaz, in the NE- House 1 which consisted of 12 rooms and a courtyard and was located on the north-east side of the house, the main entrance opened to the courtyard through a passageway. The southern rooms were not directly linked to the courtyard, their circulation was provided through a passageway that was connected to the courtyard. There were interconnected rooms in the northern wing that were accessible straight from the courtyard from a single entrance. In House 2, the courtyard was almost at the center of the house and nearly all rooms opened to this central space. The main entrance opened to the courtyard through a corridor. In Houses 3 and House 4, the courtyards were directly accessible from the street, there were no vestibules or transitional areas. These two houses were small and had only four rooms, and indeed lacked space for a vestibule. In Kolophon too both types of entrances are seen; House IV was entered from a transitional passage from the eastern side while House II and House III were linked directly to the street. In Klazomenai houses the courtyards opened directly to the street and did not have transitional areas. In the houses exemplified from Larissa and Latmos, likewise, there is no evidence for the existence of a passageway.

The spatial relation between the courtyard and the *prostas* was another prominent determinant to analyze the house form in Anatolia. Because, in all examples classified as representatives of the *prostas* house type (except Larissa and including Priene, Kolophon, Pergamon, Klazomenai) the *prostas* defined a transitional area from the public realm of the courtyard to a private room, an *oikos* or an *andron* in different ways. In Priene, there was a direct connection and spatial flow between the *prostas* and courtyard, while in Kolophon, the *prostas* was partially separated from courtyard by means of a wall that defined a small secluded area inside the *prostas*. Because the *prostas* did not open fully to the courtyard unlike in Priene, the spatial flow in between the courtyard and the *prostas* was relatively restricted and the *prostas* here acted more like a transitional space. In Priene, on the other hand,

the fully open *prosta*s could well function as another living space. In Klazomenai houses, the courtyard and *prosta*s were separated by two columns designed as a small portico, it could have been used as a living space. *Prosta*s provided a spatial flow from the courtyard to the *oikos* and the fore-court of the *andron*.

The position of *androne*s representing the male quarters and the *gynaikonitis* as referring to the women's quarter and their spatial relation with the courtyard and the *oikos* are another criteria were influential in designing the house form. Each defined gender-specific areas and hence their position in the plan was used to discuss on privacy. Although there is less architectural evidence for the existence of female specific areas in the Classical Period houses, ancient texts suggest that the *gynaikonitis* were on the upper story of the houses.¹⁵⁷ In Priene, for example, the upper floor of the *androne*s were defined as a *gynaikonitis*.¹⁵⁸ In Kolophon, the presence of an external stair indicates that the *andron* was a two-storey structure as different than the rest of the house. (Figure 45) It is claimed that the second floor was used as a *gynaikonitis*, this suggestion however is also not verified by any evidence. In Priene, the *androne*s on the ground floor, were linked to the *prosta*s on the north side of the courtyard, while the *androne*s are situated on south in Kolophon. The spatial relation between the *prosta*s and courtyard and the direct access to the *oikos* and *andron* from the same area, *prosta*s, led some scholar argue about the lessened privacy demands in the Priene houses.¹⁵⁹

The *andron* as men's quarter was directly accessible from the *prosta*s in all the houses which were separated from the courtyard with column(s). These columns defined the spatial boundary between the *prosta*s and the courtyard. In Klazomenai houses, as different from Priene and Kolophon, there was an

¹⁵⁷ Jameson, 1990b, p. 187.

¹⁵⁸ Ferla, ed., 2005, p. 192.

¹⁵⁹ Özgenel, 2001, pp. 136-137.

ante-room situated in front of the *andron*. The ante-room was linked directly to the *prostas* via a door. When compared to Priene houses, the *oikos* as the private sphere was separated from the *andron* by means of an anteroom and there is no evidence for the existence of a second floor that could have been used as a female area.

In Burgaz houses, similarly, there is no room identified as a *gynaikonitis* nor any evidence for a second story. In a handful amount of examples where *andron* was defined, its spatial arrangement showed differences. For example, in the NE- House 1, the *andron* (room 2) was situated near to the street entrance and was partially separated from the courtyard through a kind of vestibule. It seems the *andron* here visually and spatially controlled the house. In NE-House 2, the *andron* (room 1) was situated near the street and opened directly to the vestibule which gave access to the courtyard. It did not have any spatial relation with the rest of the house. In the NE-House 3, the *andron* (room 4) was situated at the corner of the house and as different from the other houses in the site, it was linked to the inner spaces and was not situated near the street entrance. In some houses, on the other hand, loomweights are found in the *oikos* or in some rooms that directly opened to the courtyard: in NE-House 1, room 7 opening directly to the courtyard and room 8 which is identified as an *oikos*; In NE-House 2, the courtyard and room 4. The significant distribution of loomweights in these houses may indicate a female use in the courtyard and associated spaces. (Figure 52)

The changing spatial arrangements between the courtyard and the other recurring spaces, *oikos*, *andron* and *prostas* are the determinant factors of house form in ancient Anatolia. Although, there is no standard house form in terms of a standard and fixed spatial relationship in the examples concerned, it is a fact in the Classical Period houses in Anatolia, the courtyard was the most common and indispensable space. In even small houses a large amount of area was reserved for a courtyard such as in Klazomenai (in House 1C and House D) in almost 150 m² was assigned to the courtyards out of 340m² total space. In Burgaz, the courtyard covers an area of 40 m² in House 1 (270m²),

39 m² in House 2 (184m²), 28m² in House 3 (110m²) and 35m² in House 4 (120m²). In Kolophon (in House II and House IV), the courtyard occupied an area almost 70m² while it was almost 170m² in House III. In Priene houses also one-third of the total area was reserved for courtyard.

Differences in the planning of houses and house forms can not be explained only in reference to the urban characteristics of the cities. The city planning approaches were different in the cities mentioned and any plan type was not specific to a certain urban planning method. The newly-planned cities such as Priene and Burgaz for example had both a grid plan but the *prostas* house type was not common to both, it is not seen in Burgaz. Priene and Kolophon on the other hand, had both *prostas* houses despite the differences in their urban planning patterns. While, Priene was established in a grid plan with equal housing plots, Kolophon was planned in an irregular urban pattern suiting the topography. In Kolophon the known houses were different in form and the *insulae* were separated by stone paved streets. The houses accordingly were not equal in size and they were not located on equal plots. This might have been a result of the difficulty imposed by the topography, but this does not alone adequately explain the absence of a standard plan type, as Priene sharing a similar topography was planned in a strict grid plan.¹⁶⁰ Houses excavated in Latmos were built into a rocky topography, similarly, and showed a more irregular spatial arrangement; they were interpreted as *pastas* houses as different from the more common *prostas* type of houses in the Classical Period in Anatolia. The courtyard in these houses was created in a rather free plan and its form was determined by the location of the other rooms. One reason might have been the difficulty of designing regularly planned houses because of the steep topography which might not have allowed comfortably the application of a grid plan organization, though in Priene, as mentioned above, the steep topography did not prevent the application of a grid plan with regular housing plots successfully. In Pergamon, there was not a standard *insula* size with regular building plots,

¹⁶⁰ Becks, 2014, p. 283.

the residential structures took a variety of forms based on their contextual propoerties. Although the geography could have guided the positioning and orientation of houses with respect to the sun, it did not change the arrangement of houses as a whole. The houses principally consisted of a courtyard on the south and living rooms on the north as seen in most of the other cities.

It seems that the differences in house form are principally manifested in the spatial arrangement of courtyards and the specialised recurring rooms, irrespective of the city planning method and geography. As Rapoport, says 'form' is more than a 'shape' and includes the contribution of social and cultural norms as determinant factors. The emergence of different house forms, in terms of spatial arrangement in the houses described so far can be explained according to this broader definition; the co-existence of socieities who lived in the same geographical horizon of Western Anatolia and had culturally shared fetaures such as the administartion system and urbanity but might have followed different norms in their management of domestic practices and rituals. It is known that the Ionians settled in Western Anatolia in the 11th century BC gradually created an urbanised region with public amenities and private buildings planned together. They used some common design principles in especially planning their domestic quarters which developed into more complex versions in between the Archaic Period and the Hellenistic Period.¹⁶¹ The basic principle was nothing eleborate or an outstanding form, but a simple and practical one.¹⁶² The rectangular house form within a grid plan was a suitable and working alternative.¹⁶³ The rectangular form preferred in both domestic architecture and city planning meant least complication. The house having a rectangular plan, in that sense, was basically shaped around a courtyard which enabled to create semi-open / closed spaces and differentiated rooms based on their functions. The Double

¹⁶¹ Özgenel, 1997, p. 14.

¹⁶² Wycherley, 1962, p. 16.

¹⁶³ Ibid.

Megaron house which is taken as the prototype of *prosta*s house also came from the Ionian city of Smyrna. The developed courtyard-*prosta*s scheme became widespread in other Ionian cities such as Priene, Klazomenai and Kolophon despite their different topographical contexts. Though exhibiting common design principles, they might have followed different attitudes towards the management of privacy, slavery, gender issues and hence the functional differentiation in the domestic area.

With reference to shape-form distinction, it can be said that the house form tells more than its basic spatial organization and a discussion on house form is not merely a reading of spaces. It is associated with how and why spatial relations such as between the *prosta*s/*pastas* and courtyard, between the courtyard and its surrounding rooms and between the outside and inside were differentiated. In Anatolia, in this regard, there was no standard 'house form'. The courtyard-*prosta*s or courtyard-*pastas* schemes differed plan-wise or porticoe-wise but, in essence both the *pastas* and *prosta*s were spaces suitable to be used as semi open and shaded living areas, thus extensions of courtyards. The reason why one was preferred more than the other might indicate a cultural preference for which there is no firm or diagnostic evidence to justify. Similarly there was no standard house form in terms of the spatial relationship between the courtyard and *oikos*, and courtyard and *andron*. The fact that a courtyard was the only indispensable domestic space establishing all the other spatial situations in various ways is applicable to all the examples and hence the courtyard was the main determinant of house form in ancient Anatolia.

4.2 The Archaeology of Domestic Architecture in Greece: A Brief Introduction on the State of Architectural Evidence

Cities planned in a regular-grid such as Olynthus, Halieis, Piraeus, and Abdera and excavated in more detail constitute the sample for the Classical Period domestic architecture in ancient Greece.

The ancient city of Olynthus is located in the Chalkidiki peninsula in Northern Greece.¹⁶⁴ It lies on two flat-topped hills, North Hill and South Hill, and extends over the valley between them. In the 4th and 5th centuries it expanded to the area between the two hills named as the “Villa Section”. The buildings on the South Hill, the oldest part of the settlement, show an irregular pattern in their size and proportion. The spaces inside also show a highly irregular arrangement. There is no sign of a court or a porch area and it is difficult to understand how the rooms were related to each other.¹⁶⁵ The buildings on the North Hill which was constructed in an orthogonal plan, on the contrary, are articulated around a courtyard and porch space, described as *pastas*, and was placed usually at the north part of the house.¹⁶⁶ The houses were mostly planned in blocks of ten, including two rows of five houses separated via a narrow alley.

At Olynthus, most of the houses were built in the 5th century BC and abandoned due to the threat of Philip the Macedon around 348 BC. The excavations which were made by David M. Robinson and J. Walter Graham in between 1929 and 1946 revealed a city with more than hundred houses preserved in their ground level. As an archaeologically distinguished site Olynthus contributed to our understanding of Greek domestic architecture in the Classical Period to a great extent. The following houses are sampled from this vast amount of evidence: Houses A1, A5, A3, A10, A iv 9, A vi 5, A vi 3, A vi 9, A vii 9, A viii 8, A viii 6, A viii 5, A viii 9 from the North Hill and ‘Villa of Good Fortune’, ‘The House of Many Colours’, ‘The House of the Twin Erotes’, ‘The House of Tiled’, and ‘Prothyron Villa of the Bronzes’ from the Villa Section.¹⁶⁷ The most common features in almost all the houses in Olynthus was the use of “*pastas*”, which was most widespread house-type in Greece (seen also in Anatolia) during the Classical Period. This type is

¹⁶⁴ Cahill, 2002, p. 23.

¹⁶⁵ Morgan, 2010, p. 59.

¹⁶⁶ Ibid.

¹⁶⁷ Nevett, 1999, p. 53.

commonly contrasted to the houses of the “*prostas*” type, found at Priene, Kolophon, Klazomenai, Pergamon and Abdera.¹⁶⁸

Halieis was located at the southwestern part of the Argolid Peninsula. The western and eastern parts of the city were oriented differently and the settlement had an orthogonal plan dating back to the first half of the 6th century BC.¹⁶⁹ The excavations at Halieis were carried out by Henry S. Robinson and James R. McCredie with the support of the American School of Classical Studies in Athens in 1972 and 1976 in the North East of the Lower Town, and continued later in 1978 and 1979. The city was divided into seven quarters by the excavators. The excavation areas 6 and 7 gave information about the residential quarters that expanded to the Lower town. Area 7 includes an *insula* which had ten houses.¹⁷⁰ In Area 6, some parts of “three large *insulea*, two streets and one avenue” are revealed.¹⁷¹

The most complete house in Area 7 ‘House 7’ which is located on the southeast part of the city. Another fully excavated house, ‘House A’ is found on the northeast section. Houses C, D and E have not been fully excavated. The houses could not be defined as *pastas* houses and hence were different from the houses found in other classical cities in ancient Greece in terms of their spatial organization.

Abdera was a colony of Klazomenai built in a grid-plan in the 4th century BC.¹⁷² The excavations conducted first by D. Lazarides in 1950 continued well until 1985. The excavated houses House C was identified as a *prostas* house which was commonly used in Anatolia in the Classical Period. The

¹⁶⁸ Cahill, 2002, p. 82.

¹⁶⁹ Ault, 1994, p. 56.

¹⁷⁰ Ibid., p. 80.

¹⁷¹ Ibid.

¹⁷² Graham, 1972, p. 299.

houses indeed show a similar architectural arrangement to the ones in Piraeus and Priene.

Morgantina, another city in Sicily, in southern Italy, dates to 5th century BC. The excavations started in 1955 and continued until 2010. The city had two settlement patterns: the western side was planned in a grid layout, while the eastern area in an irregular arrangement.¹⁷³ The city exemplifies larger houses that were originally constructed in the 3rd century BC, and continued to be occupied, with some changes, until the 1st century AD.¹⁷⁴ The well known houses that came from the western part of the city are 'House of the Official', 'House of Doric Capital', 'House of Ganymade', 'House of Arced Cistern', and 'House of Tuscan Capitals'. All are *peristyle* courtyard houses with some having two courtyards. In that sense, Morgantina houses though late in date than the Classical Period houses, constitute a distinct case in terms of size, planning and architectural elaboration. They exemplify the *peristyle* plan scheme in its most developed version and thus referred to introduce the design of courtyard houses in later periods.

Piraeus was planned in the Hippodamian grid in between 475-450 BC. The early excavations were conducted by German and Greek archaeological teams in between 1896-1907. The early examples of the *prostas* type of courtyard houses, adopted later in Anatolia are first found in Piraeus.¹⁷⁵

The houses in ancient Athens was excavated first by Rodney Young and in the larger area of west of Areopagus. The remains were dated to the 5th century BC. Built as two adjacent structures buildings C and D came to represent the domestic architecture of the city. Both houses were organized around a central courtyard with surrounding rooms. The *insula* including five houses dated to 4th century BC and found at the north of Areopagus, on the

¹⁷³ Nevett, 1999, p. 147.

¹⁷⁴ Tsakirgis 1990, p. 430; Nevett, 1999, p. 147.

¹⁷⁵ Gönül, 2008, p. 22.

other hand, were irregular in form. The courtyard was the recurrent feature in all houses but there is no other distinctive spatial features such as the *pastas* found in Olynthian houses.

4.2.1 “Form” and “Shape”: *Pastas*-Courtyard Scheme in the Classical Period Houses in Greece

The houses on the South Hill, the oldest part of the settlement in Olynthus shows an irregular pattern in terms of size and lot proportion, while, those on the North Hill and Villa Section were constructed in an orthogonal plan with rectangularly laid out islands and around a courtyard and a *pastas* which was usually placed at the north of the house.¹⁷⁶ The city, in this regard, displays dominantly courtyard houses planned with a *pastas*, a porch type that was more widespread in Greece during the Classical Period.

The houses in Olynthus exhibit similar architectural design principles, although their functional organization, size, location and architectural features differ. The common plan scheme was based on the variation of the combination of an open courtyard, north room(s), a *pastas*, a second-story, an *andron* and its ante-room, a kitchen complex, and also a shop, storeroom and *exedra* in some example. Nicholas Cahill who analysed and discussed the houses and their contents in detail used the term “North Rooms” instead of *oikos* to define the living rooms found in a similar position in other houses. The term indeed refers to the north position of the rooms which, together with *pastas* defined a more private quarter. As different from the case of *oikos* in several other examples, in Olynthus there is more than one room in the same position and all such rooms are taken together as the private quarter of the household. This is a more characteristic feature in the Olynthian houses and the term “north rooms” coined by Cahill defines a site-specific architectural situation.

The general similarity of Olynthian houses, led many scholars define a typical “Olynthian house” to identify the principles applied in the architectural

¹⁷⁶ Morgan, 2010, p. 59.

design of houses used in all Olynthus houses. Walter Graham¹⁷⁷ for example, defined House A vii 4 and the Villa Good Fortune as prototypes of Olynthian houses, but he also emphasized the differences in their architectural design.¹⁷⁸ On the other hand, George Mylonas chose the House of Many Colors as his typical Olynthian house.¹⁷⁹ Nicholas Cahill made a classification of Olynthus houses based on the distribution of artefacts, domestic storage, domestic activities and also architectural features such as the second-story, courtyard, *pastas*, *andron*, shop, kitchen complex and other rooms.¹⁸⁰ Hoepfner and Schwander basing their discussion on the Greek concept of *isonomia*, the equality of all citizens before the law, pushed the argument far and suggested that the Classical Greek houses originally shared the same plan with only minor changes.¹⁸¹ They argued that all citizens were required to build their houses according to a single plan; accordingly the differences in house plans can be explained as a result of later modification and re-constructions.¹⁸² The House of Many Colors, The Villa of Good Fortune, and House A vii 4 which are accepted as “type houses” are indeed exemplary to understand the domestic architecture in Olynthus and to evaluate the form-shape distinction.

In the House of Many Colors, there was a single street entrance and the house was entered through a vestibule which was named as a “*prothyron*” entrance. (Figure 53) The relatively small courtyard, compared to the size of the rooms, was the first space reached after this vestibule. The courtyard divided the house into two on the NS axis, the northern three rooms (rooms a, b, c) opened to the *pastas* which was designed as a semi-close space by using a partition wall in between the courtyard and the *pastas*. Room a and Room b as

¹⁷⁷ Graham, 1966, p. 4.

¹⁷⁸ Cahill, 2002, p. 82.

¹⁷⁹ Mylonas, 1940, p. 392 .

¹⁸⁰ Ibid.

¹⁸¹ Hoepfner and Schwander, 1994 (as cited in Westgate, 2007, p. 230).

¹⁸² Cahill, 2002, pp. 82-88.

interconnected spaces, are not identified as an *oikos*, as in the Anatolian examples, and was they named as northern suit rooms.¹⁸³ There are suggestions about their functions with reference to the domestic artefacts and the light well which enabled to get light into the inner rooms and the second story because of its unroofed structure.¹⁸⁴ These suit of rooms are accepted as the main living room (room a) with a light-well (room b). The *andron* was also situated at the northeast corner (room d) and it was entered from an anteroom (room f).¹⁸⁵ On the southern part of the house was the kitchen complex (k, g and h). The room placed on the south-east side (room m) was identified as a storeroom from the presence of *pithoi* (storage jars). At the southern part of the courtyard, there was a deep portico or a small court interpreted as an *exedra*, a space that seems to have been specific to the Olynthian houses.¹⁸⁶ It was identified as a “summer living room” by Robinson, because it served like a second courtyard in the northern part of the house. The existence of a staircase showed that there was a second floor in the house. Both the lightwell and the *exedra* help to get more light into the inner spaces because the courtyard was too small to provide adequate light in this two storey house. There is no evidence for the existence of a *gynaikonitis*, however, a gendered use of space might have taken place in the kitchen-complex and the suit of rooms (room a and room b), often assigned to female use and in the *andron*. The artefacts found in the courtyard, *pastas* and elsewhere show that the domestic area was used for ritual practices, food preparation, storage and textile production. An altar was situated at the west end of the courtyard and portable altars were found at *pastas*. The loomweights and storage amphorai found mostly in *pastas* and other rooms also indicate such uses. There are relatively less findings in the courtyards, one reason might have been its small size. The House A vii 4 is another type

¹⁸³ Ibid., p. 91.

¹⁸⁴ Ibid.

¹⁸⁵ Ibid., p. 97.

¹⁸⁶ Ibid., p. 94.

house defined as such by Graham.¹⁸⁷ (Figure 54) Apart from the kitchen complex, a shop and a storeroom it contained all the specialized spaces; an open courtyard, the north room(s), a *pastas*, an *andron* and its ante-room and also had a second-story. The entrance was from a *prothyron* type entrance which gave access directly to the courtyard. Room h situated on the south-west had its own entrance and was identified as a shop while, the south-eastern corner room (Room k) as an *andron* after an elevated floor and an ante-room (room j). The North Rooms (rooms a and b) and the kitchen complex (rooms c, d, e) opened to the *pastas* which was a semi-close space spatially separated from the courtyard. The room (Room g) situated on the east end of the *pastas* was a storeroom. The courtyard and the identified rooms contained a group of domestic items. The loomweights are found in the courtyard and in the Northern Room b indicating a weaving activity. *Pithoi*, metal vessels, jars, cooking pots and other domestic artefacts are found in the *pastas* and Room b. These finds suggest that the distinguished areas, the courtyard and *pastas* were used for different activities and not assigned to a single function in the house.

Despite the common and recurring spaces, the two houses differed in their spatial organization in terms of the arrangement of the courtyard, *pastas* and the other defined spaces. In both examples, the houses were planned to have three axis on the east-west orientation; first one consisted of the North Rooms, the second included the *pastas* and the storeroom, and the third comprised the courtyard, the ante-room and the rooms located near the entrance. The kitchen complex and the *andron* had different locations in both houses; in the former, the kitchen was at the south-west corner of the house whereas it was located on the north-east in the latter. The storeroom was situated near the south-east corner of the street entrance in the former, it opened to the *pastas* in the latter. It seems that even though they are defined as and formed in the same city, they did not share the same house form. Although they were planned in a

¹⁸⁷ Graham, 1966, p. 4.

similar rectangular shape, the circulation pattern, the orientation of rooms and the spatial relationships were different.

Olynthus is a rich site for exemplifying the domestic architecture of the Classical Period houses and constitute a sample also for the sites in northern Greece. (Figure 55) Morgantina though located in Sicily and not in Greek mainland, is one of the sites to look at the houses that represent another house type.

Morgantina was under Greek hegemony for a period and its domestic architecture bears traces of a cultural influence. The houses found, as expected, were planned as courtyard houses with porticoes but their design was different than the *prostas*-courtyard or *pastas*-courtyard schemes that featured in Anatolia and Greece in the Classical Period. They include more centrally located courtyards surrounded with colonnaded porticoes and thus exemplify the third type house, called the *peristyle* house, which came to be used more frequently in the late Classical and Hellenistic Periods. The fact that this house type, which dominated the domestic architecture in Delos in Greece in the same period, is also seen in Sicily, Italy is a potential case to discuss the reach of the Greek cultural sphere in other geographies. The two houses chosen as a case-study were built in the 3rd century B.C and were occupied until the late 1st century B.C,¹⁸⁸ in this sense, they exemplify architectural features more commonly seen in the Hellenistic Period.¹⁸⁹ The House of the Doric Capital, for example, was planned around a *peristyle* courtyard. (Figure 56) When compared to Olynthus, there was a more complex circulation pattern in the house. The courtyard was enclosed from all four sides by rooms and was almost at the center of the house. It was accessible through a stair from the street and its entrance was not designed as a passageway. The units situated on the west side of the entrance had two entrances; one enabled to direct access to the outside and the other led to a

¹⁸⁸ Tsakirgis, 1990, p. 427.

¹⁸⁹ Nevett, 1999, p. 147.

small corridor in between. They might have been used as shops or storage spaces with reference to the *pithoi* found in the eastern unit, but this is not a verified assumption. The western inner rooms opened to the courtyard and there were some interconnected rooms such as rooms 1, 10 and 11 and rooms 3, 4, 5 and 6 both suit of spaces opened to a common room 2 which might have served as a transitional space in between. Room 2 which extend along two rooms resemble the *pastas* exemplified in both Anatolia and Greece, but it was planned in a perpendicular axis to the courtyard there. Room 1 with its large size and a platform on its floor looks like an *andron*. It had direct link to both room 2 and the courtyard. When considering the public usage of *andron*, it is plausible to suggest that room 2 might have been used to separate the *andron* from the northern private rooms. The eastern part of the courtyard included three separated units, room 4, 19 and 20 including the interconnected rooms 17, 21 and 22, the large corridor provided the circulation between them which was linked to the courtyard through a single entrance. The presence of a staircase indicates that the eastern part had a second storey. This spatial arrangement of rooms seems to have been done to make them a separated unit and it might have been a later addition. A street entrance to this unit also indicates that it could have been used independently. The function of many rooms are not securely identified due to lack of finds, but the location and decorated pavements of some interior rooms indicate the spaces of specific activities.¹⁹⁰ Room 18 might have been served as a *prostas* which extended room 19. The room 12 and room 21 may also have been used as *androne*s with reference to their floor pavements. If so, the *androne*s were not positioned close to the main entrance. There were also no anterooms situated in front of them. The courtyard, in that sense, might have been used as a public space, a welcoming and a service area when the drinking parties held for the male visitors. It is known that, the *peristyle* courtyard became a means and sign of economic and social status in the Hellenistic Period as oppose to the equality idea of the Classical Period.¹⁹¹ As different from Olynthus, Priene, Kolophon

¹⁹⁰ Tsakirgis, 1989, p. 389.

¹⁹¹ Abbasoğlu, 1999, p. 54.

and Klazomenai examples, in that sense, the courtyard and its direct relation to the two *androneis*, if they were all used as such can be seen as a sign of social status and wealth. The private spaces did not have a direct link to the courtyard, instead, there were some transitional spaces such as Room 2 or the corridors on the eastern part of the house. In that sense, the courtyard occupying a very large area separated two main living units on east and west. Both units were accessible through street entrances from the southern and eastern parts of the house. Although the house consisted of 22 rooms on the ground floor, only 7 of them directly opened to the courtyard. There was an apparently indirect spatial relation between the inner spaces and the courtyard in comparison to most of the Classical Period houses discussed so far.

In the House of the Offical there was a single entrance on the east side of the house. (Figure 57) The first space entered from the street was the entrance hall that led to three different directions. One gave way into the larger northern part of the house which was organized around a courtyard with surrounding rooms. The existence of cisterns in the court and some findings related to domestic activities including food preparation in room 10, indicates that this court served as a domestic area.¹⁹² The Room 17 might be accepted as a re-interpretation of *pastas* as a close space extend the two rooms on the north side. The front room of Room 17 seems to define another transitional passage looked like a *prostas* located in between the *peristyle* courtyard and Room 17. The second route led to a single room which faced the main entrance of the house. The third direction gave access to the south of the house which consisted of another court at a corner location and a dining room, an *andron*, (room 4) with a floor decoration.¹⁹³ Room 3 served as an anteroom for the *andron*. Room 2 which extended along the anteroom can be interpreted as a *prostas*. The use of two courtyards enabled to divide the domestic area into three parts. While the northern court served for domestic activities, the south courtyard was mostly used for public activities with reference to the

¹⁹² Nevett, 1999, p. 148.

¹⁹³ Ibid.

andron. The *andron* that was positioned on the south-east corner was spatially separated from the rest of the house. It was accessible through a vestibule from the main entrance and opened directly to the south courtyard. The elaborate entrance hall set border both spatially and visually between the inside and outside. It also controlled the movements in the domestic area. *Andron*-anteroom scheme was indeed elaborated here as the courtyard functioned like an anteroom. This is one of the specific features of this house when compared to Klazomenai, Kolophon and Olynthus houses which had modest *androne*s and anterooms. It is argued that in the Classical Period, the modest courtyard houses were sign of social and political equality in the *polis*, the *peristyle* courtyard house as a signs of economic and social superiority came to existence in the Hellenistic Period. The existence of two courtyards in the House of the Official and the *peristyle* in the House of Doric Capital can be seen as exemplifying this argument.

A courtyard-portico arrangement is seen in the houses at Halieis, an ancient city in southern Greece as well. The houses found had *pastas* type of porticos. The courtyard was commonly placed at the southwest corner as in Olynthus. Both houses had recessed, single entrances (7-6) and (6-80), *prothyron*.¹⁹⁴ In House 7, the room situated in a close location to the entrance was defined as an *andron* (9) based on the its cement floor, raised border, anteroom (10) and the walls that were coloured with red plaster.¹⁹⁵ (Figure 58) The *prothyron* led to the courtyard in which various domestic artefacts are found, suggesting its significant role in the routine of domestic activities.¹⁹⁶ In the southern area, there was a space enclosed by walls along three side, its function is not clearly defined. The courtyard, then opens to two rooms (16 and 17) which were partially separated by a wall. The existence of a hearth and a number of cooking equipments found here, indicates that it was a cooking area.¹⁹⁷ A well

¹⁹⁴ Ault, 1994, p. 80.

¹⁹⁵ Ibid., p. 88.

¹⁹⁶ Ibid., p. 102.

¹⁹⁷ Nevett, 1999, p. 99.

situated in the courtyard and within close location to the rooms facilitated the cooking and other domestic activities associated with use of water. The organization of northern rooms arranged as suite of rooms opening to a courtyard in Halieis, can be seen similar to the houses at Olynthus; however, having an access route through a room or a corridor was different. Ault accepted this portico as a *pastas*-like area which gave access to the separated units.¹⁹⁸ As different from Olynthus examples, the portico extended along a group of rooms arranged like a suit. In this regard, for the Halieis houses, Ault suggests to use the term “transverse hall” to describe “the room located on the north side of the courtyard which fronted a suite of two or more rooms”.¹⁹⁹

This spatial arrangement may indicate the presence of a number of social users; in each case the group of rooms (11-12-14) and (15-16-17) were not interconnected and had separate entrances that would make them open to the court individually.²⁰⁰ The variety of pottery found in the portico (13) showed that the household used this space for dining and other activities.²⁰¹ The stairbase found near room (15) indicates that there was also a second floor. It is apparent that in House 7, the domestic area was planned to include four interrelated parts; an *andron* and its ante-room; the courtyard and the cooking area, the north living quarter and the second-story living area. The courtyard as the spatial node to all functioned to manage the household traffic in between the parts besides being actively used as a domestic space.

In House A a *prothyron* led to the courtyard and unlike House 7, no room was planned in the immediate entrance zone. (Figure 59) There was a square, cement platform at the north-east corner of the courtyard (82) which was interpreted either as a working area,²⁰² an extension of the courtyard or as a base for a *pyrgos*- a tower that might have consisted of an *andron* and its

¹⁹⁸ Ault, 1994, pp. 91.

¹⁹⁹ Ibid., pp. 229-230.

²⁰⁰ Morgan, 2010, p. 59.

²⁰¹ Ault, 1994, p. 105.

²⁰² Boyd and Rudolph, 1978, p. 349.

second floor, as seen in the Kolophon houses.²⁰³ There is also a portico on the west side of the courtyard (81) and the vast majority of finds that consist of cooking pottery and storageware indicates that it was used for storing and preparing food.²⁰⁴ The main rooms of the house, as in House 7, were planned in two adjacent suites; the north-west rooms (83 and 84) including a living area and the cooking/washing complex²⁰⁵ and the north-east area that consisted of two rooms (87 and 88), a paved room with a well (88) and a second room which was probably used for dining, based on its well decorations and the fineware table vessels found there.²⁰⁶ The two were designed as an *andron* and anteroom as seen in House 7, but they were not clearly specified as such by the excavators who described the house as a single storey structure.²⁰⁷ It is suggested that there was a staircase in the portico which led to an upper storey. The house consisted of separated parts, as in House 7 that opened first to a portico and then to a courtyard.

The existence of *koprone*s or *waste pits*- the stone-lined pits that were buried in the courtyards in both houses, also served to collect the household waste, both organic and inorganic.²⁰⁸ Collection of garbage was presumably done to recycle and sell the waste materials as fertiliser and hence to gain economic profit. Olive oil press installations are also found in the houses at Haileis houses. Around two dozen examples of press furniture have been found around the territory of Haileis and its neighbours.²⁰⁹

Examples of Classical Period domestic architecture from ancient Athens include both urban and rural courtyard houses. The Dema House found in

²⁰³ Nevett, 1999, p. 100.

²⁰⁴ Ault, 1994, p. 128.

²⁰⁵ Nevett, 1999, p. 100.

²⁰⁶ Ault, 1994, p.126, 129.

²⁰⁷ Boyd and Rudolph, 1978, p. 347.

²⁰⁸ Ault, 2000, pp. 486-487.

²⁰⁹ Ault, 2007, p. 264.

rural Attica, for example, had a similar spatial arrangement to the Olynthian houses.²¹⁰ (Figure 60) The house was formed around a courtyard and a large portico that extended along four rooms that defined *pastas* and gave access to all rooms. Such a large *pastas* must have functioned as a storage area for agricultural production,²¹¹ a space that was a necessity in the rural life. Accordingly both the court and the *pastas* seems to have been used together for domestic activities. The fragments of a bathtub in Room IX, and a terracotta *louter*, in the court and room X, show that washing could be made in many parts of the house.²¹² Room VII gave access to the courtyard through two entrances. The arrangement of rooms II and III indicate that they might have been used for domestic tasks related to cooking and washing and also as a living room, an arrangement similar to the *oikos* unit seen in Olynthus; the excavators defined room III as a kitchen from the evidence of fire.²¹³ This description reminds the “North Rooms” used in the Olynthian houses by Cahill. *Oikos* as a private space and a living room was the locus of domestic tasks but depending on its position and use as a living room or a living area including the kitchen spaces or wet spaces in the house it showed a difference and hence named differently to suit its spatial arrangement and contents. It has been suggested that room I was an *andron*, however this is not clear in the absence of any decoration or a raised platform.²¹⁴ The overall spatial layout of the house shows a similar pattern with a *pastas* type house, but in a much larger scale.²¹⁵

Another rural farm house, The Vari House, was isolated from the nearby settlements. (Figure 61) It was organized around a paved courtyard and the

²¹⁰ Nevett, 1999, p. 85.

²¹¹ Ibid.

²¹² Ibid., p. 83.

²¹³ Ibid., p. 84.

²¹⁴ Ibid., pp. 84-85.

²¹⁵ Ibid., p. 85.

portico that extended along the three rooms is identified as *pastas*. The courtyard here was most probably used for agricultural processing purposes as it also had a paved surface. The presence of beehives in the house, in this sense, is an indicator of honey production in the house.²¹⁶ This rural house is dated to the second half of the 4th century BC, and is contemporary with the houses at Olynthus. It is interesting therefore to see that both were *pastas* houses. The courtyard in The Vari House however must have been used more extensively for production, processing and storage.²¹⁷

A group of 5th century BC houses at Areopagus constitute the urban housing sample from Athens. (Figures 62) The group includes four houses found in western part and two houses in the eastern side.²¹⁸ House 3 and House 4 were planned around a courtyard which were accessible directly from the street. In House 1 and House 2 there was a transitional hall in between the courtyard and the entrances. In House 3 and House 4, the portico extended in front of two rooms and created a *pastas*-like area.²¹⁹ The porticos were covered and supported by a column. There is little evidence for the character of individual rooms. A large room in the House 3 had a cement floor, and it might have been used as an *andron*.²²⁰ The space consisted of two rooms similar to the *andron*-anteroom scheme seen in Olynthus. There was also an entrance hall that opened to the courtyard, the off-centered doorway seen here is another criteria used in the definition of an *andron*. The room located south of the *andron* and opened to the *pastas*-like space, could have been used as a large store-room with pots. The *pastas*-like area served as a transitional room in between the courtyard and the rooms as in the Olynthus houses. In House 1 and House 2, the north quarter consisted of four rooms resembling the private

²¹⁶ Morgan 2010, p. 1.

²¹⁷ Westgate, 2007b, pp. 229-245.

²¹⁸ The houses in the text and the related figures are labelled by the author to facilitate architectural descriptions.

²¹⁹ Nevett, 1999, p. 86.

²²⁰ Wycherley, 1978, p. 240.

quarters in the Klazomenai houses, though not verified their spatial relationship and positioning indicate that they might have served as *oikos*, *andron*, *anteroom* and *prosta*.

The House 5 on the northeastern side was also organized around a courtyard which was screened from the street by an entrance hall that enabled to set a border both spatially and visually. (Figure 63) This can be explained in relation to the concerns of privacy, the courtyard enabled the control of the private environment from a single location.²²¹ This was not applied in all the houses in the urban block as in House 3, House 4 and House 6. A single column placed on one side of the courtyard in apparently supported a portico which was also seen in House 3 and House 4.

It seems that the urban block included a range of houses and except from the courtyard there was not many architectural and spatial recurring features. The houses were not consistent in their form and size as well.²²² Two were not completely rectangular in shape but the rest had either a rectangular or a square shape (House 5 and House 6). They can not be classified also according to their portico design or a single recurring feature. The distinctive rooms, such as *oikos*, *andron*, *pastas/prosta*, except from House 3, are not identified clearly.

House C and House D, the two houses on the North slope of Aeropagus were planned with courtyards and entered through a vestibule (1) from the street on north. (Figure 64) House D, located on the east, had a secondary street entrance on the south. This was not a common feature in the sampled houses from Greece, which often had single entrances. According to Morgan having a number of entrance indicates that the building was not only used as a residence, but had other usages such as commercial or industrial.²²³

²²¹ Nevett, 1999, p. 88.

²²² Wycherley, 1978, p. 240.

²²³ Morgan, 2010, p. 49.

Wycherley, also suggested that House C and House D were combined into a single establishment in the 4th century BC; in the resulting scheme House C was used as a dwelling, and House D served as a workshop, as understood from the remains of pottery-making, metal working and a curse tablet.²²⁴ Remains of chips and fragments of grinding tools also suggested that among the people who lived in these houses were marble-cutters.²²⁵ House C which was defined as a residence also had a commercial use from its direct connection to the street. Room 12 was interpreted as a shop.²²⁶ Rooms 10 and 11 which were linked to the portico, were separated by a wall from the rest of the house. Similarly, the courtyard was screened from these rooms through a long corridor which led to the street entrance. There is little information to determine the function of these rooms securely. The excavators identified room 3 as an *andron* based on being the largest room and having the “best position” in the house.²²⁷ The rooms, on the other hand, do not exhibit the distinctive features of an *andron*, such as a raised border, mosaic or cement floor or an off-center doorway seen in other sites.²²⁸ In the courtyard of the House C was as well. The spaces in this house was divided into three areas; the outer space including room 12 and separated from the rest of the house, a transitional area represented by the long corridor and rooms 10 and 11 that were visually and spatially separated from the house, and the main part including the courtyard and surrounding rooms. This spatial segmentation enabled possibly, making different activities together at the same time. The long portico also enhanced the privacy of the inner spaces by limiting direct access both spatially and visually. The courtyard, on the other hand, served as a semi-private space which controlled the movement and circulation in the more private rooms. In fact, such a screened entrance by means of a vestibule

²²⁴ Wycherley, 1978, p. 238.

²²⁵ Ibid.

²²⁶ Young, 1951, p. 207; Morgan, 2010, p. 49.

²²⁷ Young, 1951, p. 206; Nevett, 1999, p. 89.

²²⁸ Nevett, 1999, p. 89.

is also seen in House D, the workshop part of the dwelling. The organization of the courtyard and the two entrances gave an opportunity to separate home and work, and also the activities as domestic and craft by setting a division between public and private uses. (Figure 65)

The last case study sites are Abdera and Piraeus. Both were planned in a grid layout in the Classical Period. There is relatively more information about the character of individual rooms; in both cities, for example, the houses consisted of a four-unit spatial organization comprising a central courtyard, an *oikos*, a *prostas*, an *andron* and an anteroom in front of the *andron*. The north side of the courtyards were arranged with this four-unit, while the service areas, secondary rooms and shops which had direct access to the street, were located at the south side of the courtyard. The rooms that directly opened to the street were identified as shops, while the introverted rooms as workshops in Piraeus houses. (Figure 66) In the Abdera houses, the southern rooms probably served for the same function but was not identified as such. (Figure 67) The innerrelated two rooms to *oikos* which is exemplified in only one house, shows that this was not common application in Piraeus. There is also no artefact evidence such as loomweights or personal items that might hint for a female use of space.

In Abdera example the house had a single entrance which directly opened to the courtyard, as opposed to the different types of entrances in the Piraeus houses. The houses located in the southern part of the *insula* in Piraeus got access from the street in front and were entered from larger vestibules that led to the courtyard. Those that were adjacent to the side streets in the north had smaller vestibules while the houses that were located in between were accessed from narrow outdoor passageways. This variety was a result of the eight house *insula* pattern that was divided by surrounding streets. In the Abdera house, the *andron* was screened from the courtyard both spatially and visually because its anteroom got access not from the courtyard but from the *prostas*. In Piraeus, the anteroom opened to the courtyard; the alignment of the entrances in the anteroom and *andron* on the same axis indicates that if

the doors were left open the courtyard could be seen from the *andron* and its anteroom during the *symposium*. In six of the houses moreover, not only the courtyard but also the *prostas* could become exposed to the street, when their entrance doors were left open. In comparison, the *symposium* guests in Abdera would not have the visibility of the courtyard during their stay in the *andron*. A single house, obviously remains insufficient to generalize issues but here the spatial situation certainly enabled more privacy for both the household and the visitors.

The archeological evidence from both cities are limited when compared to Olynthus, Morgantina and Halieis. In the Abdera house, there was a fragmentary mosaic floor which enabled to identify the room as an *andron*.²²⁹ In Piraeus, each house had its own hearth in the middle of the *oikos*. The central position of a fixed hearth is interpreted as an ideal situation for heating and cooking purposes.²³⁰ It might be suggested that in the cities organized within a Hippodamian grid the residential districts were planned, generally, with the *pastas* type of houses in the Greek mainland; however the early examples of *prostas* type of house, before becoming widespread in Anatolia in the 4th and 3rd centuries BC are first found in Piraeus and also seen in Abdera. When compared, it can be said that the *oikos* and the *andron* were two distinctive spaces with preceding spaces, *prostas* functioning as such for the *oikos* and anteroom for the *andron*. In Priene, the *oikos* and *andron* shared a single preceding space and opened to *prostas*. The spatial organization of houses based on placing groups of rooms on the south and north sides of the courtyard, on the other hand, is seen in the houses of all three sites. Although, there was not a standard house form in terms of displaying recurring and fixed spatial relationships regarding the examples concerned, the courtyard features the essential organizational space in all examples.

²²⁹ Nevett, 1999, p. 102.

²³⁰ Tsakirgis, 2007, p. 226.

In terms of the spatial relation between the outside and inside: the chosen houses from Olynthus and Halieis had a single entrance and their courtyards opened to the streets through a transitional area named *prothyron*. This narrow vestibule functioned as a spatial threshold and enabled to set a boundary between the private indoor and public outside. In the House of Many Colors at Olynthus this closed portico led to another portico which gave access to the anteroom of the *andron* and also the storeroom, whereas in House A viii 4 in Olynthus, it led directly to the courtyard. The second portico defined a border between the *andron* as the place of public dinner occasions and the private rooms like kitchen suits and living rooms which were assigned for household usage. A similar organization is seen in House 7 at Halieis, where also a transitional space between the *prothyron* and the courtyard gave access to the anteroom of the *andron*. The guests or visitors who came to the dinner parties, could not see the main living room and the *pastas*, upon closing the doors, that is they were restricted visually from the rest of the house due to the position of the anteroom. In House Avii 4 in Olynthus, on the other hand, there was a direct visual link from the street entrance towards the *pastas*. In House C in Athens, similarly, the street was distanced through a long corridor which enabled to separate the domestic activities from the commercial ones. In House D, the presence of a two entrances highlighted its public usage as a workshop and commercial area; the entrances facilitated access from both north and south streets. Houses with two entrance types are found in the residential area at the northern part of Areopagus. In modest houses with few rooms organised around small courtyards, on the other hand, obtaining spatial and visual privacy might have been a more difficult goal to achieve or neglected by necessity, as the courtyards were accessed directly from the street and the limited indoor area made all the rooms within easy reach.

The position of *androne*s and their spatial relation with the courtyard and the nearby inner spaces therefore become significant determinants in the house form. A female concentrated use of space as counterpart of an *andron* usage can not be spotted archaeologically and architecturally. The distribution of

loomweights and cooking equipments found in courtyards, *pastas* and elsewhere show that women pursued their activities in different spaces. The *androne*s, in contrast that are spatially identifiable spaces, with a frequent male use. In the House of Many Colors, Olynthus, it was located on the north-east corner and preceded by an ante-room which opened to a portico; in the House A vii 4, Olynthus, it was placed at the south-east corner and had an anteroom which opened to the courtyard. For the houses in Halieis, it is suggested that curtains were used to separate the ante-room and *andron*, the dado and pivot holes found are not traced in other houses.²³¹ The off-centered doors of the *andron* and anteroom in House 7, in that sense, can be seen as an attempt to achieve visual privacy. In Abdera, no spatial organization to screen the courtyard from the street entrance is readable, yet the *andron* was secluded from the courtyard through its anteroom. This spatial organization between the courtyard and the *andron* is seen as a possible prototype for the Olynthian houses.²³² The *andron* was the largest room and placed close to the entrance in House C, Athens. There was not an anteroom and it had direct access to the courtyard. In House 3 in Athens, on the other hand, the room identified as an *andron* and anteroom have off-centered doorways and were screened from the rest of the house, probably due to privacy concerns.

The spatial relation between the courtyard and an extended space in the form of an open portico with or without columns, *pastas/prostas* was another determinant factor in the house form. In Abdera, the courtyard and the segmentation of spaces were more rigid in terms of public and private distinction. In Piraeus, the courtyard also divided the house into two realms as in Abdera, while in the houses at Olynthus, the courtyard was surrounded by rooms on all sides and thus functioned not as a dividing but as an unifying space. It was accessible from the street entrance, kitchen spaces, shop, *pastas* and its anteroom in most examples. In Abdera and Piraeus examples, it was linked to the *prostas* and shop/storeroom. When compared it is seen that the

²³¹ Ault, 2000, p. 487.

²³² Nevett, 1999, p. 102.

prostas was separated with two columns from the courtyard in Piraeus, while in Abdera, it was defined as a semi-close area by means of side walls.

Sampled houses from the Classical period showed that the courtyard house was a common typology in both Anatolia and Greece and differed in terms of their spatial arrangement, portico type, size and interior division. They were classified as “*prostas*”, “*pastas*” and “*peristyle*” houses with reference to the portico type that adjoined the courtyard in different ways and were exemplified as such in the re-established cities that were planned in an orthogonal grid scheme. While, the *prostas* houses were common in Anatolia; Priene, Pergamon, Kolophon and Klazomenai,²³³ the *pastas* house was seen in the Greek mainland, in Olynthus to a great extent and also in a house excavated in Latmos from Anatolia as a sporadic representative example. There are examples which can be classified under neither *pastas* nor *prostas* schemes. The houses in Halieis, Piraeus and Abdera from Greece and Burgaz from Anatolia, in that sense had spatial organizations differed in terms of their courtyard planning and surrounding rooms. In Morgantina, houses exemplify the *peristyle* plan type. In the sampled two houses, the colonnaded porticos define larger open spaces with surrounding rooms. Spaces designed in the form and location of *pastas* and *prostas* as transitional areas however, were also found between the *peristyle* courtyards and a number of rooms. The *peristyle* as such, can be interpreted as a colonaded and a perimeter type of portico which gave access to many rooms on two, three or four sides rather than a linear one like *pastas* and *prostas* which extended along one or more rooms on only one side of the courtyard. In the rural houses at Athens, the *pastas* as in Olynthus served for four or more rooms. It was almost in the same size with the courtyard, planned, likely, to facilitate the production works as an extension of the courtyard.

²³³ Zeyrek, 2005, p. 16.

Considering Rapoport's shape-form distinction, it can be said that the terms *prosta* and *pastas* as used in the current scholarship refer to a portico that extended in front of a single room or a number of rooms in the courtyard houses of Anatolia and Greece. In all the presented examples the houses were square or rectangular in shape and the *pastas* and *prosta* also had an orthogonal plan. However, the house form showed a variety related to the differentiated spatial relations in between the portico (*prosta/pastas*) and the courtyard, between the courtyard and its surrounding rooms including the distinctive spaces of *andron* and *oikos* and between the house and street, that is between private and public. Such spatial relationships were set according to how gender (male-female), status (free-slave, resident-guest), age and/or privacy were culturally and also household-wise that the nuances of this interpretation made the house form a more complicated and changing concept.

4.3 'Setting': The Greek *Polis* and the Development of the Courtyard House

Rapoport looks at the relation between the settlement pattern and use of courtyard from the point of view of "efficient use of space". He claims that the rural houses are designed as isolated units, potentially occupying a free land, while the urban areas are limited in available land for which the courtyard creates a more compact space by reducing the area of settlement in the dense urban fabric. The rural farm houses, The Vari House and Dema House in Greece for example, were isolated from the settlements around and planned as courtyard houses. They had paved courtyards and like the urban houses had *pastas* type of porticos. The courtyards in these houses were essential spaces for performing agricultural processing and hence constituted foremost practical necessities. In the urban centers the repetitive pattern of courtyard house as in Olynthus, Pireaus, Klazomenai or Priene, in addition to accommodating activities of domestic tasks and production, could assume other roles in the form of symbolising cultural priorities such as "social

equality” or “ideology towards the status of citizenship.”²³⁴ The main point in this concept as put forward by Ruth Westgate, was that the Greeks accepted the city as a common living area for all members of the society and the town was divided into equal plots which assigned lands of equal size to build houses.²³⁵ Hence the residential quarters of the old cities were re-planned in this way or new cities established as such received rectangular building plots as exemplified in the cities of Miletus, Piraeus, Olynthus, Klazomenai, Abdera and Priene. Rectangular plot form, though varied in size had also the advantage of dividing the plot into further rectangular and smaller lots more conveniently. The resulting scheme produced houses of a certain standard.

The standard house however was standard not because of its size and/or featuring common spaces but because of the recurring spatial relationships. As such a standard house consisted of a group adjoining rooms that opened to the courtyard. These spaces were *oikos*, *andron* and *pastas/prostas*. The courtyard however was the only common space featuring in a central position in all houses, a fact that might indicate its role the operation of the idea of equality; a courtyard defined a territory for its male owner which in turn acted as a sign of the ideal of equal access to power.

Accordingly, the scholarly work on the development of the ancient Greek house, is based on studying the topic in relation to the urban and social developments especially in between the Archaic and Hellenistic Periods in which the courtyard house became the dominant dwelling type in regions under Greek cultural influence. Ian Morris like Westgate, for example, suggested that the emergence of multi-roomed houses around a courtyard was related to “middling ideology” which referred to the equality between men in the society by rejecting aristocratic emphasizes on the status.²³⁶ It meant that the courtyard house provided each man a medium to show his power as the

²³⁴ Westgate, 2007b, pp. 229-245.

²³⁵ Jameson, 1990a, p. 95.

²³⁶ Westgate, 2007b, p. 229.

head of an independent household. Nevett in this regard claimed that the development of the courtyard house was linked to the concept of citizenship within the *polis* and to need to protect the female chastity in the domestic space.²³⁷ That is, the courtyard defined a private sphere in the house and thus enabled to control the members of the household. These developments discussed in relation to the concept of *isonomia*, equality before the law.²³⁸ They took the concept as the central motive and organizing principle for the Greek *polis* in the Classical Period. The concept of *isonomia* referred not only to the rights and obligations for the society, but also the land division inside and outside the city.²³⁹ In the domestic context, it meant that the courtyard house defined a unit under the control of the citizen male, who gained authority with his equal power in the political community.

The development of the courtyard house in the ancient Greek world in this sense, can be interpreted as a spatial evidence for satisfying the equalitarian ideals in the Classical Period. When the houses of the Early Iron Age and Classical Period are compared, it can be stated that the former had an undesigned interior, lacked spatial complexity and hence defined a weak boundary in terms establishing spatial solidarity between the neighbouring houses, and the spatial relations formed a close social interaction between the households who shared the same space/s. For example, it is suggested that the spatial segmentation of the houses at Zagora in the Archaic Period might have been a sign of some kin groups living under the same roof willing to distinguish their own private areas.²⁴⁰ The strictly defined boundary that is set by the equal lot policy around the courtyard in the Classical Period, shows

²³⁷ Nevett, 1999, pp.167-168.

²³⁸ Westgate, 2007b, p. 230.

²³⁹ Ault, 2000, p. 483.

²⁴⁰ Westgate, 2007b, p. 240.

the occupant's independence and status as a citizenship according to the prevalent political ideology.²⁴¹

In the Classical Period, there were two types of cities in terms of urban character; one is the re-established cities with a grid plan such as Miletus, Priene, Klazomenai and Burgaz from Anatolia and Olynthus, Morgantina, Piraeus, Abdera and Halieis from Greece and those which did not follow this pattern and were planned in an organic form such as Kolophon and Larissa from Anatolia. Some cities such as Olynthus and Morgantina, further displayed the characteristics of both; an irregular settlement plan and a grid plan practised in different parts of the settlement. Thus, the grid plan allowing for equal land distribution was not the only urban design method.

The preference for a more standard type of courtyard house as a reflection of communally favored political ideology in especially the re-established cities of Anatolia and Greece can be a reason why some cities were planned uniformly, in even very steep topographies, in the Classical Period. The grid system used to plan these cities, enabled to create a more uniform land division for houses, based on the idea of equality discussed by some scholars.²⁴² However, this can not explain the dominant use of courtyard houses also in the cities which were not planned according to the Hippodamian plan. It also could not clarify the emergence of different types of houses as *prostas* and *pastas* house; because both types are defined with reference to houses situated in the re-established cities: Priene for *prostas* and Olynthus for *pastas*.

This might be explained, in one sense, in relation to the development of the courtyard house from a *megaron*. As exemplified in Zagora and Bayraklı, the single unit megara developed from being a single space to more complex structures. As spaces become specialised based on different functions, the

²⁴¹ Ibid.

²⁴² Hoepfner, 1996, p. 158.

courtyard emerged as a transitional area which enabled both connection and separation in between spaces. The repetitive use of courtyard in the ancient Greek world, can be seen as a continuation of this tradition in both Greece and Anatolia. The definition of *prostas* / *pastas* scheme as house typologies is also made in reference to the *megaron* house from Onythe²⁴³ in Greece and Bayraklı²⁴⁴ in Anatolia. The common usage of *prostas* in Anatolia and *pastas* in Greece and South Italy was not a coincidence, that is, there was a probably regional interaction between the cities and also cross-cultural interaction between the two regions. Examples such as Abdera in Greece, where houses display *prostas* plan, shows the cross-cultural spatial dialogues between the two regions. The fact that Abdera was a colony of Klazomenai where *prostas* scheme was the common practice illustrates the source of this dialogue.

4.4 ‘Privacy’: Spatial and Visual Control Through “Courtyard”

Privacy emerges as a primary criterion in the development of courtyard houses in both Anatolia and Greece. The issues concerning privacy are foremost associated with the relationship between public and private realms. According to Rapoport privacy can be provided in two ways: it is achieved with spatial control on the possibility of variety of uses of domestic space depending on time scheduling and on the spatial control between the inside and outside through some physical elements like entrances, windows and porticos. In the latter, all types of spatial and physical control between the public and private spheres were defined as a “lock”. The lock can be a spatial one, such as a semi public / private space or a physical arrangement. Both measures were in operation in the courtyard houses of ancient Anatolia and Greece. The entrance vestibule, the courtyard, the porticos (*pastas* and *prostas*), and the permanent boundaries can be accepted as locks that manifested in the spatial form the Greek house; the social interactions

²⁴³ Graham, 1966, p. 6.

²⁴⁴ Akurgal, 1983, p. 41.

between the members of the household was a significant determinant of placing and / or designing a lock: ²⁴⁵

...buildings have two functions: “primary (pure denoted function) and secondary (connoted, conceptual function).”

The ancient Greek houses of the Classical Period illustrate the mutual presence and operation of private and public functions. The terminology associated with domestic architecture and found in the literature of the period also highlight this. The term used to refer to house in ancient Greek was “*oikos*” This was a significant concept in the construction of the ideological dichotomy between the household-private realm and the *polis*-public realm.²⁴⁶ The *oikos* foremost referred to the household as a social unit and it regulated the social interactions. It was the symbol of private realm and was associated often with women and children, while *polis* was the symbol of public realm in which the male members attended the rituals performed in political and ceremonial environments.²⁴⁷

When the physical boundaries were considered, the term *oikos* was also used but this time to refer to the private sphere. In a broader sense, it was used to mean ‘house’ as a dynamic and ideological construction of the Greek *polis*. Even when the physical structure of a Greek house was expressed as *oikos*, it was still subject to re-organization by different owners.²⁴⁸ The changing architectural character of the house for instance, is exemplified by the archaeological and textual evidence which show that when a family moved, the house could be regularly altered and routinely scavenged for its valuable materials (timbers, roof tiles, and fittings); some cases are known in which the tenants themselves had to provide roofing, shutters, and doors.²⁴⁹ The

²⁴⁵ Sanders, 1990, pp. 43-72.

²⁴⁶ Sjöberg, 2014, p. 315.

²⁴⁷ Ibid.

²⁴⁸ Antonaccio, 2000, p. 521.

²⁴⁹ Ibid., p. 520.

house, as such were subject to architectural re-organization by different owners. Such changes did not always happen in the form of physical interventions to the building but also in the form of functional change as well. The house could change from being a residential area into being a workspace and a religious one in a short time depending on different needs, meaning that the behavior of the occupants reveals the use of house.²⁵⁰ The possibility of domestic space encompassing a variety of uses reveals the inclusive nature of domestic sphere as being both a private and non-private sphere, with domestic activities and social relations blending in ways determined by its users.

Likewise, although the ancient Greek house defined a private space in an enclosed area, the household as the inhabiting social group under the same roof was influential in its form. According to Westgate: ²⁵¹

Household is “a primary arena for the expression of age and sex roles, kinship, socialization and economic cooperation where the very stuff of culture is mediated and transformed into action.” the architecture of houses is likely to be deeply affected by such wider changes.

Respectively a household, also named *oikos* in ancient Greek, denoted a social integration, composed of individuals separated by gender distinctions, as well as by age and class, who negotiated norms and spaces in the private setting.²⁵² Gender, as such, emerges as one of the other significant aspect of household relations in the ancient Greek house. The organization of public and private spaces, and their spatial and social relationships mostly associated with the domestic tasks assumed by men and women. Therefore the Greek house did not only have physical boundaries but also social and ideological ones formed around the relation between the public and private, men and women, free and non-free, *oikos* and *polis*.

In that sense, the public and private character of a house can be discussed by looking at how and where different activities took place and by whom these

²⁵⁰ Morgan, 2010, p. 55.

²⁵¹ Westgate, 2015, p. 49.

²⁵² Goldberg, 1999, p. 143.

activities were done. In that sense, gender related concerns can provide references, as in many modern and past cultures, on the public and private character of domestic spaces associated with the use gendered of space.

In the ancient Greek house likewise gender was a cultural issue, and stated as such by the ancient authors, as mentioned above. The evidence on gendered space comes from depictions of women in domestic settings on vases, and from archaeological findings that are associated by female use. Vase paintings dated to 5th and 4th centuries BC show interior of houses being mostly dominated by female usage, and the outdoor by male. They depict for example a seated woman, a standing mature and bearded man, and an attendant maid with a chest, which would be a stereotype for the grave steles that depicted women, slaves, girl(s) and accessories like boxes.²⁵³ In the red-figure hydria (Figure 68) and in the “Stele of Hegeso” (Figure 69) the presence of a chair is accepted as a mark of interior space and also suggests that it is a space of women.²⁵⁴ The standing man together with equipment, on the other hand, refers to outdoor, public spaces.²⁵⁵ Yet it is not possible to talk about Greek house having strict spatial divisions in terms of public and private usage and also in terms of gender. Although a Greek house defined a private space in a delimited area, the spatial character of the rooms and the house was changable depending on usage.

In the houses of Kolophon and Priene, for example, the upper floors of *andirons* were labelled as *gynaikonitis*, women’s quarter. This definition was based on Euphiletos’ description of the Greek house who mentioned two separate areas for men and women in the house.²⁵⁶ While women were occupied with taking care of the new-born baby on the upper floor, the men lived downstairs. However, whether this spatial division was a temporary one

²⁵³ Leader, 1997, p. 683.

²⁵⁴ Ibid., p. 689.

²⁵⁵ Ibid., p. 691.

²⁵⁶ Lysias, 1.9. (as cited in Nevett, 1999, p. 18).

or a permanent practice was not mentioned. Cahill suggested that women's space does not necessarily refer to a separately arranged area called as *gynaikonitis*; the *oikos*, courtyard or the kitchen area could have been the spaces where women could do activities such as cooking, food preparation and child care.²⁵⁷ Respectively, it is suggested that the *andron* and *gynaikonitis* might have been separated spaces, but they should not be defined neither as a particular room nor a series of rooms in a fixed location, that is, *gynaikonitis* could be any space where women resided when male visitors were present in the house.²⁵⁸ Nevett likewise rejects the presence of a *gynaikonitis* within the rather limited area in the Greek house, and states that:

259

There is no gynaikon, ... rather than being a confined to a limited part of the house, artefacts associated with female activity are present in a variety of spaces including the court and *andron*. It therefore seems likely that women presents throught the house as their activities required.

In Burgaz houses, for example, the looweights found in the *oikos* spaces or in some other rooms that opened to the courtyard hinted femeale oriented activities. In Olynthus, the architectural evidence shows that the courtyard was used for domestic activities assciated to women such as weaving, with reference to the use of portable looms and the possibility of cooking in the open area in the sunny days.²⁶⁰ On some vase paintings, the women are depicted inside together with a small or a large group while playing music or making wool.²⁶¹ In these scenes, women are also seen in the courtyard identified as such by the depiction of columns.

²⁵⁷ Cahill, 2002, p. 153.

²⁵⁸ Antonaccio, 2000, p. 532.

²⁵⁹ Nevett, 1999, pp. 18-20.

²⁶⁰ Cahill, 2000, pp. 504-505.

²⁶¹ Lewis, 2002, p. 131.

In this regard, *gynaikonitis* is a more complicated and ambiguous theme for a spatial discussion. While some scholars²⁶² claimed that there is no evidence for a strict division of male and female area in the Classical Greek house, some others suggested the opposite.²⁶³ Nevett stated that the *andron* defined the male area in the hearth of the house, and the separation between male and female could have been a temporary one; when not used for male activities like *symposium*, the *andron* could have been used for other purposes.²⁶⁴

In House 1C in Klazomenai, the anteroom of the *andron* would have served, normally as a pre-reception room for the *symposium* guests. The space as such was a public area or a men's area. However, a *pithos* found on the north-east corner of the anteroom indicates that the room was also used for storage functions, perhaps when the *andron* was not used for *symposium*.²⁶⁵ The *andron* indeed could define a public area like a law court, agora or a public assembly in the domestic scale, in which a group of male citizens gathered and discussed matters and also entertained themselves; at other times it may well served as a domestic activity area for other purposes.²⁶⁶ *Andron* was used for the drinking and dining gatherings named *symposium*. The event was a sign of men's bonding to the social structure of the *polis*. An apparent question rising from this is whether *symposium* did no take place in houses with no *androne*s. Tsakirgis claimed that *symposium* was a temporary activity practiced by men and not necessarily required a room. Three or more couches could have been arranged temporarily in any room, so one of the rooms in a house could transform into an *andron for symposium*.²⁶⁷ The time of *symposium* could be known in advance and the portable and simple furnitures such as

²⁶² Jameson, 1990a, p. 104; Özgenel, 2001, pp. 136-137; Nevett, 1999, pp. 173-175.

²⁶³ Hoepfner, 1996, p. 159.

²⁶⁴ Nevett, 1999, pp. 18-20.

²⁶⁵ Özbay, 2010, p. 115.

²⁶⁶ Ault, 2000, p. 488.

²⁶⁷ Tsakirgis, 2005, p. 77.

chairs, beds and tables used in *andron* and elsewhere could be carried to the event space.²⁶⁸ Lynch also indicates that the Late Archaic and Classical house located west of the Stoa Poikile, did not have an *andron*, but the drinking parties among men occurred in a formal arrangement there.²⁶⁹ It can therefore be stated that not only the *andron* but all the rooms, could have a multiple usage in the Greek world.²⁷⁰

The courtyard could well become another female activity area, as Nevett suggested, based on a time scheduling; when the male visitors entered the court, the female members of the households, knowing their arrival time could become absent. Visual privacy, in addition can be achieved also with temporary boundaries such as curtains and partition panels placed in the courtyards or the room entrances: ²⁷¹

...social interaction within the house between women and male strangers could have been carefully controlled through the interruption of sight-lines by physical barriers like curtains and wooden partitions, and just by behavioural and theoretical barriers.

It is likely that such temporal boundaries were part of the daily life of the Greek households. The boundary idea was not an issue of male and female use of space only, it was a phenomenon that operated in other situations as well, thus making limits and transition zones important aspects of daily routine in Classical antiquity.²⁷² For example, the textile hangings that covered doors as spatial dividers were features of the Greek houses, but as perishable materials they disappeared except few fragments that have accidentally survived.²⁷³ For example, the holes found in some of the houses

²⁶⁸ Özgenel, 2006, p. 210.

²⁶⁹ Ibid.

²⁷⁰ Nevett, 1999, p. 37.

²⁷¹ Nevett 1995a, p. 373; Jones 2007, p. 251.

²⁷² Sjöberg, 2014, p. 316.

²⁷³ Jones 2007, p. 251.

in Delos are thought to have been sockets for curtain-poles.²⁷⁴ For the Halieis houses, it was also suggested that, curtains could have been used in between the *andron* and the anteroom to interrupt visual continuity.²⁷⁵

Physical isolation and spatial privacy can be provided more securely with physical elements such as using doors and eliminating windows. The courtyard as an open area acted as a permeable boundary and regulated transition in between degrees of privacy demanded within the house. For example, there was a single entrance in a house in the Athenian Agora that dates to the 5th century BC and shows typical architectural features of the Classical Period houses in many respects; the interior was deliberately restricted from the visual contact of the outsiders. (Figure 70) The house was organized around a central courtyard and the rooms had their own entrances with no interrelating doors. This would have meant that while each room defined a private area in its own right, the movement from or to them was relatively controlled from the more public courtyard.

The centrality of the courtyard in that regard, enabled both a visual and a spatial control on female and male movement by scheduling the activity in the domestic area. Such an arrangement is best exemplified in terms of the spatial relationship of the *andron* and the courtyard, that is in terms of the movement of household and guests according to a time schedule in between them. In Priene, as different from its counterpart Piraeus, the *androne*s were accessible directly from the *prostas*, and there were no ante-rooms seen in the houses of Piraeus. In addition to that, the vestibules which were situated between the street door and the courtyard in many houses elsewhere were not adapted in the houses of Priene. The absence of a forecourt and a vestibule and the direct access to both the *oikos* and *andron* can be taken, for example,

²⁷⁴ Ibid. p. 252: "Maison des Masques": holes in the northern columns only, 2.37 m above the floor; "Maison de l'Hermès": holes in two columns in front of room g, 2.24 m above the floor.

²⁷⁵ Ault, 2000, p. 487.

as signs of a lessened demand for privacy in the domestic area, in at least Priene. The spatial and visual control through a vestibule in the Athenian example on the other hand can be interpreted as a “lock” in between the public and private sphere as discussed by Rapoport. In the Priene houses, the *prostas* served as a lock which enabled to set a border between the courtyard and *oikos*, and between the courtyard and *andron*.

Another social aspect that needs to be considered in terms of the privacy concerns in the domestic area is the resident slave population. For the usage of spaces in Classical houses, Jameson has accepted slavery as a significant factor, while Nevett and others doubt that the slaves had stayed in the house.²⁷⁶ In the Classical Period, it is known that with the increased industrial activities, domestic and agricultural slavery became more widespread within the Greek households. The question of whether domestic industry was based on slavery labour in the domestic context or not needs to be investigated in this regard. According to Jameson, ‘all who could afford to made use of them, at home and at work’ did so, and that some households at least had owned one or more slaves.²⁷⁷ However, it is difficult to determine the role of slaves in the agricultural or other economic activities in the domestic area precisely.²⁷⁸ But the development of large-scale production such as mining and farming of cash crops definitely required large slave workforces, and it has been suggested that the towers attached to some Classical Period urban houses and later rural houses in some part of the Aegean, as in Kolophon, were built partly to function as a secure accommodation for slaves and also for goods.²⁷⁹ (Figure 71)

²⁷⁶ Jameson, 1990b, pp. 191-192; Nevett, 1999, p. 40,174; Cahill 2002, pp. 263-264; Westgate, 2015, p. 82.

²⁷⁷ Ault, 2007, p. 263.

²⁷⁸ Ibid.

²⁷⁹ Westgate, 2015, p. 80.

There could have been measures applied to separate slaves from the rest of the household but in some cases slaves were needed to be present in specific rooms, such as in *androns* to serve diners. In one case for instance, it is known that slaves were physically excluded from a family meal. In Demosthenes' speech against Euergos,²⁸⁰ the speaker describes his wife, children and ex-slave nurse eating together in the courtyard, "the other slave women...were in the tower where they live." Descriptions such as 'ex-slave nurse' and 'other slave women' have shown that the relation between the master and slave had social and spatial boundaries which defined the free and slave in terms of space use. In this regard, the household has the authority to control the movements, sexuality and social interaction of the resident slaves.

An analogy has been made between the veil and house to describe the privacy in the Greek house; it is claimed that the veil as a symbol of separation, enabled women to move outside comfortably by creating a kind of portable private domestic space.²⁸¹ It is stated that the symbolic message of the veil was that it was similar to shells, doors and roofs which were the physical barriers in the houses. Both set a boundary for women in the outside world. According to Jones who established an analogy between the use of veil as an extension of domestic space, the emergence of the double- courtyard house was related probably to the increasing separation of women from the public world.²⁸² Nevett observes that from the late 4th century onwards, a new group of large and elaborate elite houses began to appear, suggesting that 'the status of the *oikos* and the role of the house were undergoing a rapid change in many areas of the Greek world'.²⁸³ This shift in the domestic area enabled a spatial division of the house into two areas, one is associated with the family and private areas, and the other with the public happenings such as meetings with guests. Each area was organized around its own courtyard, and the physical

²⁸⁰ Demosthenes, *Olynthiacs*, 47.55-56 (as cited in Westgate, 2015, p. 84).

²⁸¹ Jones, 2007, p. 255.

²⁸² Ibid.

²⁸³ Nevett, 1999, pp. 162-164.

separation of the house probably became more strict than before. Yet, in the double-courtyard house scheme, it seems that women became more restricted than they were in the one courtyard model. According to Nevett, it is a speculative issue to discuss whether the activities of women were under more control when compared to the 4th century BC.²⁸⁴ Nevertheless, this may be taken as an evidence for an urge or need toward a redefinition of the places of women in the public and private areas.

Among the case-study sites, the double-courtyard houses came from Morgantina and were dated to the Hellenistic Period. Although there is no diagnostic evidence to indicate a distinction, the spatial organisation in the north courtyard offered a comfortable and private area for family and especially for the women and children during the time of *symposium* held in the *andron* at the south courtyard in The House of the Official.

It would not be wrong to state that the courtyard acted as a space for both a restriction and observation of all movements and happenings taking place in different parts of the domestic environment. The “lock” in Rapoport’s scheme, thus work in the form of a spatial and physical control in the Greek house, based on time, gender, social status, domestic tasks and economical activities. The courtyard was the subject of this control as being the “lock”.

4.5 ‘Environmental Adaptability’: Orientation and Climatic Factors in the Design of Courtyard Houses

As Rapoport claimed, the courtyard provided a climatically comfortable area by enabling an open and multi-purpose space in suitable weather in mild climate zones.

Ancient Greek authors, aware of climatic sensitivity wrote on the orientation of houses. Xenophon in his *Memorabilia* suggested that:²⁸⁵

²⁸⁴ Ibid.

²⁸⁵ Xenophon, *Memorabilia* iii 8 (as cited in Gardner, 1901, p. 299).

If a house faces south, the sun will shine into the *pastas* in winter, and in summer it will be high over our heads and over the roof, and so we shall have shade. Accordingly, we should build the rooms that face south higher, so that the winter sun may not be excluded from them, and the rooms facing north lower, that the cold winds may not penetrate into them.

Aristotle in his *Oeconomica* gave comparable information about the environmental adaptability of the house:²⁸⁶

Both for pleasure and for health a house should be breezy in summer and sunny in winter; and this will be the case if it faces the south and is not equal breadth all round.

Both Xenophon and Aristotle advised that the house should be oriented to south with respect to the sun and the northern part of a house should be protected from the cold wind. Xenophon also suggested that the southern part of a house should be organized higher to provide a shady area in summers, while the northern one at a lower position to become protected from cold weather. Their advices refer to the orientation of a house in general, and there are no direct references about inner spaces such as courtyard, *oikos*, *andron*, *prostas*, *pastas* or secondary rooms.

In the Classical Period, especially in cities with a grid plan such as Piraeus, Abdera, Olynthus, Halieis, Morgantina, Priene, Kolophon, Klazomenai and Pergamon, the houses were oriented towards south-west direction, to provide climatic efficiency in the domestic area. This principle in general, continued in the inner spatial organization of the houses as well. The courtyard as a common space in all houses, could be utilised as a positive climatic area in both winter and summer. The location of the courtyard in the sampled houses, was the main determinant for positioning the other rooms. It was generally located on the south part of the houses, presumably to benefit from daylight and also to provide a shady area for the household. Because the Greek houses had not much openings for ventilation and lightening, the courtyard served also as their source.

²⁸⁶ Aristotle, *Oeconomica* i.6.7 (cited in Gardner, 1901, p. 299).

There were certainly exceptions in the orientation principles. For instance, in Athens, in the houses at the north foot of the Areopagus, the courtyards were situated in the west-east sections of the houses, perhaps because of the site conditions. Similarly, in the cave house in Latmos, it seems that the topography was more dominant and forceful than the climatic comfort conditions, as the courtyard in the sample house was oriented to the east.

The more common south-orientation of the courtyards in the Classical Period houses, show a conscious preference to adapt houses to the climate conditions. The courtyard, as such, enabled a comfortable domestic environment for doing several activities. In Olynthus and Halieis, for example, the portable braziers with their mobility enable to cook in the courtyard in sunny days.²⁸⁷ The courtyard with an available water source also provided a comfortable setting for work in a warm day, the roofed space probably served for the same purpose in harsh weather.²⁸⁸ A recent study on the houses in the North Hill at Olynthus, including the sampled two examples, showed that cooking equipments and flues are denser in the *pastas*.²⁸⁹ The *pastas* as the portico, and an extension of the courtyard and the north rooms, in this regard, provided a climatically comfortable working and living area in the houses. The *pastas* provided a shady area while the courtyard an open one.

4.6 ‘Spatial Relationships’: Circulation and Movement Inside a Courtyard House

Rapoport took the courtyard as the main node of circulation that provides access to the rest of the house. In the Greek house, the courtyard as an organizational space provided and regulated spatial distinction and organized the circulation pattern in the same way. The rooms inside, however, had

²⁸⁷ Tsakirgis, 2007, p. 228.

²⁸⁸ Tsakirgis, 2005, p. 74.

²⁸⁹ Nevett *et. al.*, 2017, p. 183.

varying degrees of access to the courtyard in relation to the management of interaction between public and private, inside and outside, men and women, adults and children, free and slaves and alike. Such management was achieved by differentiating spaces, circulation patterns and creating routes between the rooms and the courtyard by means of vestibules, porticos, passegeways, corridors and doors.

In the Classical Period houses, among the recurring spaces the *oikos* and the courtyard featured as the two main rooms.²⁹⁰ In all the houses sampled from Anatolia and Greece, the courtyard defined a common area suitable to control all the movement in the domestic area. It was not surrounded and enclosed from all sides and was not always also located at the center of the domestic area. It could be located on the south to divide the house into two spatial realms as in the houses at Pirene, Kolophon, and Klazomenai. In this planning preference the more private part remained as the northern area that often included *prostas/pastas*, *oikos* and in some cases also the *andron* while the secondary spaces such as commercial units, storage spaces and in some cases *andrions* were located in the southern part. In Morgantina, although the presence of two courtyards introduces a more complex circulation pattern in the house, the northern courtyard, similarly, gave access to rooms which are mostly reserved for household use, and the southern court served for the use of visitors and public activities.

While the courtyard served as the main node of access, the portico in the form of a *pastas* or a *prostas* also played a significant role in organizing the movement in the house; often defining a secondary circulation pattern. In Piraeus, Olynthus, Klazomenai and Priene, the *pastas/prostas* were separated from the courtyard by columns and defined a semi-private area that supported the functions in the adjacent rooms. In Priene, the *prostas* gave access to both the *andron* and the *oikos*, while it opened only to *oikos* in Piraeus. In Olynthus, the *pastas* extended along many rooms and it served as a

²⁹⁰ Abbasoğlu, 1999, p. 54.

transitional area, and the back rooms linked to the *pastas* were not interconnected, and each opened to this portico.

Existence of a secondary storey is known from the houses in Olynthus, Halieis, Kolophon and Priene. The remains of staircases thus, show that there was also a vertical movement from the courtyard. All houses in Halieis, for example, had a stairbase which was mostly located at the northern edge of the court, and the second story most probably extended along the northern rooms. It is however not possible to know the arrangement or function of the rooms on the second story due to lack of archaeological and material evidence. According to Ault the second-story rooms were probably assigned to sleeping and light storage.²⁹¹ In Kolophon, the stair in Houses II, III and IV, also indicate that the *androns* were two-storey units as different from the rest of the house. It is claimed that the second floor was used as a *gynaikonitis*, but this is not certified.

The most common house type in the ancient Greek world has been identified by Nevett as the “single entrance, courtyard house”.²⁹² The Classical Period houses examined likewise had commonly a single entrance which was usually screened from the outside through a vestibule, corridor or a passageway.²⁹³ In this regard, the number and location of the entrances in the house and the connecting doors can help to trace the relations both between the members of the household and the foreigners, and also between the members within the domestic context.²⁹⁴ The courtyard was the first space upon entering the house from the street. In all the houses, except House D in Athens, there was a single entrance which gave access either directly to the courtyard as in Halieis and Kolophon houses, or through a passageway as in Athens and Priene. Studies have shown that the arrangement of the entrances was not

²⁹¹ Ault, 2000, p. 487.

²⁹² Nevett, 1995b, p. 94.

²⁹³ Ibid., pp. 91-92.

²⁹⁴ Nevett, 2007, p. 7.

coincidental, and was most probably related to the social structure of the residing group in the house.²⁹⁵ House D in Athens had two street entrances, which can be as a sign of different social groups living separately in different quarters of the house. Morgan, suggests that the spatial divisions and multiple entrances indicate that the buildings were not only used as a residence. They hosted multiple usages including non-domestic functions such as commercial or industrial activities.²⁹⁶ In House C at Athens, room 12 directly opened to the street and rooms 10 and 11 were linked to the portico which was separated by a wall from the rest of the house. According to Young room 12 might have been a shop because of its direct connection to the street.²⁹⁷

Using such information Westgate created a scheme of circulation patterns for the houses of the Classical and Hellenistic Periods.²⁹⁸ (Figure 72) This showed that the courtyard was utilised as a central area to give access to all rooms, and also to control the circulation patterns in the domestic area, however, the degree of access from the courtyard was different for each room. In Athens, the courtyard gave relatively equal access to the rooms because of its geometrically central position, while in Olynthus, the *pastas* provided secondary access and served a transitional area for the interconnected rooms.

To sum up, the houses presented demonstrate that the spatial relations were defined in reference to their integration to the courtyard. The courtyard was a nodal point that enabled to monitor movement in the house; the degree of access to the courtyard on the other hand was determined by using ‘locks’ like porticos, staircases, entrance vestibules and corridors and adjoined/linked rooms such as ante rooms.

²⁹⁵ Ibid.

²⁹⁶ Morgan, 2010, p. 49.

²⁹⁷ Young, 1951, p. 207; Morgan, 2010, p. 49.

²⁹⁸ Westgate, 2007a, pp. 425-427.

4.7 Courtyard as a Generic Space in the Ancient Greek House

According to Rapoport the significant contribution of the courtyard house is to create a sub-system of settings in which a number of domestic, economic and social activities can take place. In ancient Greek houses, likewise, the courtyard provided a self-sustained spatial unit, itself functioning as a usable space for various functions.

The households were involved in accomplishing several daily and/or routine activities such as textile production, craftwork, agricultural production and processing, food preparation, cleansing, domestic worshipping and other daily tasks within the confines of the domestic area. According to Walker:²⁹⁹

The home was considered a miniature of production in which clothes and food made from wool and crops.

Athenian texts also include references to the economic activities performed by or within the households, especially by women. For example, in the ideal house of Ischomachus, the wife was responsible from making textiles and supervising the slaves who carried out the weaving.³⁰⁰ Plato noted that women controlled the shuttles and wool-work, and there was a loom in the house where Chrysis lived.³⁰¹

Texts offer little evidence for where such works were performed. Evidence concerning the gendered use of space comes also from the Athenian vases dated to the 5th century BC. The depictions on these vases display scenes of places hosting domestic and economic activities. They show the contribution of women to the domestic economy, by emphasizing essentially the role of women in both houses and the city in reference to textile production. Respectively, the women shown as working in textile production in the scenes, are often accepted to have been doing the work in an indoor space,

²⁹⁹ Walker, 1983, p. 82.

³⁰⁰ Morgan, 2010, p. 97.

³⁰¹ Ibid.

interpreted as such from the columns or closed doors depicted in the scenes. These details however, does not say anything about women working in a confined area. On the contrary, architectural features such as columns can well refer to more open spaces such as courtyards or shaded porticos. On the *pyxis*, the column placed next to the open *thalamos* door suggests that the figures are in a courtyard.³⁰² (Figure 73) Similarly, the open *thalamos* door on the Phiale Painter's Vienna *pyxis* (Figure 74) implies that the women were in the courtyard, although there is no column to suggest a portico space; the objects seem to be hanging on a wall within a shaded portico rather than a wall in an enclosed room.³⁰³ (Figure 75)

At Halieis there is archaeological evidence concerning agricultural processing in the domestic setting. The existence of *koprone*s or *waste pits* in the courtyards indicates that the courtyard was used as an area for recycling organic and inorganic waste. The *pithos* found in the courtyard in House IV at Kolophon and in Olynthus show that the courtyard was also used for storage. Similarly, the courtyard in the rural houses of Athens; in Vari House and Dema House, was an utilitarian area serving for storage and processing tasks. House D identified as a workshop in Athens represents an example of dwelling with mixed functions; pottery-making and metal working were done in the central courtyard as understood from the finds.

Textual evidence provides an insight into the religious rituals that took place in the courtyard as well. The archaeological evidence for such rituals comes from the domestic cult objects which could be located in courtyards that could be utilised as an open, well lit assembly area or elsewhere in the house. Not only the domestic altars but also hearths, miniature vessels, terra-cotta figurines, simple domestic utensils such as pots or household belongings might have been used in the domestic rituals. The importance of hearths for heating and providing light, and also as the locus of ritual activity in the house

³⁰² Cahill, 2002, p. 178; Bundrick, 2008, p. 314.

³⁰³ Ibid.

had been expressed as such also textually.³⁰⁴ From the Early Iron Age, examples of central and fixed hearths were exemplified at Zagora and Old Symnra,³⁰⁵ that supplied an equal amount of heat and light to the surrounding area. In the Classical Period, as Greek houses were developed into more complex spatial structures with more rooms, the fixed hearth apparently remained insufficient in providing a longer period of warmth and light equally distributed to each room. Although some alternative items were developed in time, the fixed domestic hearth stayed as a domestic feature in the Classical houses, as in Olynthus.³⁰⁶ Their persistent use must have been a practical necessity and a climatic requirement. In almost all these houses, as in the earlier examples at Emporio and Zagora, the hearths which are encircled with stone verbs, were mostly located in the centre of a room.³⁰⁷ In House D on the north side of the Areopagus in Athens,³⁰⁸ the hearths were rectangular in shape and placed fairly centrally in the rooms. The central placement of these hearths makes them ideal as sources of heat; the material remains from the hearths at Olynthus include no bones, suggesting that cooking was done elsewhere.³⁰⁹

In some other Classical Period houses, the hearths were not centrally placed in a closed room, but in an *oikos*. In Priene,³¹⁰ for example, the hearths were often placed against the wall in the porticoe (*prostas*) of the *oikos*. The hearths in the houses at Kolophon were located in the unroofed courtyards, (IVe) a placement which caused the excavators to identify them as altars.³¹¹ The

³⁰⁴ Tsakirgis, 2007, p. 225.

³⁰⁵ Akurgal, 1983, pp. 41-43.

³⁰⁶ Cahill, 2002, p. 154.

³⁰⁷ Tsakirgis, 2007, p. 231.

³⁰⁸ Ibid., p. 226.

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Holland, 1944, p. 124.

hearth found in House 7 at Haileis was situated between the semi-open rooms that were placed against the street entrance.³¹² Both examples at Priene and Halieis were also used as stoves for cooking proved by the abundant traces related to cooking; the placement of a hearth against a wall, on the other hand, may also signal its primary function as a stove.³¹³

The courtyard served as part of the sub-systems in terms of functioning also as a water supply and drainage area. Wells and cisterns built in the courtyards supplied and collected water, as exemplified well in the Klazomenai houses.³¹⁴ Similarly, at Halieis, each house had a well at one corner of the courtyard; since the city lacked a communal water supply facility each household had to supply its own water.³¹⁵ At Olynthus and Morgantina, the courtyards were equipped with drains and cisterns used to collect rainwater and supply water for domestic use.³¹⁶

The courtyard, apart from taking water inside was the main source of air and light for the houses which lacked or minimal openings on their street facades.³¹⁷ As such the courtyard was the main light source that provided good illumination. Hence it provided an open living spaces for the family members, an utility area for performing a variety of household activities, a place of domestic worship and a zone of surveillance and transition in between public and private areas or residential and work quarters. (Figure 76) Because, the courtyard, it could accommodate various functions, acts as a liminal/transitional space in between users and spaces. At the same time, it was an inclusive and hence a generic space that could adapt and perform well

³¹² Ault, 1994, p. 99.

³¹³ Tsakirgis, 2007, p. 226.

³¹⁴ Özbay, 2006, pp. 454-455.

³¹⁵ Ault, 2005, p. 63.

³¹⁶ Cahill, 2002, pp. 78-79.

³¹⁷ Jameson, 1990a, p. 98.

in different situations. It is both the most complex and the flexible space in terms containing all domestic routines and social relationships.



CHAPTER 5

CONCLUSION

The scholarship on ancient Greek domestic architecture took courtyard as an indispensable part of the house. The courtyard as the prominent and characteristic feature of the dwelling and a semi open portico that was planned in association with the courtyard is used to establish a classification of house plans. Accordingly set types are coined with the names given to the portico: *prostas*-courtyard, *pastas*-courtyard and *peristyle*-courtyard. These schemes also formed a common spatial language to describe the architecture of houses. Studies that base their discussion of ancient Greek House solely on these typologies on the other hand may lack the social and cultural discourse relevant to understand the house form, that is, the house as both a social and spatial concept. In this regard, studies that look at the ancient Greek house from thematic approaches such as gender, slavery and public-private often focus also on the locational and spatial features of the courtyard and the *prostas* / *pastas* spaces instead of evaluating the house as a whole, as a totality of several other spatial relationships. In the case-based studies from Anatolia and Greece, on the other hand, the houses were examined according to the presence or lack of some recurring spaces and how much they represented the common identical components used as space-defining architectural features. Hence, the study aimed to establish a broader framework by approaching ‘courtyard house’ as a concept and thus as a generator of all spatial and social relationships. The chosen examples from Anatolia and Greece are used to draw such a broader panorama for the Classical Period houses by focusing on architectural constituents including the specialised rooms; *oikos*, *andron*, *anteroom*, and service spaces like kitchen and storeroom and the open and semi-open spaces represented by the courtyard and porticos. As such, rather than starting from the individual spaces themselves, the proposed reading started from the resulted product, the courtyard house phenomenon. This ‘deconstruction’ provided a multi-dimensional and inclusive understanding of the determinant social and cultural norms in creating the

‘house form’, a concept that includes features beyond the shape characteristics of a dwelling.

Form and shape distinction, as introduced by Amos Rapoport offered a useful and productive framework to look at the emergence and development of courtyard house in a historical continuity in the ancient Greek world. It is discussed that the single-room houses which were common in the Archaic Period, were replaced with houses of multiple rooms from the 8th century onwards. This development seems to have facilitated the separation of activities and households that emerged as a necessity due to the increased social and spatial complexities. Although there was not a standard pattern in the functional specialization of the domestic area, the differences in the architectural features or assemblages in the rooms enabled to define the houses as semi-independent quarters for the members of the household. On the other hand, similar finds and spatial features found in the houses from different sites and regions, provide a common set of data to evaluate ancient Greek domestic architecture. The changes in domestic architecture, in that sense, can be better understood in the context of wider developments. Respectively, the construction of separated parts in a dwelling suggests an emerged need to make more defined and physical spatial divisions; there could have been various possible reasons behind this including practical, social, economic and ideological ones.

In the Classical Period, a social complexity emerged with the increased density in the cities and hence the desire to make social separation between status groups through physical boundaries and architecturally specialized rooms to control their movements in the domestic area and also in between the house and the city became operative. The courtyard and the recurring rooms created an adaptable architectural scheme which was practical to build: being a budgetwise economical and timewise faster way of planning residential quarters in rapidly growing cities or newly built ones.³¹⁸ The

³¹⁸ Wycherley, 1978, p. 16

repetitive usage of the courtyard and same specialized spaces appear in the residential areas of planned cities like Olynthus, Piraeus and Abdera from Greece; Priene and Klazomenai from Anatolia. The idea of creating a standard house scheme could have been also related to the development of *polis* and the idea of equality, concepts that feature in especially the textual evidence of the Classical Period.

In the Classical Period, one other reason behind the increasing number of rooms and emergence of specialized spaces around a courtyard in a dwelling was the transformation of the economical sphere towards a more complex structure and intensity. The courtyard began to fulfill the spatial requirements of the management of economic activities and production. Workshops and / or shops were added to the domestic area for such reasons and the house form changed to accomodate spaces for work, production, storage and commercial transaction. The development of economic activities needed further spaces that were not private in the domestic area and hence shops with independent access from the street were incorporated in to the houses. These spatial arrangements enabled a division between the customers and the members of household.

The usage of specialized rooms within the area reserved for household use is on the other hand, is argued according to social/status distinctions evaluated by using privacy, gender and slavery as thematic frameworks. Such thematic perspectives however, embrace a speculative dimension as there can not be a satisfying match between the more concrete and diversified archaeological and physical evidence and the un-biased and in adequate textual evidence to use to provide information on real architectural and social situations. Despite their limitations however, the archaeological evidence and the descriptions in the ancient literary texts exemplified constitute the main sources in presenting suggestions, assumptions and discussions. The literary texts indicate that privacy and gender were important conceptual constructs in structuring the use of domestic space in the Classical Period, the emergence of the spatial segmentation in the domestic area in the 8th century, was a result of this. The

examples from both Anatolia and Greece illustrate that the gender-based spaces, *gynaikonitis* (women's quarter) if existed, and *andron* (men's quarter) were not necessarily found as distinctive spaces in all houses. They show, in contrast, that there is not a rigidly segregated spatial zone by means of complete physical separation to suggest a gender based space differentiation. The subdivision of space, instead, made it easier for women to keep themselves away from outsiders if required; when the *andron* or courtyard were in use by visitors and outsiders. The spatial response for providing a social distinction among the free and the slaves, must have been a relational one as well. Depending on their need of service slaves could be present in any part of the house, their private space however cannot be verified findwise. The suggestion that the *pyrgos* found some houses could have been one of the possible areas, is one example.

The changes in domestic architecture and the development of courtyard house was related to the emerged social, political and economic complexities in the Classical Period. In a broader sense, these complexities were sustained and supported by embracing a "Greek" identity, a shared cultural sphere that shaped the ideological motives. The houses classified as "courtyard houses" in ancient Anatolia and Greece, in this sense, are far from being typical; and simple their owners chose and / or preferred to provide separate areas for activities or spatial distinctions between the members of household and users of the house. (Figure 79) The courtyard, in that sense, became an inclusive space combining all these activities according to the demanded social relationship patterns within the same area; like the ideologies prevalent the house too inherited a complexity.

The recurring usage of courtyard plan in the ancient Greek house was evaluated in this context, according to main attributions of courtyard as discussed in Rapoport's cross-cultural studies. The starting point was Rapoport's 'house form' argument; the 'distinction between form and shape' discussed in relation to 'privacy mechanisms', 'subsystem of settings', 'means of access', 'efficient use of space' and 'climatic efficiency' as thematic insights.

Rapoport took the privacy mechanisms more dominant theme followed by subsystem of settings and mean of access based on the examination of several examples from different parts of the world.³¹⁹ He considered ‘efficient use of space’ and ‘climatic efficiency’ as occurring on mostly a culture-based framework. The form-shape distinction as a conceptual perspective and its discussive themes, as culturally operative issues are adapted to the ancient Greek context to discuss the culture of dwelling in the Classical Period.

For discussing the privacy mechanisms in terms of physical control through spatial relationships in the ancient Greek house the position and number of entrances and the spatial relationships of the portico and its hinterland are evaluated. The single entrance courtyard was common except one Athenian house (House D). (Figure 78) In terms of the outside-inside relationships based on the spatial configuration of entrance relationships, it can be said that there was lack of standard; though in some cases there were repeating features, like in Klazomenai, Piraeus and Kolophon where the courtyard separated the shop unit as a public usage area from the rest of the house which was planned as the private sphere. (Figure 77) The *prostas* and *pastas* which gave access to the main living areas from the courtyard, are defined as semi-private areas and as extensions of the private spaces and also the courtyard. Their spatial character was changeable. In the situation, the *andron* and *oikos* opened to the same area, the *prostas* might have served as a semi-public space especially during the time when there were a *symposium* and visitors. The courtyard, similarly, can not be clearly defined as a public or a private space, while it enabled an open space for the domestic activities which were done mostly by women and slaves; it was also used by male visitors and slaves in different times. There could have been specialized spaces for certain activities held by men or women together or as separately during the day, but these activities were all temporal and indeed might not have required reserved rooms. In that sense, the use of the courtyard was flexible and the distinctive

³¹⁹ Rapoport, 2007, p. 59.

rooms that could have been utilised by the household could have been based on scheduling the temporality of the events.

In ancient Greek domestic architecture the need for flexible space was actually a more determinant factor than climate to explain the repetitive use of courtyard house plan. The courtyard house is a compact but flexible spatial setting that performs well in each environmental and event circumstance and discussed as such in the examples selected from Anatolia and Greece. (Figure 79) It was a self-sufficient system that enabled doing domestic, economic and social activities together, efficiently and in accordance with the cultural patterns of daily life. The archaeological evidence such as cisterns, wells, *koprone*s or loomweights as signs of female activity in the domestic area were found in many examples from both Anatolia and Greece. The south position of the courtyard in almost all chosen examples allowed to make several activities insuitable weather which elevated the status of the courtyard as a generic space. The less referred houses in the scholarship, exemplified by Burgaz, Latmos and Pergamon, for example, also indicated that despite the differences in the enviromental conditions and topography, the courtyard as an extension of private domain was still in use.

The flexibility of space usage is also evidenced in the choice of terminology used to designate specific spaces in the sampled houses. In Kolophon, Priene, Klazomenai, Burgaz, Abdera and Piraeus houses, for instance, *oikos* which was positioned together with a *prosta*s (except Burgaz houses), is used to mean a main living room used by all members of the family. The *oikos* and *prosta*s served as the private quarter on the north part of the houses. In this scheme, the *prosta*s, indeed assumed the role of an ante-room for *oikos* and/or also for *andron* in some examples that could well transform from being a transitional space to a usable one. During the *symposium*, for example, the *prosta*s could became a semi-public space to manage the required level of privacy between the guests and households. As a semi-private space, it could also enable doing some household tasks and domestic activities in good weather. Cahill, on the other hand, used the term “north rooms” instead of

oikos to define the spaces used for similar activities in the Olynthian houses. As different from the more standard *oikos*, there are two northern rooms assigned for private usage for the household and the *pastas* extended along both rooms and served an extension of living spaces like the *prostas*. The “north rooms”, in this regard, is a more inclusive term to identify an area as a private quarter than *oikos* which often refers to a single substantial room. Ault, in this regard, defines the north rooms as a “suit of rooms” and used the term “transverse hall” instead of *pastas* to describe the portico which extended along a group of rooms as different than the Olynthus examples.³²⁰ His preference to use the term “suit of rooms” instead of *oikos* or “north rooms” can indeed become a suitable one in the possibility of houses accommodating a number of social groups who had lived independently in the same house. The “transverse hall”, accordingly can be used to identify a space that gave access to a number of private quarters instead of a single or more rooms. It is apparent that all the terms and descriptions take into account the northern quarter associated with the private use of the household; but the function, design and position of this part of the house had varied. This fact itself is a strong contribution to the argument of form and shape distinction in the context of ancient Greek domestic architecture. Although, the meaning use and function of spaces could change in the Greek house, the courtyard remained as a common ground to evaluate and analyze the spatial and social context of domestic architecture.

The courtyard, in that respects, is actually a complex space as it could accommodate various functions and relationships, happening at the same time. While, the courtyard provided a gathering/communication space for the household, a pleasant open domestic space of light and air, it also acted as a complex and flexible spatial and functional setting. Even if the function, architectural language and spatial organization of the courtyard changed depending on the internal and external factors such as climate, landscapes, materials, the way of living, differences in economic power and culture it

³²⁰ Ault, 1994, p. 91.

remained as the most static feature of the dwelling culture in Greek antiquity. As such, is an overarching spatial concept to discuss the ancient Greek house from the point of view of 'house form' which tells more than its architectural shape. The portico as a supporting spatial feature contributed to the flexibility of the courtyard by taking different forms to satisfy the preferred socio-spatial relationships within the private setting.



REFERENCES

- Abass F., İsmail, L. H. and Solla M. (2016). "A Review of Courtyard House: History Evolution Form and Functions", *ARPAN Journal of Engineering and Applied Sciences* (11:4), pp. 2557-2563.
- Abbasoğlu, H. (1999). "Anatolian House in Antiquity" in Y. Sey (ed.). *Housing and Settlement in Anatolia: A Historical Perspective*, İstanbul: Tarih Vakfı Yayınları, pp. 43-81.
- Acar, E. (1999a). "Neolithic-Calcolithic Age" in Y. Sey (ed.). *Tarihten Günümüze Anadolu'da Konut ve Yerleşme*. İstanbul: Tarih Vakfı Yayınları, pp. 2-20.
- Acar, E. (1999b). "The Cities of the Bronze Age" in Y. Sey (ed.). *Tarihten Günümüze Anadolu'da Konut ve Yerleşme*. İstanbul: Tarih Vakfı Yayınları, pp. 23-41.
- Akurgal, E. (1983). *Eski İzmir 1, Yerleşme Katları ve Athena Tapınağı*, Ankara: Türk Tarih Kurumu Basım Evi.
- Akurgal, E. (1987). *Anadolu Uygarlıkları*. İstanbul: Net Turistik Yayınları.
- Alhusban A. and Al-Shorman A. (2011). "The Social, Political and Economic Functions of Courtyard Houses in Umm Qais, Northern Jordan", *International Journal of Historical Archaeology* (15:1), pp. 1-9.
- Antonaccio, M. C. (2000). "Architecture and Behavior: Building Gender into Greek Houses", *The Classical World* (93:5), pp. 517-533.
- Asatekin, G. (2005). "Understanding Traditional Residential Architecture in Anatolia", *The Journal of Architecture* (10:4), pp. 389-414.
- Atıcı, N. (2013). *Household Organization in Classical Burgaz (Palaia Knidos): Domestic Assemblages, Space and Function*, Master Thesis, Ankara: Middle East Technical University.
- Ault, B. A. (1994). *Classical Houses and Households: An Architectural and Artifactual Case Study from Halieis, Greece*, PhD. Dissertation, Bloomington: Indiana University.
- Ault, B. A. (2000). "Living in the Classical Polis: The Greek House as Microcosm", *The Classical World* (93:5), pp. 483-496.

Ault, B. A. (2007). “*Oikos and Oikonomia: Greek Houses, Households and the Domestic Economy*” in R. Westgate, N. Fisher, and J. Whitley (eds.). *Building Communities: House, Settlement and Society in the Aegean and Beyond*, London: British School at Athens, pp. 259-265.

Ault B. A. (2005). *The Excavations at Ancient Halieis: The Organization and Use of Domestic Space*, Bloomington, USA : Indiana University Press.

Bakır, G., Ersoy, Y., Zeren, M., Özbay, F. and B. Hürmüzlü. (2003). “2002 Yılı Klazomenai Kazısı” 25. *Kazı Sonuçları Toplantısı* (2), pp.101-110.

Becks, P. A. B. (2014). “Kolophon’dan Klasik Dönem Konutları”, *Anadolu Sohbetleri XIII*, İstanbul: Türk Eskiçağ Bilimleri Enstitüsü, pp. 273-293.

Boyd, T. T. and Rudolph, W. W. (1978). “Excavations at Porto Cheli and Vicinity, Preliminary Report IV”, *Hesperia: The Journal of the American School of Classical Studies at Athens* (47), pp. 333-355.

Bundrick, S. D. (2008). “The Fabric of the City: Imaging Textile Production in Classical Athens”, *Hesperia: The Journal of the American School of Classical Studies at Athens* (77:2), pp. 283-334.

Cahill, N. (2000). “Olynthus and Greek Town Planning”, *The Classical World* (93:5), pp. 497-515.

Cahill, N. (2002). *Household and City Organization at Olynthus*, London: New Haven.

Cambitoglou, A., Coulton, J. J., Birmingham, J and Green, J. R. (1971). *Zagora I: Excavation of a Geometric Town on the Island of Andros, Greece (Excavation Season 1967; Study Season 1968-1969)*, Australia: Sydney University Press.

Chan C. S. and Xiong Y. (2007). “The Features and Forces That Define, Maintain and Endanger Beijing Courtyard Housing”, *Journal of Architectural and Planning Research* (24:1), pp. 42-64.

Coucouzeli, A. (2007). “From Megaron to Oikos at Zagora” in R. Westgate, N. Fisher and J. Whitley (eds.). *Building Communities: House, Settlement and Society in the Aegean and Beyond*, London: British School at Athens, pp.169-181.

Düring, B. S. (2007). “Reconsidering the Çatalhöyük Community: From Households to Settlement Systems”, *Journal of Mediterranean Archaeology* (20), pp. 155-182.

Eldem, S. H. (1954). *Türk Evi Plan Tipleri*, İstanbul: İ.T.Ü. Mimarlık Fakültesi.

Ferla, K. (ed.) (2005). *Priene*, London: Harvard University Press.

Fuchs, A. R. and Meyer-Brodnitz, M. (1989). "The Emergence of the Central Hall House-Type in the Context of 19th Palestine" in J. P. Bourdier and N. Alsayyad (eds.). *Dwellings, Settlements and Traditions: Cross-Cultural Perspectives*, USA and England: University Press of America, pp. 403-424.

Gardner, E. (1901). "The Greek House", *The Journal of Hellenic Studies* (21), pp. 293-305.

Goethert R. (2010). "More Than a Pattern: The Contributions of Courtyard House in the Developing World" in N. O., Rabbat (ed.). *The Courtyard House From Cultural Reference to Universal Relevance*, USA: Ashgate Publishing Company, pp. 173-187.

Goldberg, M. Y. (1999). "Spatial and Behavioural Negotiation in Classical Athenian City Houses" in P. M. Allison (ed.). *Dwelling in the Past: The Archaeology of Household Activities*. London: Routledge, pp. 142- 161.

Gökdemir, Ö. (2006). *The Classical Period Houses in Burgaz : An Archaeological and Architectural Overview*, Master Thesis, Ankara: Middle East Technical University.

Gönül, H. (2008). *Batı Anadolu'daki Antik Yunan Konutu Araştırmalarında Başlıca Konu ve Sorunlar*, Master Thesis, İstanbul: İstanbul Technical University.

Graham, J. W. (1966). "Origins and Interrelations of the Greek House and the Roman House", *Phoenix* (20), pp. 3-31.

Graham, J. W. (1972). "Notes on Houses and Housing-Districts at Abdera and Himera", *American Journal of Archaeology* (76), pp. 295-301.

Gregotti, V. (1979). "Editoriale", *Rassegna*, Bologna: CIPIA.

Gürler B. (1999). "Passing to Prosta Type House in West Anatolia and the Location of this Type in the City Planning" in *Çağlar Boyunca Anadolu'da Yerleşim ve Konut Uluslararası Sempozyumu-Bildiriler*, pp. 231-240.

Hoepfner, W. and Schwandner, E. L. (1994). *Haus und Stadt im Klassischen Griechenland*, München: Deutscher Kunstverlag.

Hoepfner, W. (1996). "Klasik Dönem'de Konut ve Toplum" in Y. Sey (Ed.). *Housing and Settlement in Anatolia: A Historical Perspective*, İstanbul: Tarih Vakfı Yayınları, pp. 150-163.

Holland, L. B. (1944). "Colophon", *Hesperia: The Journal of the American School of Classical Studies at Athens* (13:2), pp. 91-171.

Jameson, M. H. (1990a). "Domestic Space in the Greek City-State" in S. Kent (ed.). *Domestic Architecture and the Use of Space: an interdisciplinary cross-cultural study*, Cambridge: Cambridge University Press, pp. 92-113.

Jameson, M. H. (1990b). "Private Space and the Greek City" in O. Murray and S. Priece (eds.). *The Greek City from Homer to Alexander*, Oxford: Clarendon Press, pp.171-195.

Jones L. L. (2007). "House and Veil in Ancient Greece" in R. Westgate, N. Fisher and J. Whitley (eds.). *Building Communities: House, Settlement and Society in the Aegean and Beyond*, London: British School at Athens, pp. 251-258.

Lang, F. (2005). "Structural Change in Archaic Greek Housing" in B. A. Ault and L. C. Nevett (eds.). *Ancient Greek Houses and Households, Chronological, Regional and Social Diversity*, Philadelphia: University of Pennsylvania Press, pp. 12-35.

Leader, E. R. (1997). "In Death Not Divided: Gender, Family, and State on Classical Athenian Grave Stelae", *American Journal of Archaeology* (101:4), pp. 683-699.

Lee, H. S. (1991). "Continuity and Consistency of the Traditional Courtyard House Plan in Modern Korean Dwellings", *Traditional Dwellings and Settlements Review* (3:1), pp. 65-76.

Lewis, S. (2002). *The Athenian Woman, An Iconographic Handbook*. London: Routledge.

Memarian, G. and Brown, E. F. (2003). "Climate, Culture, and Religion: Aspects of The Traditional Courtyard House in Iran", *Journal of Architectural and Planning Research* (20:3), pp. 181-198.

Memarian, G. and Brown, E. F. (2006). "The Shared Characteristics of Iranian and Arab courtyard houses" in B. Edwards, M. Sibley, M. Hakmi and P. Land (eds.). *Courtyard Housing: Past, Present and Future*, NewYork: Taylor & Francis, pp. 27-41.

Métraux, R. P. G. (1999). "Ancient Housing: 'Oikos' and 'Domus' in Greece and Rome", *Journal of the Society of Architectural Historians* (58:3), pp. 392-405.

Morgan. G. (1982). "Euphiletos' House: Lysias I", *Transactions of the American Philological Association* (112), pp. 115-123.

Morgan, J. (2010). *The Classical Greek House*. England: Liverpool University Press.

Mylonas, G. E. (1940). "The Olynthian House of the Classical Period", *Classical Journal* (35:7), pp. 389-402.

Naumann, R. (1975). *Eski Anadolu Mimarlığı*. Ankara: Türk Tarih Kurumu Basımevi.

Nevett, L. C. (1995a). "Gender Relations in the Classical Greek Household: The Archaeological Evidence", *The Annual of the British School at Athens* (90), pp. 363-381.

Nevett, L. C. (1995b). "The Organisation of Space in Classical and Hellenistic Houses from Mainland Greece and the Western Colonies", in N. Spencer (ed.). *Time, Tradition and Society in Greek Archaeology*. London: Routledge, pp. 89-108.

Nevett, L. C. (1999). *House and Society in the Ancient Greek World*, Cambridge: Cambridge University Press.

Nevett, L. C. (2007). "Greek Houses as A Source of Evidence for Social Relations" in R. Westgate, N. Fisher, and J. Whitley (eds.). *Building Communities: House, Settlement and Society in the Aegean and Beyond*, London: British School at Athens, pp. 5-10.

Nevett, L. C. (2010). *Domestic Space in Classical Antiquity*. New York: Cambridge University Press.

Nevett, L. C., Tsigarida, E. B., Archibald, Z. H., Stone, D. L., Horsley, T. J. and Zekkos, D. (2017). "Towards A Multi-Scalar, Multidisciplinary Approach to the Classical Greek City: The Olynthus Project", *Annual of the British School at Athens* (112), pp. 155-206.

Norberg-Schulz, C. (1985). *The Concept of Dwelling: on the Way to Figurative Architecture*, New York: Rizzoli International Publications.

Özbay F. (2010). "Klazomenai'daki MÖ 4. Yüzyıl Yerleşiminde Açığa Çıkarılan Prostatlı Evlerin Kökeni ve Gelişimi", *OLBA* (XVIII), pp. 107-125.

Özbay, F. (2006). *Klazomenai'de MÖ 4. Yüzyıl Yerleşimi*, PhD. Dissertation, İzmir: Ege University.

Özgen, H. M. (2002). *Latmos (Beşparmak) Dağları Güzeltepe'deki Antik Yerleşim, Topoğrafik Bir İnceleme*, Master Thesis, İstanbul: İstanbul Üniversitesi.

Özgenel, L. (1997). “Antik Dönem Evleri ve Sahipleri, Batı Anadolu’daki İyon Konutları”, *Arkeoloji ve Sanat* (78), pp. 14-24.

Özgenel, L. (2001). “Anadolu’daki Yunan Dönemi Konutlarında Mekan Tanımı, Kullanımı ve Cinsiyet”, *OLBA* (IV), pp. 125-143.

Özgenel, L. (2006). “Antik Yunan Konut Yazını: Kaynaklar, Sorunlar ve Yeni Yaklaşımlar Üzerine Bir Değerlendirme”, *OLBA* (XII), pp. 199-221.

Özkan, S. (2005). “Foreword-Courtyard: A Typology that Symbolises a Culture” in B. Edwards, M. Sibley, M. Hakmi and P. Land (eds.). *Courtyard Housing: Past, Present and Future*, New York: Taylor & Francis, pp. 14-17.

Öztürk, F. G. (2010). *A Comparative Architectural Investigation of the Middle Byzantine Courtyard Complexes in Açıksaray - Cappadocia: Questions of Monastic and Secular Settlement*, PhD. Dissertation, Ankara: Middle East Technical University.

Öztürk, F. G. (2013). “Negotiating Between the Independent and Groups of Courtyard Complexes in Cappadocia” in A. Brown and A. Leach (eds.). *Proceedings of the Society of Architectural Historians, Australia and New Zealand: 30, Open*, pp. 837-849.

Peschlow A. (1985). “Die Wohnhäuser von Latmos”, 3. *Araştırma Sonuçları Toplantısı*, Ankara, pp. 155-172.

Peschlow A. (2005). *Herakleia Şehir ve Çevresi: Latmos’ta Bir Karia Kenti*, İstanbul: Homer Kitabevi.

Pettrucioli, A. (2006). “The Courtyard House: Typological Variations” in B. Edwards, M. Sibley, M. Hakmi and P. Land (eds.). *Courtyard Housing: Past, Present and Future*, New York: Taylor & Francis, pp. 2-26.

Qunnell, C. H. and M. (1957). *Everyday Things in Ancient Greece*. London: B. T. Batsford.

Rabbat, O. N. (ed.). (2010). *The Courtyard House From Cultural Reference to Universal Relevance*, USA: Ashgate Publishing Company.

Rapoport, A. (1969). *House, Form and Culture*, New Jersey: Prentice Hall.

Rapoport, A. (1987). “Learning About Settlements and Energy from Historical Precedents”, *Athens Center of Ekistics* (54:325), pp. 262-268.

Rapoport, A. (2007). “The Nature of the Courtyard House: A Conceptual Analysis”, *Traditional Dwellings and Settlements Review* (28:2), pp. 57-72.

Reynolds S. J. and Lowry P. W. (1996). "The Garden in the Building: Observations of Córdoba's Courtyards", *Landscape Journal* (15:2), pp. 123-137.

Reynolds, S. J. (2002). *Courtyards: Aesthetic, Social, and Thermal Delight*, New York: John Wiley & Sons, Inc.

Robinson, D. M. and Graham, A. J. W. (1938). *Excavations at Olynthus, Part VIII: The Hellenic House; a Study of the Houses Found at Olynthus with a Detailed Account of Those Excavated in 1931 and 1934*, Baltimore: Johns Hopkins University Press.

Rykwert, J. (1991). "House and Home", *Social Research* (58:1), pp. 51-62.

Sanders, D. (1990). "Behavioral Conventions and Archaeology: Methods for the Analysis of Ancient Architecture" in S. Kent. (ed.). *Domestic Architecture and the Use of Space: an interdisciplinary cross-cultural study*, Cambridge: Cambridge University Press, pp. 43-72.

Sözen, M. and Erüzun, C. (1996). *Anatolian Vernacular Houses*, A Cultural Publication of Emlak Bankası.

Sigalos, L. (2003). "Housing People in Medieval Greece", *International Journal of Historical Archaeology* (7:3), pp. 195-221.

Sjöberg, L. B. (2014). "The Greek *Oikos*: a space for interaction, revisited and reconsidered", in L. Karlsson, S. Carlsson and J. B. Kullberg (eds.). *Studies Presented to Pontus Helleström, Boreas: Uppsala Studies in Ancient Mediterranean and Near Eastern Civilizations* (35), pp. 315-327.

Taşdöğen, F. S. (2006). *Traditional Karacasu (Aydın) Dwellings: An Investigation into Their Architectural and Social Characteristics*, Master Thesis, Ankara: Middle East Technical University.

Tsakirgis, B. (1989). "The Decorated Pavements of Morgantina I: The Mosaics", *American Journal of Archaeology* (93:3), pp. 395-416.

Tsakirgis, B. (1990). "The Decorated Pavements of Morgantina II: the Opus signinum," *American Journal of Archaeology* (94), pp. 425-443.

Tsakirgis, B. (2005). "Living and Working on the Margins of the Athenian Agora: A Case Study of Three Athenian Workshop Houses," in B. A. Ault and L. C. Nevett (eds.). *Ancient Greek Houses and Households: Chronological, Regional, and Social Diversity*, Philadelphia, pp. 67-83.

Tsakirgis, B. (2007). "Fire and Smoke: Hearths, Braziers, and Chimneys in the Greek House," in R. Westgate, N. Fisher, and J. Whitley (eds.). *Building*

Communities: House, Settlement and Society in the Aegean and Beyond, London: British School at Athens, pp. 225-231.

Tsakirgis, B. (2016). “What Is a House? Conceptualizing the Greek House” in A. Glazebrook and B. Tsakirgis (eds.). *Houses of Ill Repute: The Archaeology of Brothels, Houses, and Taverns in the Greek World*, Pennsylvania: University of Pennsylvania Press, Philadelphia, pp. 13-35.

Tuna, N. (1997). “Burgaz Arkeolojik Kazıları 1996 Yılı Çalışmaları”, 19. *Kazı Sonuçları Toplantısı* (2), pp. 445-459.

Tuna, N. (2003). “Burgaz Kazıları, 2001 Yılı Çalışmaları”, 24. *Kazı Sonuçları Toplantısı* (2), pp. 255-272.

Tuna, N. (2012). *Archeological Investigations at the Knidian Territorium (Knidos Territoryum'nda Arkeolojik Araştırmalar)*, Ankara: TAÇDAM, Middle East Technical University.

Usman, M. (1955). *Antik Devir Küçük Asya Evleri*, İstanbul: Güven Basımevi.

Vitruvius (2005). *The Ten Books on Architecture*, translated by S. Güven, İstanbul: Şevki Vanlı Mimarlık Vakfı Yayınları

Von Graeve, V. (1991). “1990 Yılı Milet Çalışmaları”, 13. *Kazı Sonuçları Toplantısı* (2), pp. 9-20.

Walker, S. (1983). “Women and Housing in Classical Greece”, in A. Cameron and A. Kuhrt (eds.). *Images of Women in Antiquity*. London: Croom Helm, pp. 81-91.

Walter-Karydi, E. (1998). *The Greek House, the Rise of Noble Houses in Late Classical Times*, The Archeological Society at Athens.

Westgate, R. (2007a). “House and Society in Classical and Hellenistic Crete: A Case Study in Regional Variation”, *American Journal of Archaeology* (111:3) , pp. 423-457.

Westgate, R. (2007b). “The Greek House and the Ideology of Citizenship”, *World Archaeology* (32:2), pp. 229-245.

Westgate, R. (2015). “Space and Social Complexity in Greece from the Early Iron Age to the Classical Period” *Hesperia: The Journal of the American School of Classical Studies at Athens* (84), pp.47-95.

Wulf-Rheidt, U. (1998). “The Hellenistic and Roman Houses of Pergamon” in H. Koester (ed.). *Pergamon: Citadel of the Gods, Archaeological Record*,

Literary Description, and Religious, Harrisburg, PA: Trinity Press International, pp. 299-330.

Wulf-Rheidt, U. (2014). “The Ancient Residential Buildings of Pergamon” in F. Pirson and A. Scholl (eds.). *Pergamon: A Hellenistic Capital in Anatolia*, İstanbul: Yapı Kredi Yayınları, pp. 336-354.

Wycherley, R. E. (1962). *How the Greeks Built Cities, the relationship of architecture and town planning to everyday life in Ancient Greece*, London: W. W. Northon & Company.

Wycherley, R. E. (1978). *The Stones of Athens*, New Jersey: Princeton University Press.

Yılmaz, N. (2006). *Izgara Tasarlı Kent Gelişimi ve Anadolu Örnekleri*, Erzurum: Atatürk Üniversitesi.

Young, R. (1951). “An Industrial District of Ancient Athens”, *Hesperia: The Journal of the American School of Classical Studies at Athens* (20), pp. 135-288.

Zeyrek, T. H. (2005). *The Development of Porticoed Courtyards in the Anatolian House Architecture*, İstanbul: Ege Yayınları.

Zhang, D. (2013). *Courtyard Housing and Cultural sustainability: Theory, Practice, and Product*, USA: Ashgate Publishing Company.

APPENDICES

A. FIGURES

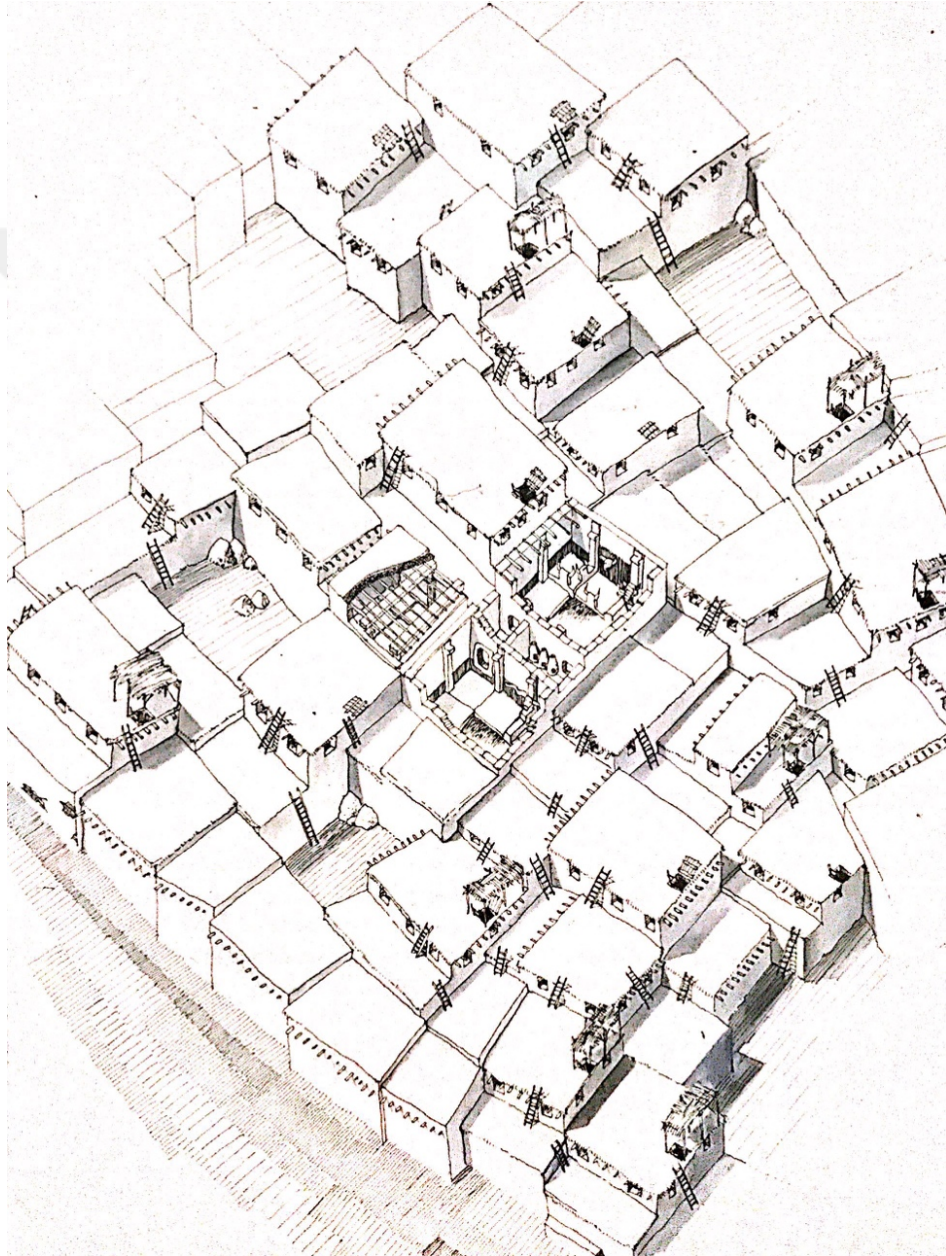


Figure 1: Reconstruction of Çatalhöyük Settlement, 7000- 6000 BC
(Acar, 1999b, p.15)

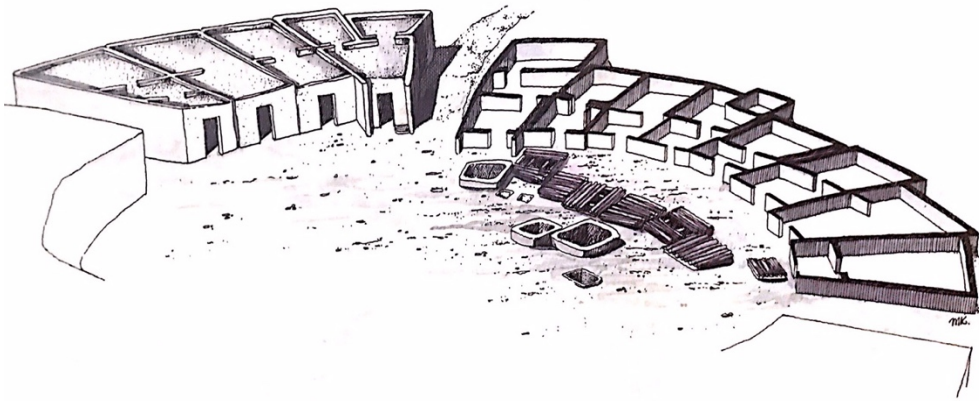


Figure 2: Reconstruction of Demircihöyük Settlement, 2000-1500 BC (Acar, 1999b, p.31)

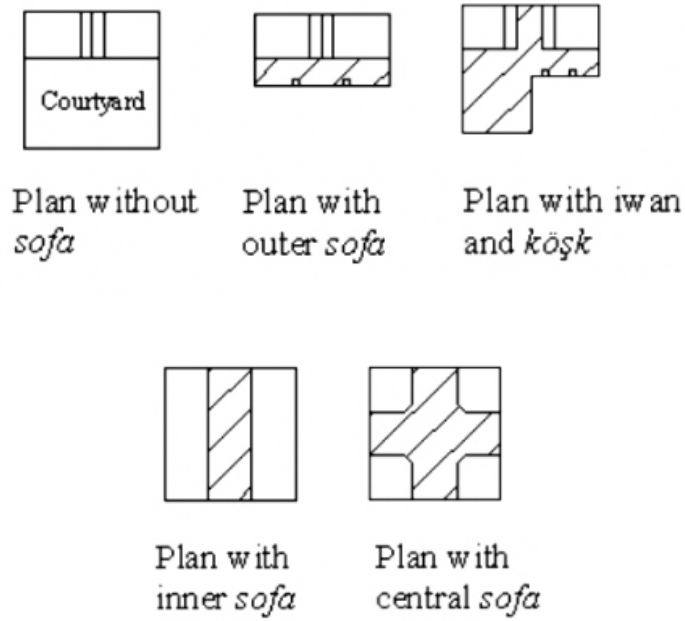


Figure 3: Plan typology of Turkish House according to Sedat Hakı Eldem (Taşdöğen, 2006, p. 29)

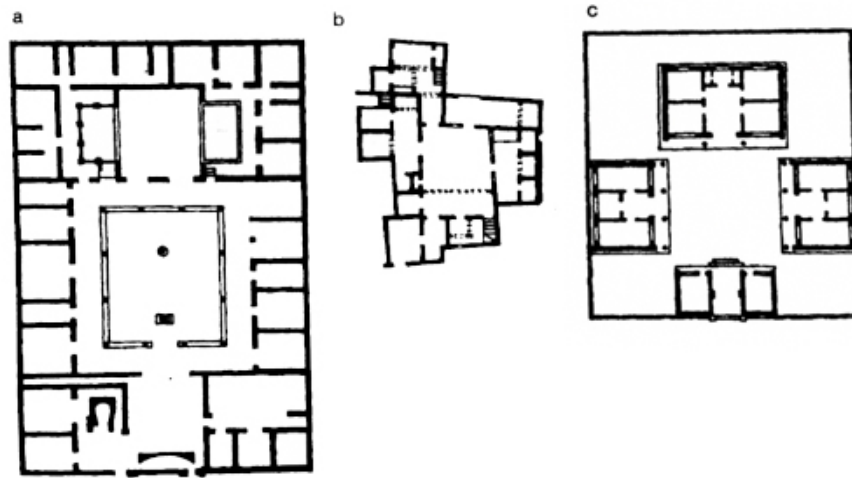


Figure 4: Plan of three courtyard houses: (a) Roman *domus* in Italica, Spain, (b) traditional house in Fez, Morocco, (c) traditional house in Jilin, China (Petrucchioli, 2006, p.3)

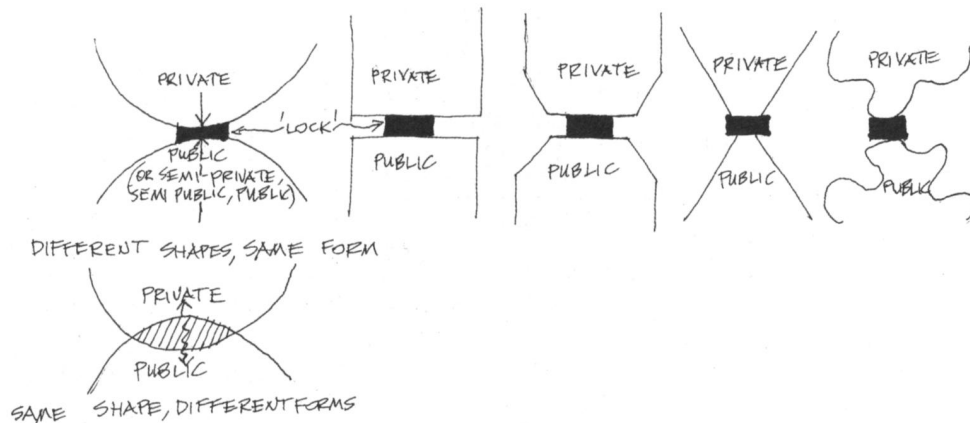
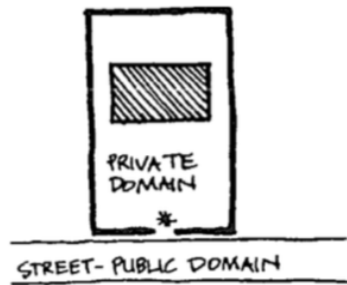
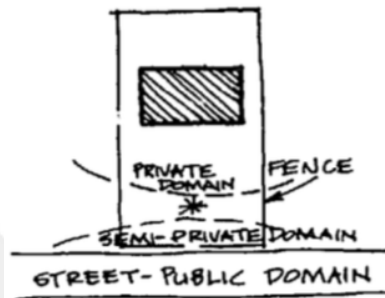


Figure 5: Diagram of 'Form' and 'Shape' (Rapoport, 2007, p.58)

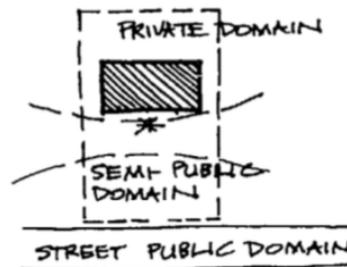


INDIA

* = THRESHOLD



ENGLAND



UNITED STATES

Figure 6: Diagram of approximate location of “threshold” in three cultures (Rapoport, 1969, p.80)

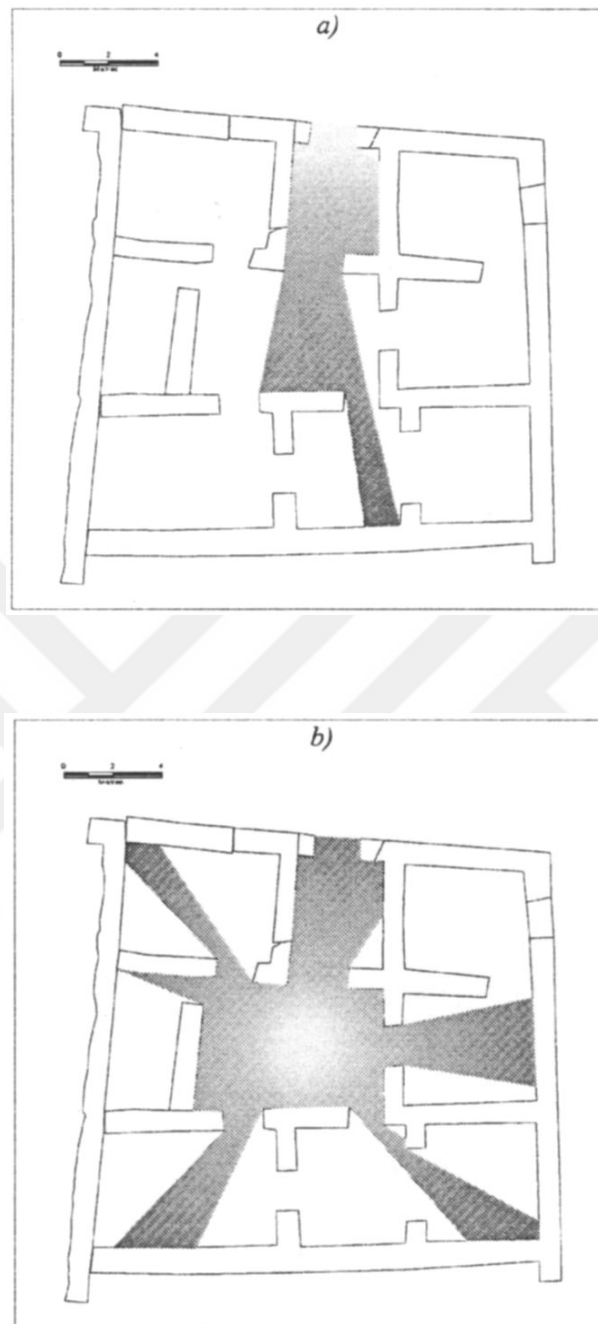


Figure 7: Plan of a courtyard house from the Athenian Agora, Byzantine Period (The shaded areas represent the visibility fields into the courtyard house from (a) the entrance and (b) the center of the courtyard) (Sigalos, 2003, p. 199)

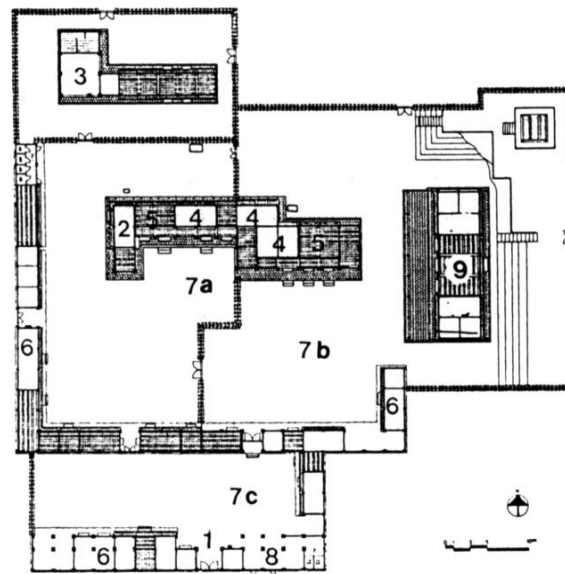


Figure 8: Plan of an upper-class house, Korea (1. entrance gate, 2. main room, 3. kitchen, 4. bedroom, 5. main hall, 6. storage, 7a. courtyard for women, 7b. courtyard for male householder, 7c. courtyard for the servants, 8. stable, 9. study) (Lee, 1991, 70)

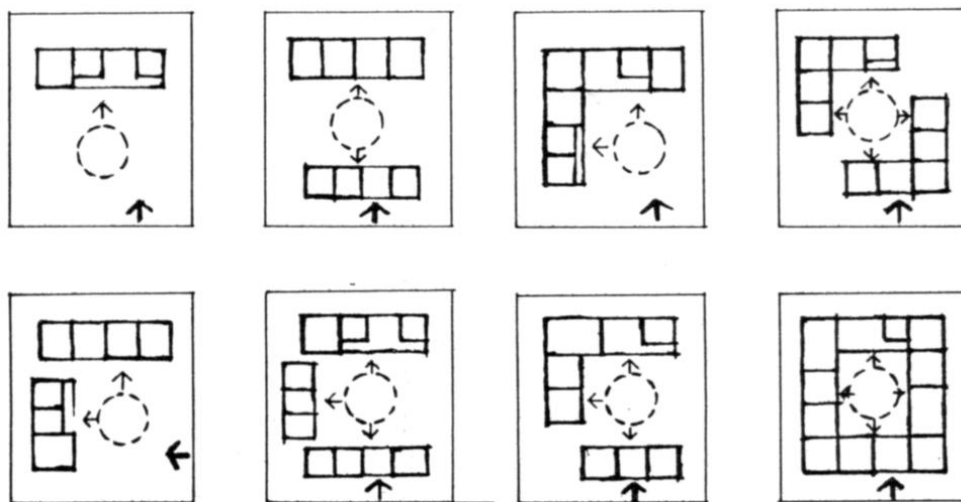


Figure 9: Diagram of courtyards and surrounding building(s) in traditional Korean house (Dotted lines indicate courtyard spaces) (Lee, 1991, p.67)

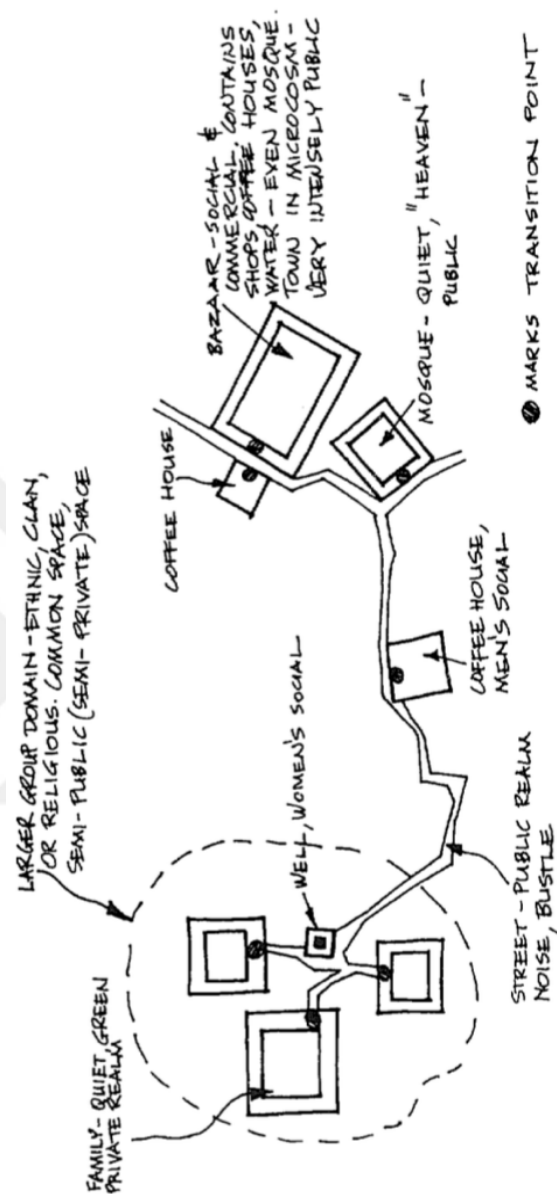
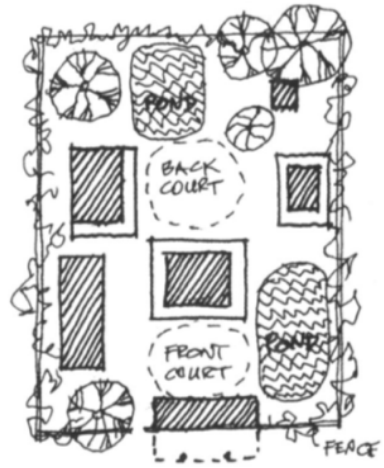
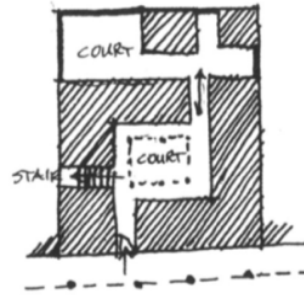


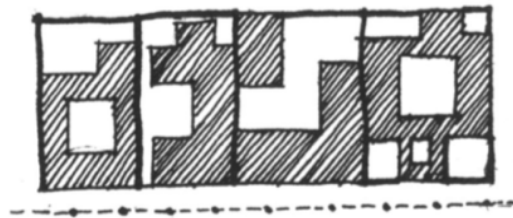
Figure 10: Diagram of house settlement system showing only some of the activities in Moslem town, Isphahan (Rapoport, 1969, p. 71)



G.



H.



I.

Figure 11: Diagram of dwellings in Bangladesh, G. rural dwelling in Bangladesh H. urban house in Dhaka, I. urban fabric in Dhaka (Rapoport, 2017, p. 61)



Figure 12: Plan of traditional urban fabrics and basic house plans in Seoul, South Korea (1. entrance gate, 2. main room, 3. kitchen, 4. bedroom, 5. main hall, 6. storage, 7. courtyard, 9. toilet.) (Lee, 1991, p.69)

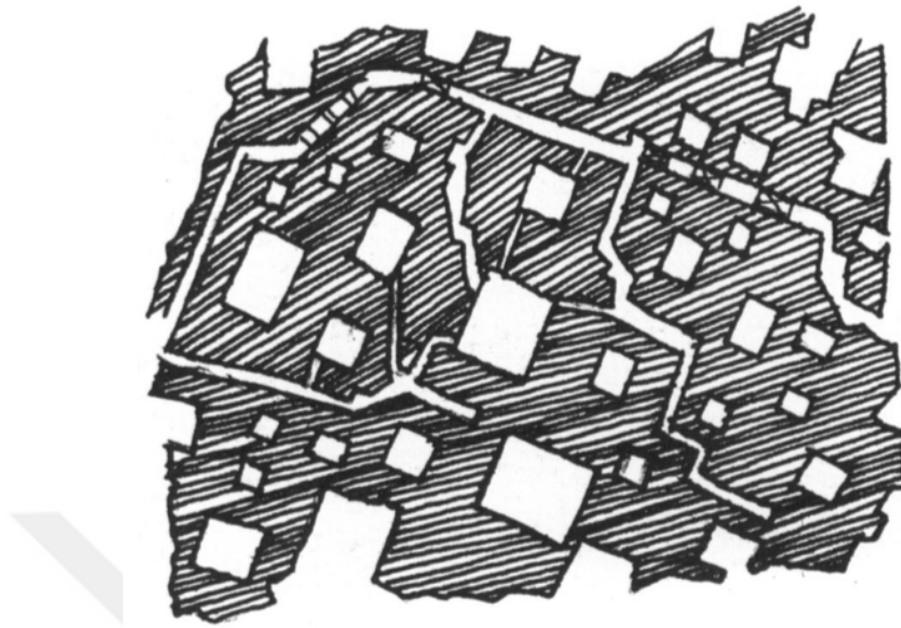


Figure 13: Plan of the traditional urban fabric, Yazd, Iran (Rapoport, 2007, p.64)

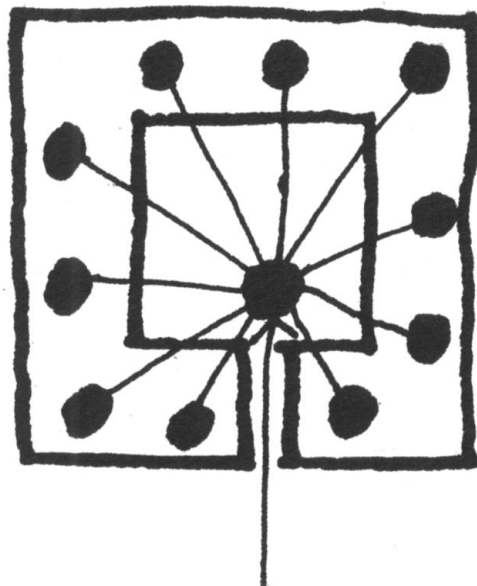


Figure 14: Diagram of a courtyard house in terms of access. (Rapoport, 2007, p. 59)

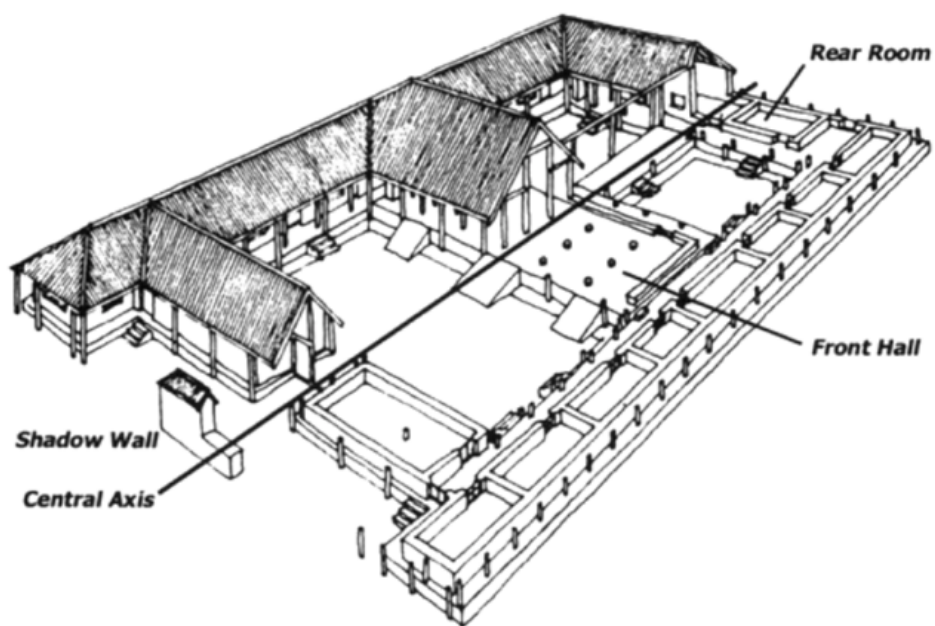


Figure 15: Isometric view of a courtyard house, Beijing, China (Chan and Xiong, 2007, p. 45)

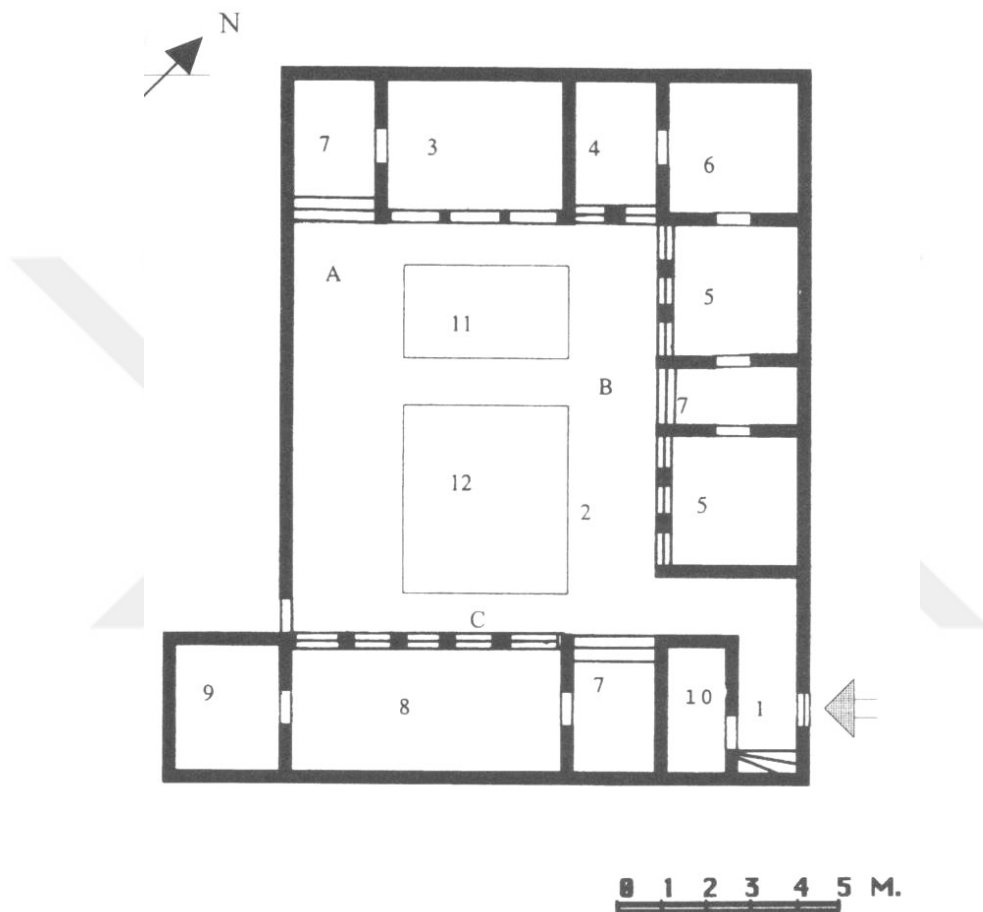


Figure 16: Plan of Saadi House, Shiraz, 19th century, Iran (A. private area B. winter area, C. public area and summer area, 1. entrance corridor, 2. courtyard, 3. sash-windowed room, 4. two-door room, 5. three-door room, 6. Store 7. corridors, 8. five-door room, 9. storeroom, 10. toilet.) (Memarian and Brown, 2003, p.185)

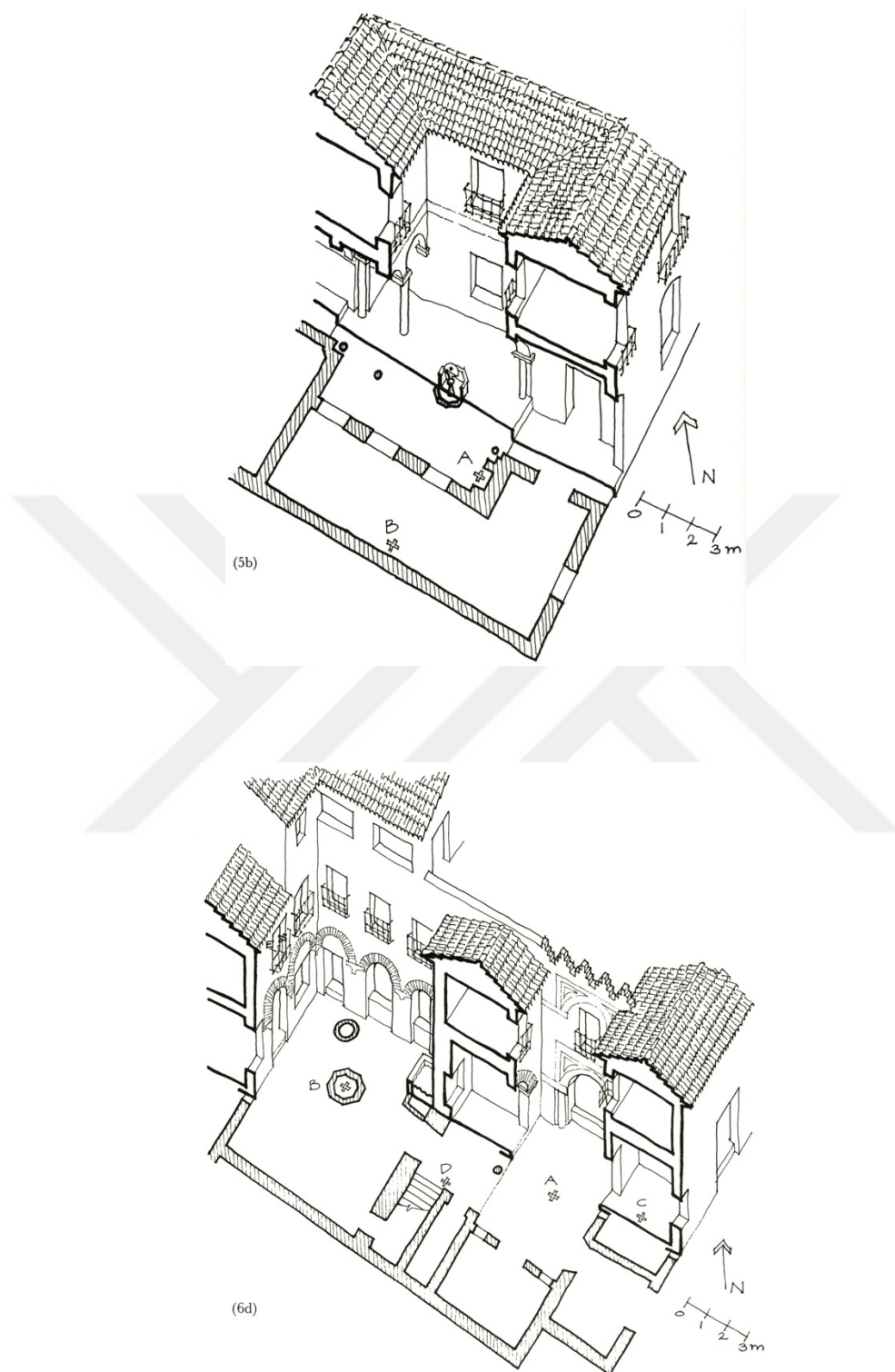


Figure 17: Axonometric section through the *zaguan* in the houses, Cordoba (Points A, B, C, D, and E are locations of temperature sensors) (Reynolds and Lowry, 1996, pp. 130-131)

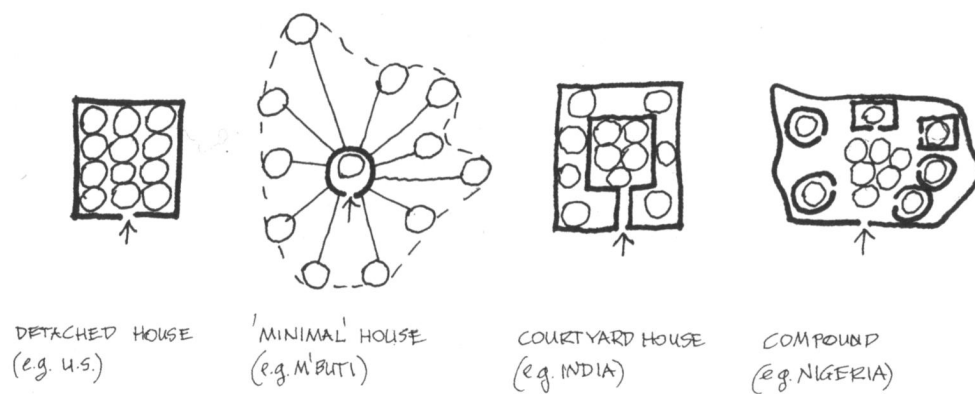


Figure 18: Diagram of different dwellings in terms of systems of activities and settings (Rapoport, 2007, p. 59)

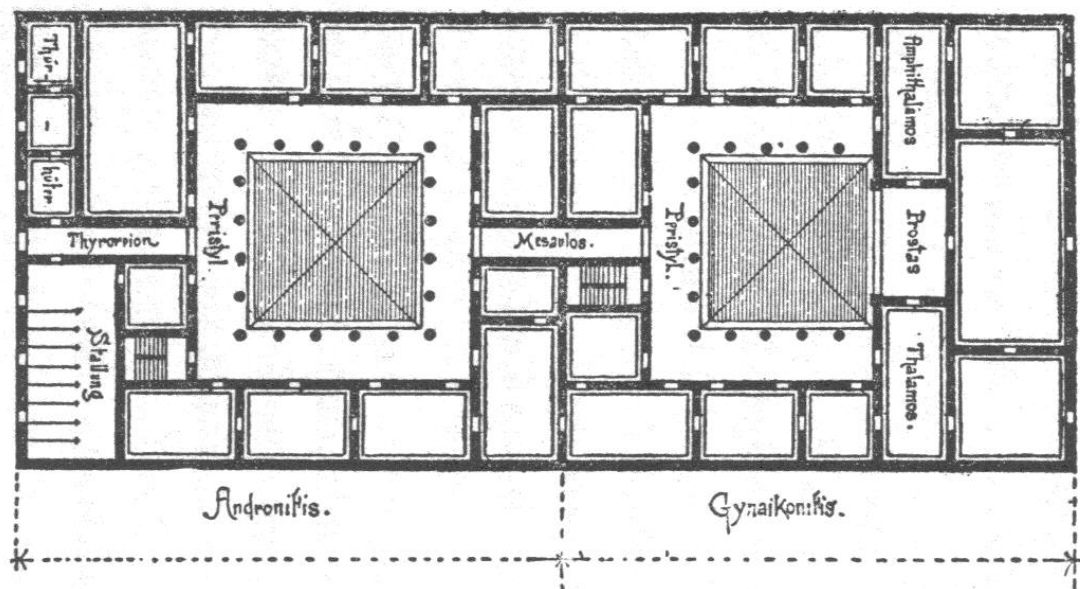


Figure 19: Plan of Greek House according to Vitruvius (trans. by Güven, 2015, p. 139)

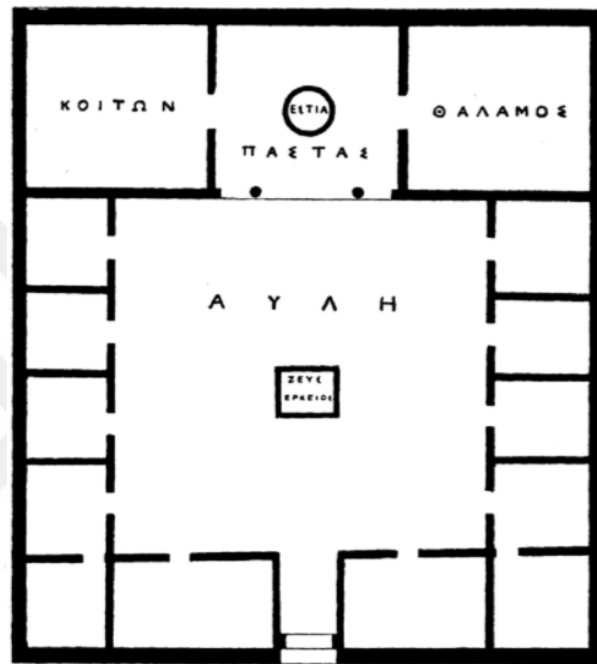


Figure 20: Plan of primitive Greek House according to Galen (Gardner, 1901, p. 303)



Figure 21: Map showing the sites including the sampled *megara* in the study (drawn by the author)

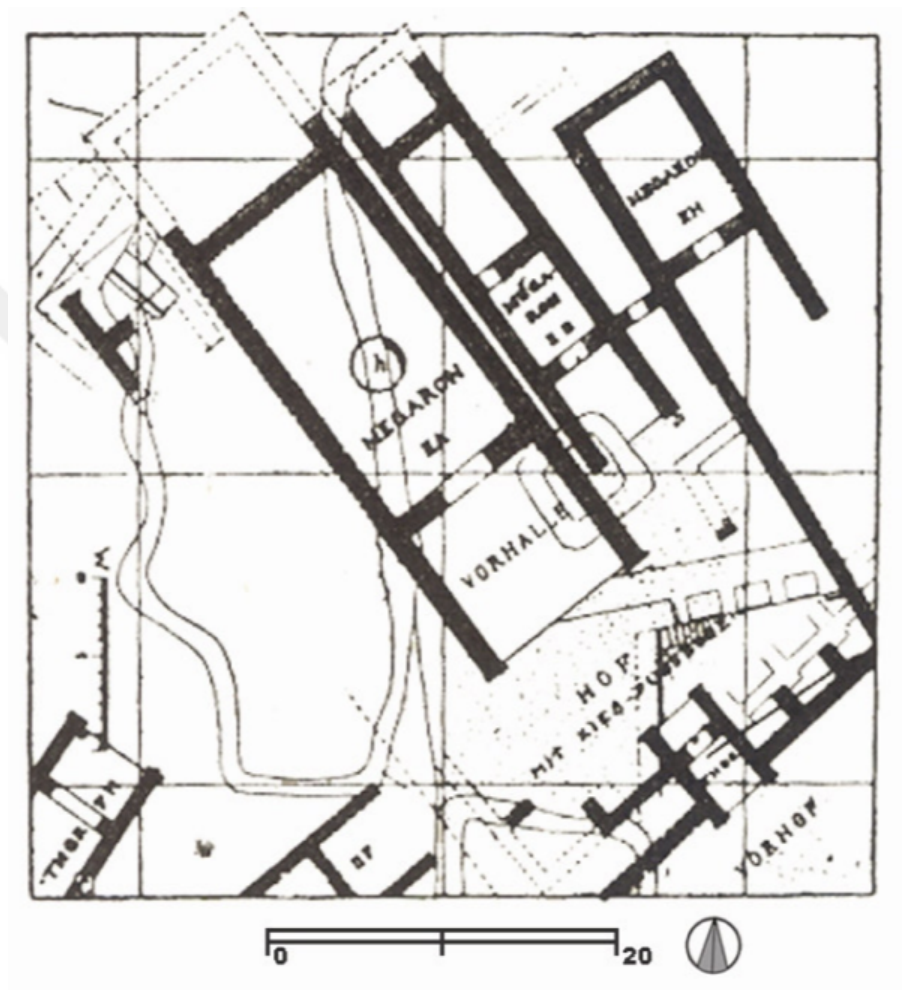


Figure 22: Plan of *megaron* houses in Troy II (Gönül, 2008, p. 128)

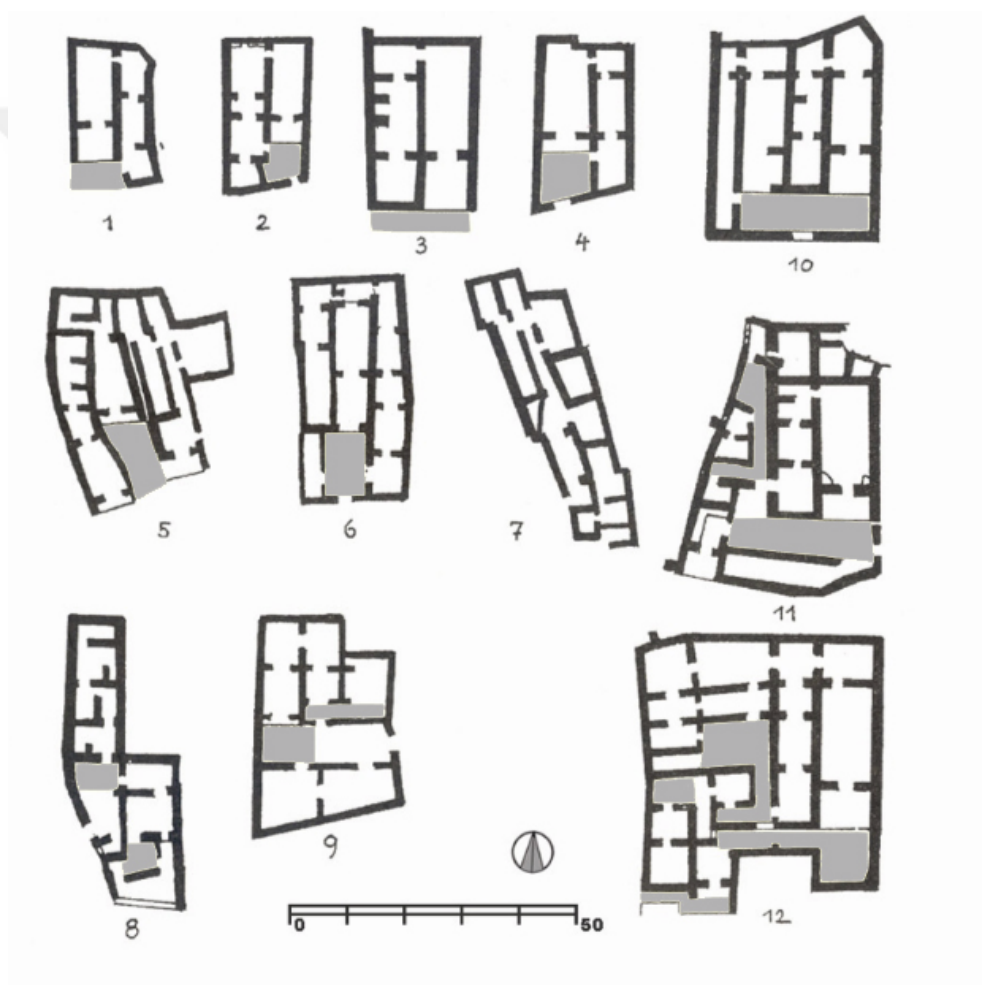


Figure 23: Plan of houses in Troy II and Poliochni V (Gönül, 2008, p.128)

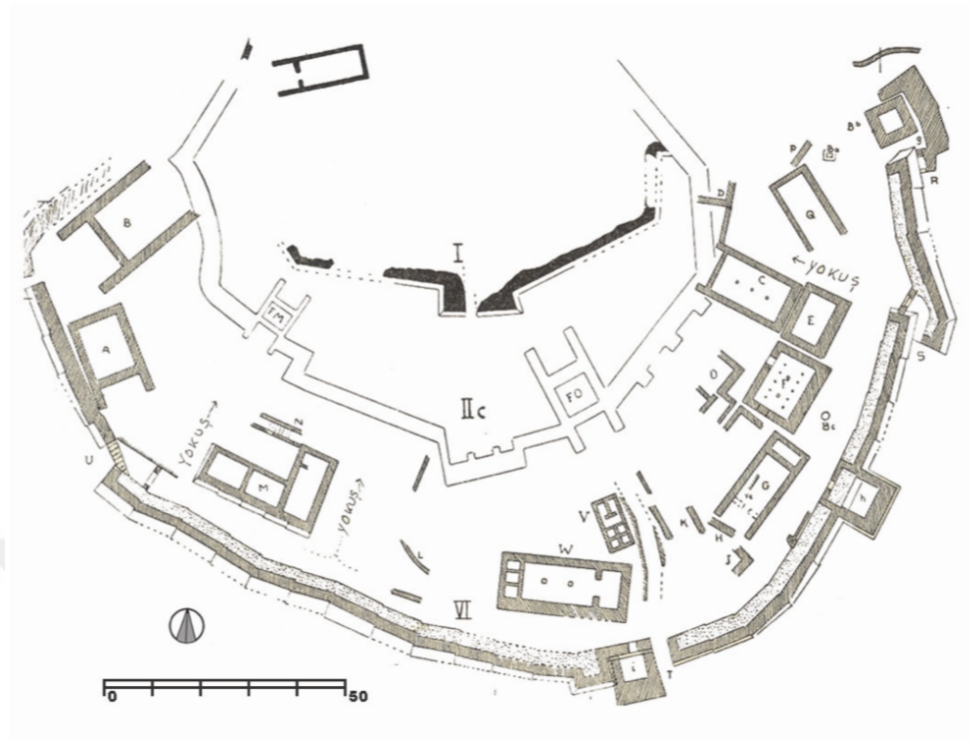


Figure 24: Plan of Troy I, II and Troy VI settlements (Gönül, 2008, p.127)

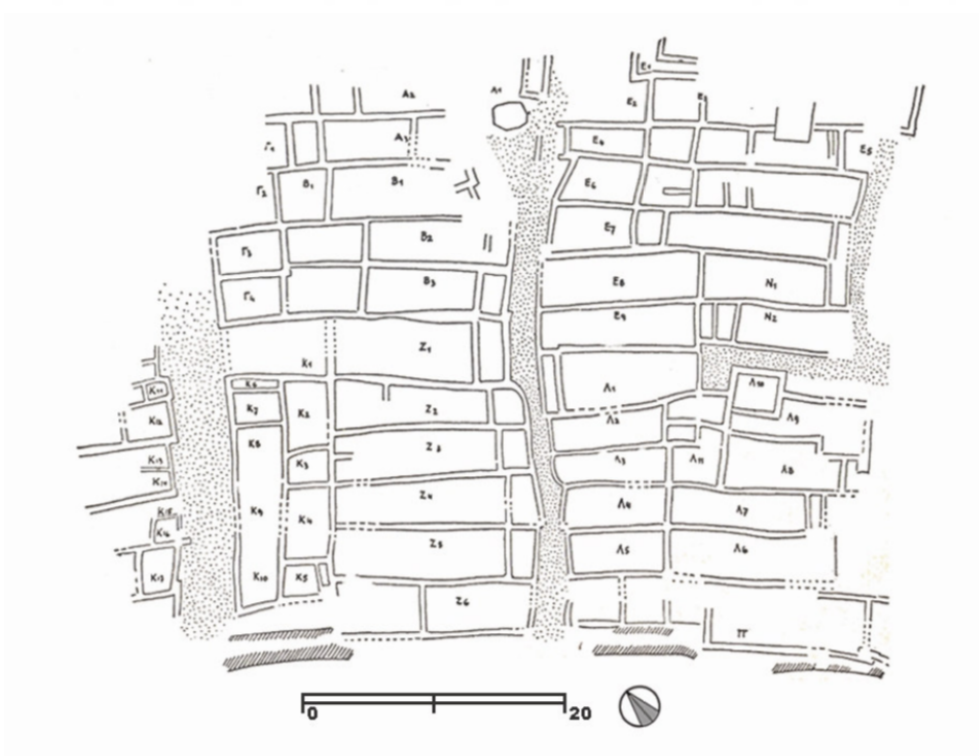


Figure 25: Plan of Thermi settlement (Gönül, 2008, p.127)

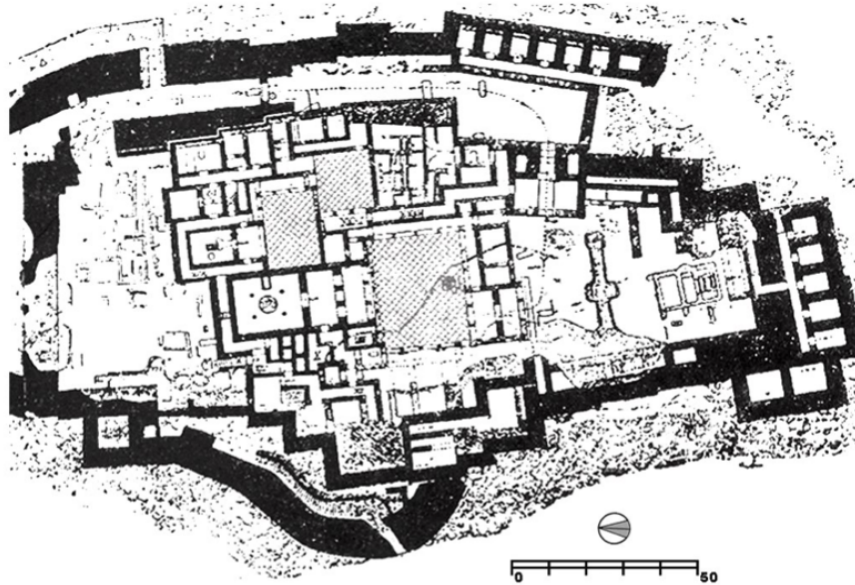


Figure 26: Plan of Mycenaean Palace at Tiryns (Gönül, 2008, p. 130)

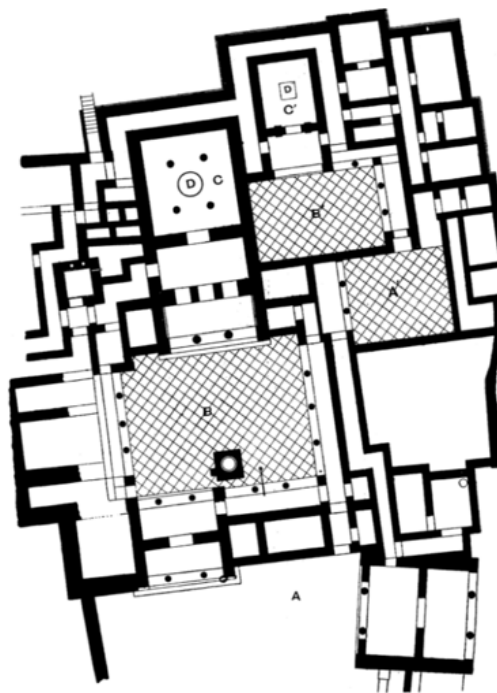


Figure 27: Plan of the *megaron* section, Mycenaean Palace at Tiryns (A-A': forecourt, B-B': court, C-C': hall, D-D': *eschara*) (Gardner, 1901, p. 295)



Figure 28: Plan of houses, 8th century BC, Zagora (Phase I and II) (Gönül 2008, p. 141)

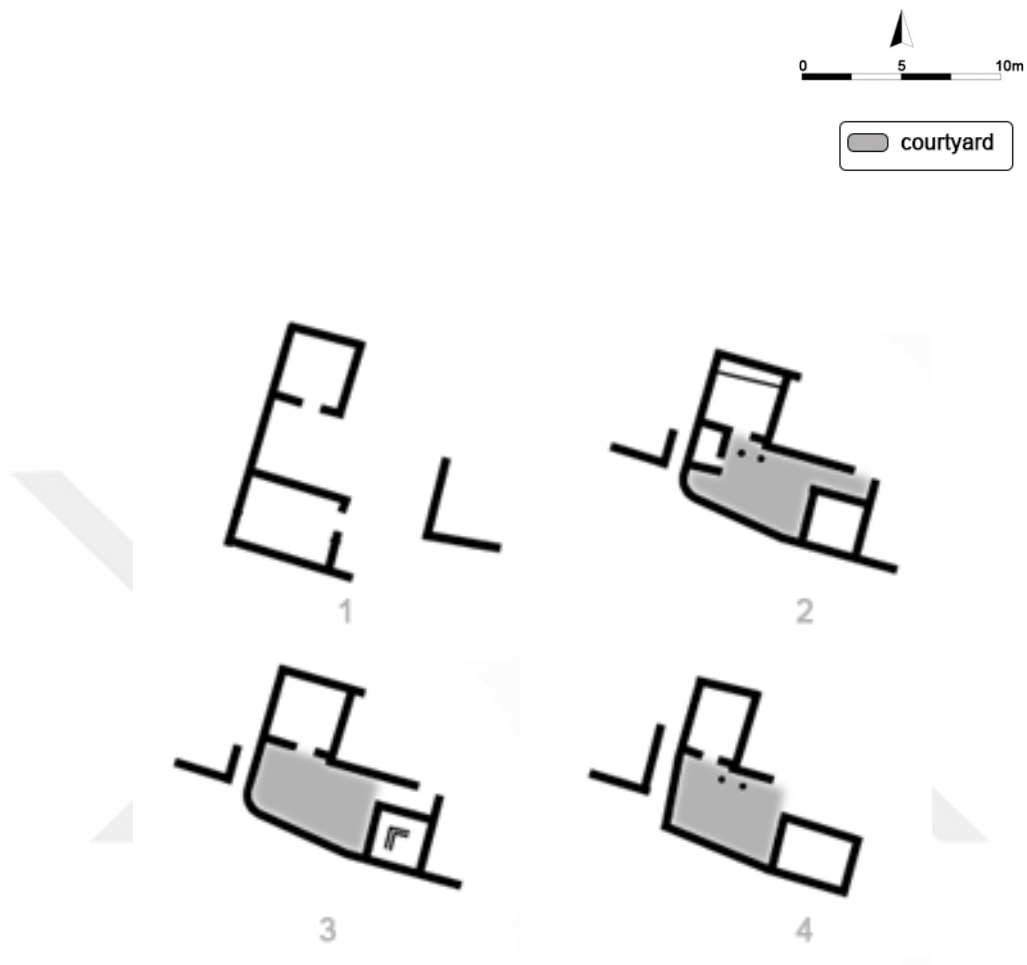


Figure 29: Plan of houses, 7th and 6th century BC, Kalabaktepe, Miletus (1: at the beginning of the 7th century BC, 2: at the end the 7th century BC, 3: at the second half of the 7th century BC, 4: 6th century BC) (after Gönül, 2008, p. 136)



Figure 30: Plan of Bayraklı settlement, 6th century BC (after Gönül 2008, p. 133) (The marked area indicates Double Megaron House)



Figure 31 : Plan of Bayraklı settlement, 4th century BC (after Gönül, 2008, p. 134)

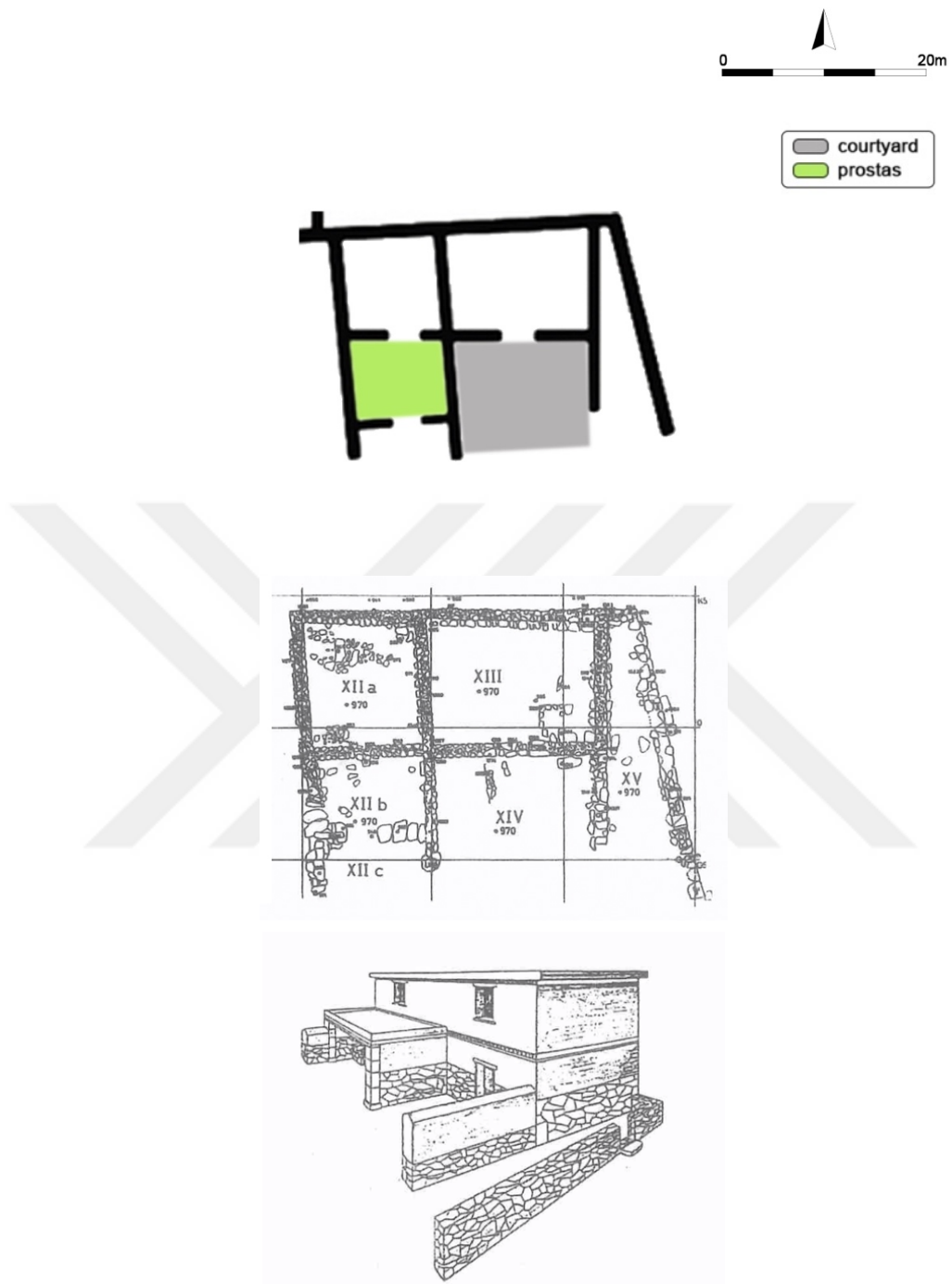


Figure 32: Double Megaron House, 7th century BC, Bayraklı (after Özgenel, 1997, p. 15)

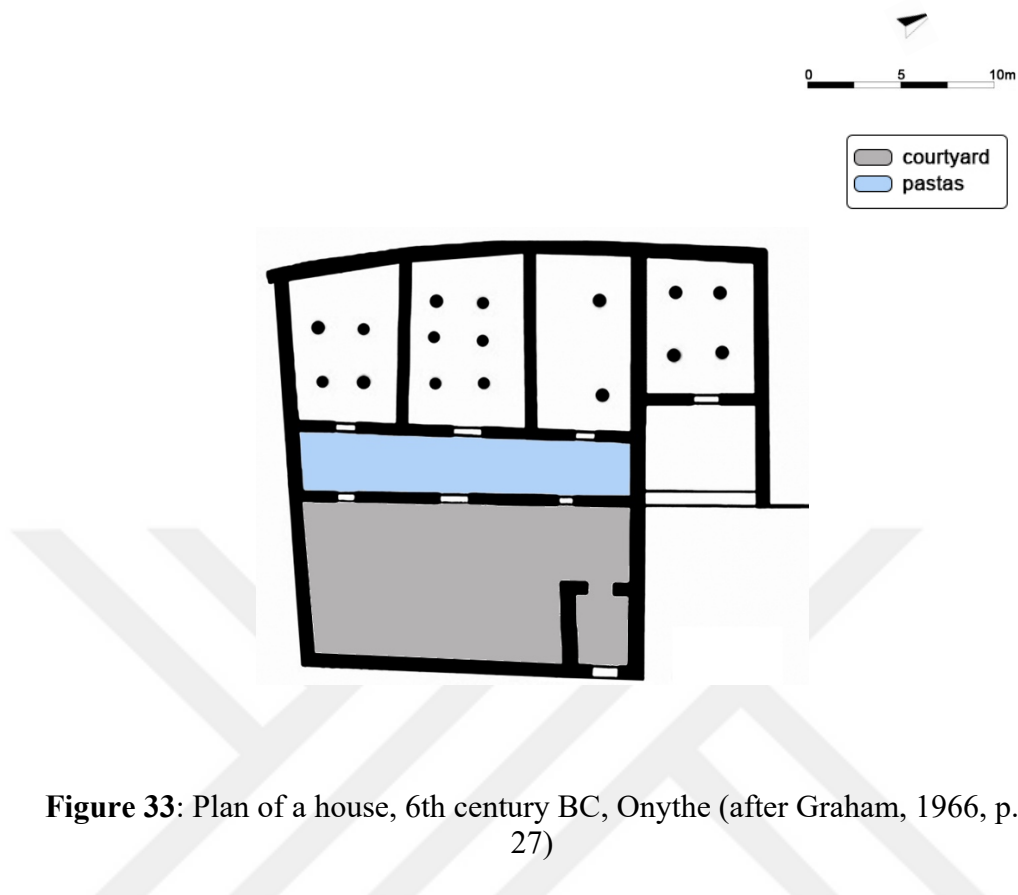


Figure 33: Plan of a house, 6th century BC, Onythe (after Graham, 1966, p. 27)

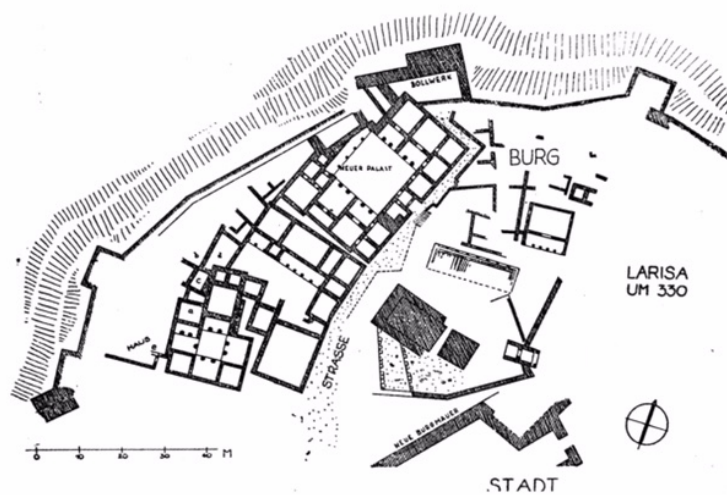


Figure 34: Plan of Larissa Palaces, 5th and 3rd century BC, Larissa (Abbasoğlu, 1999, p. 51)

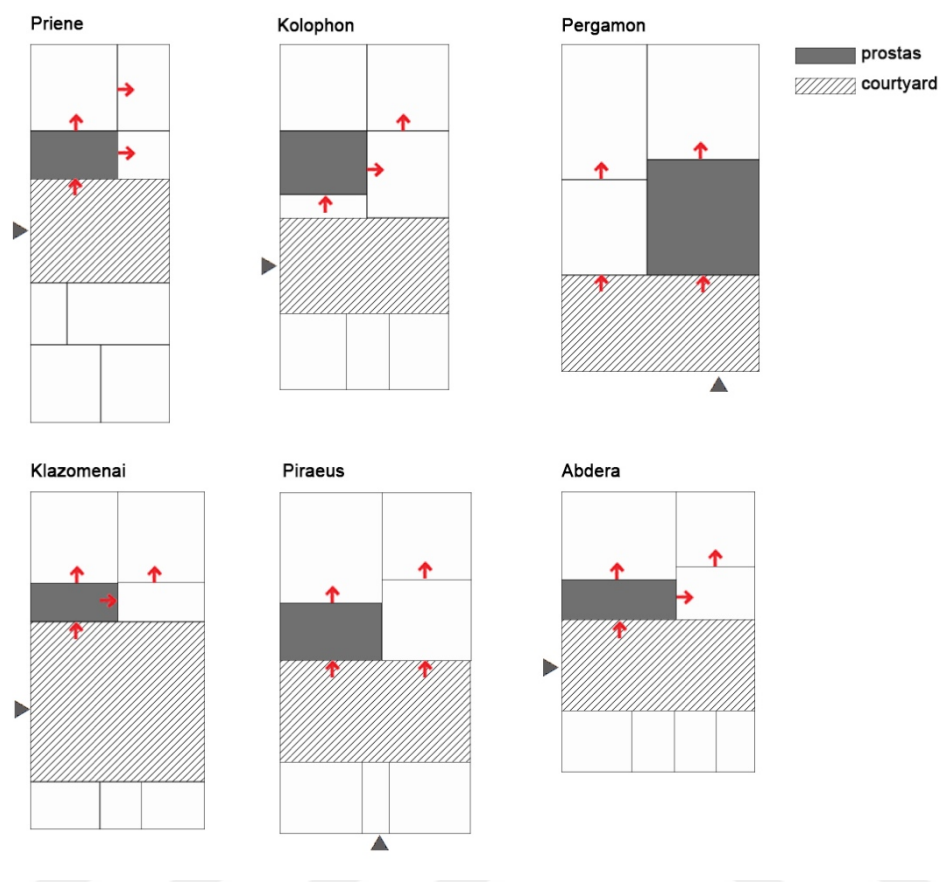


Figure 35: Diagram of *prostas* houses in Anatolia and Greece (drawn by the author)

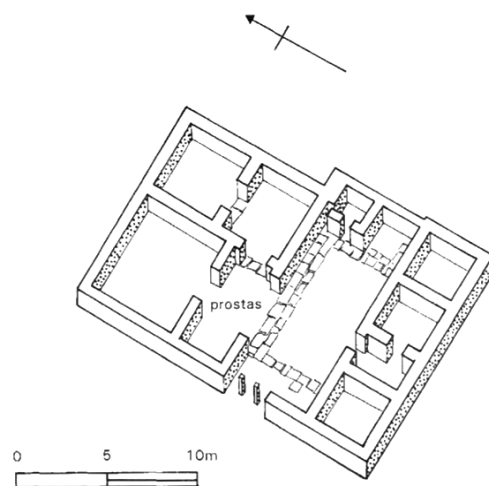


Figure 36: Reconstruction of a *prostas* house, House C, Abdera (Nevett, 1999, p. 23)

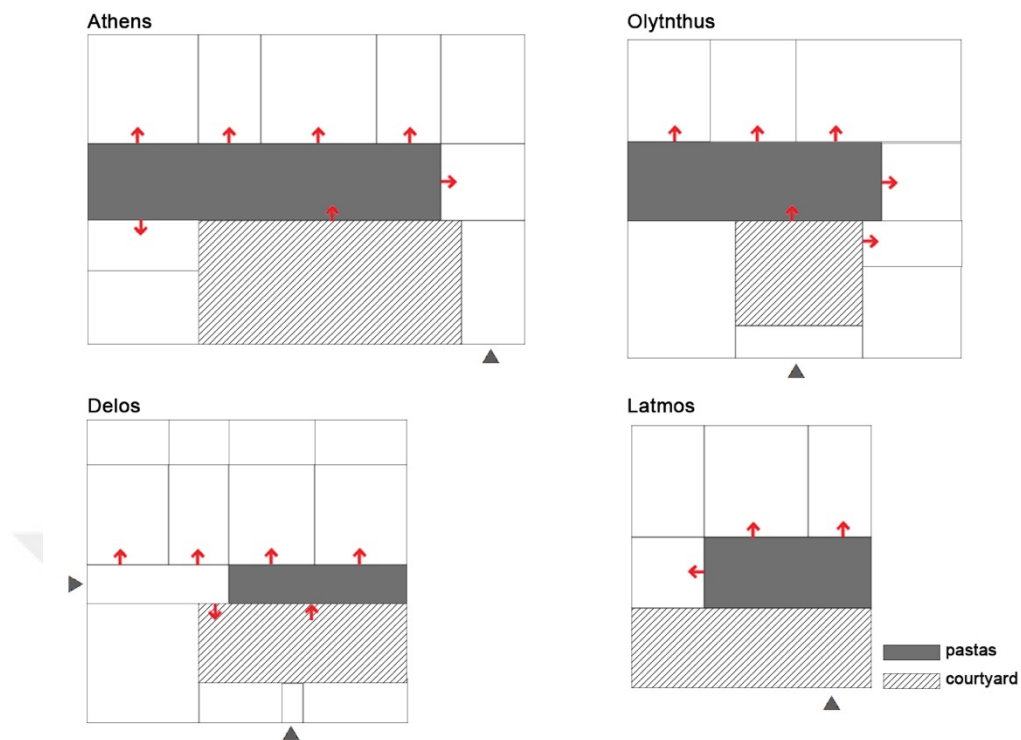


Figure 37: Diagram of *pastas* houses in Anatolia and Greece (drawn by the author)

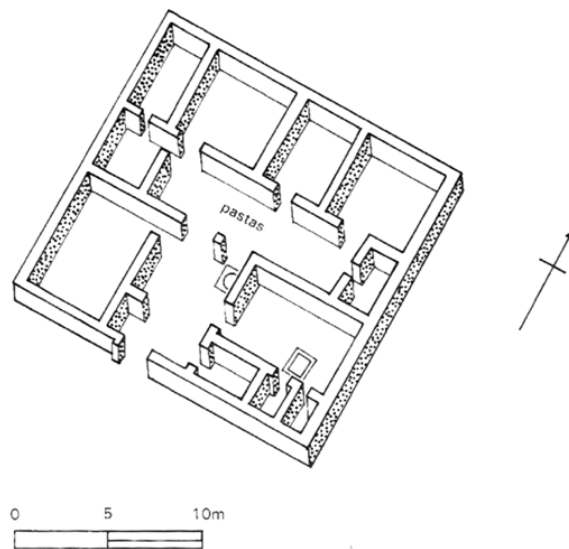


Figure 38: Reconstruction of of a *pastas* house, House AVII 6, Olynthus (Nevett, 1999, p. 24)

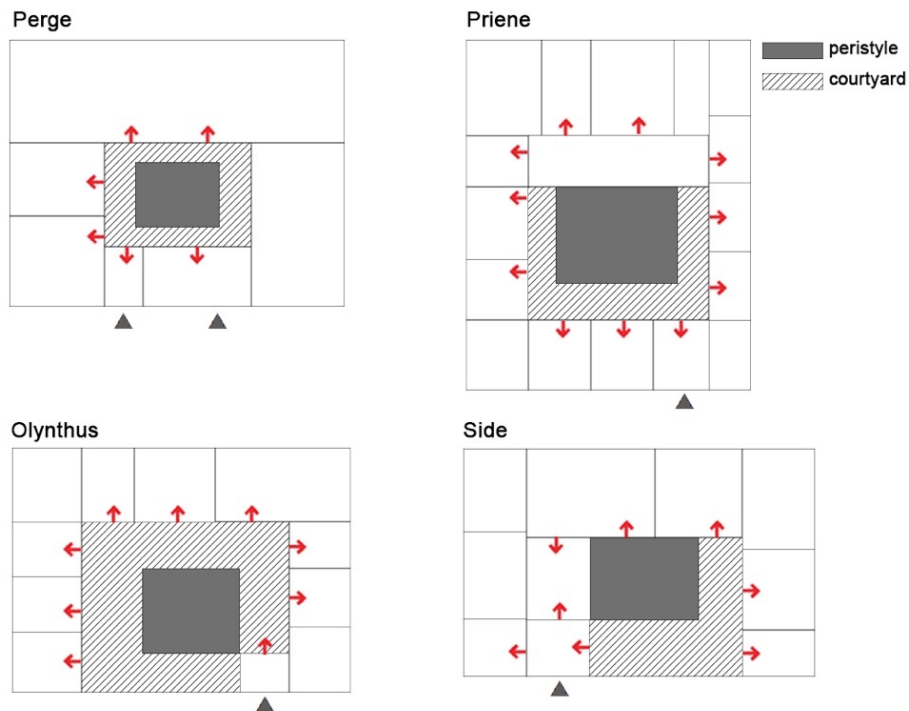


Figure 39: Diagram of *peristyle* houses in Anatolia and Greece (drawn by the author)

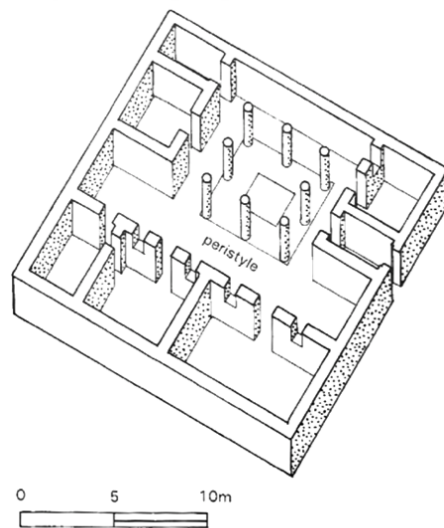


Figure 40: Reconstruction of a *peristyle* house: Maison de la Colline, Delos (Nevett, 1999, p. 24)

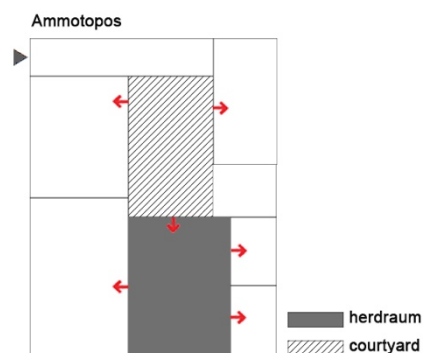


Figure 41: Diagram of *herdraum* house in Ammotopos (drawn by the author)

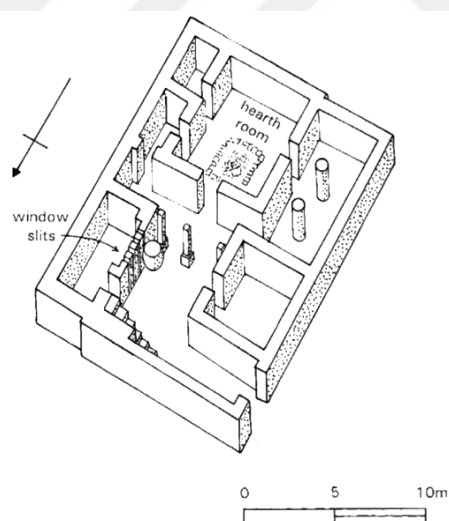


Figure 42: Reconstruction of a *Herdraum* house: House 1, Ammotopos (Nevett, 1999, p. 25)



Figure 43: Map showing the sites sampled in the study (drawn by the author)

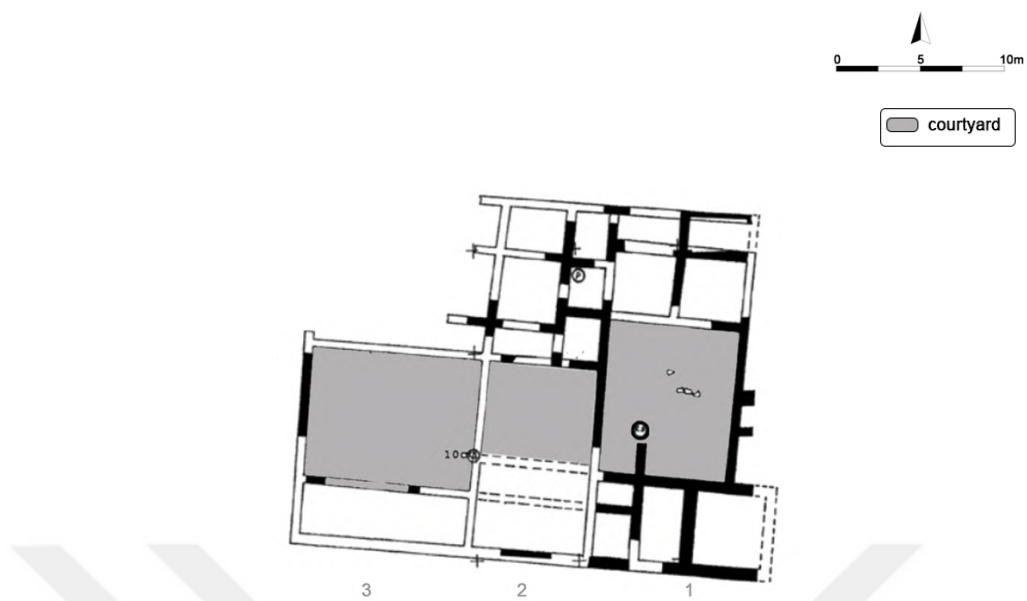


Figure 44: Plan of Basileia, Klazomenai, 4th century BC (after Özbay, 2010, p. 123)



Figure 45: Plan of houses, 4th century BC, Kolophon (after Özgenel, 1997, p.18)



Figure 46: Plan of houses, 4th century BC, Priene (after Özgenel, 1997, p.20)

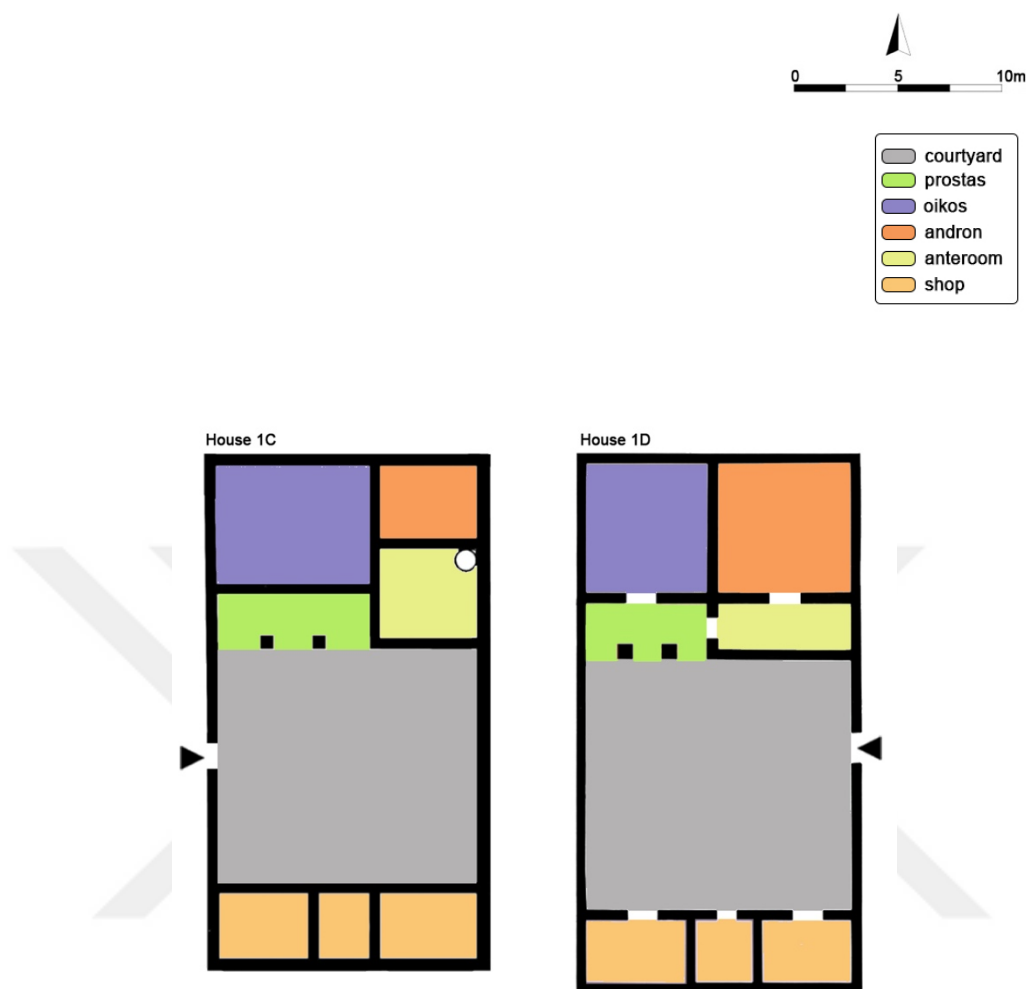


Figure 47 : Plan of houses, 4th century BC, Klazomenai (after Özbay, 2010, pp. 123-124)



Figure 48: Plan of houses, 4th century BC, Pergamon (after Wulf-Rheidt 1998, p.324)

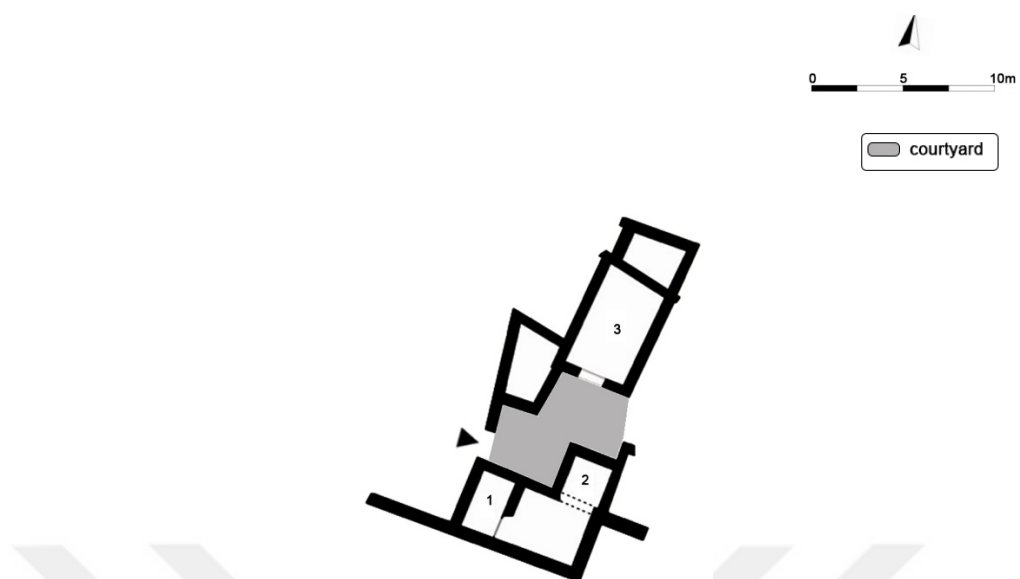


Figure 49: Plan of a house, 4th century BC, Larissa (after Usman, 1955, p. 163)

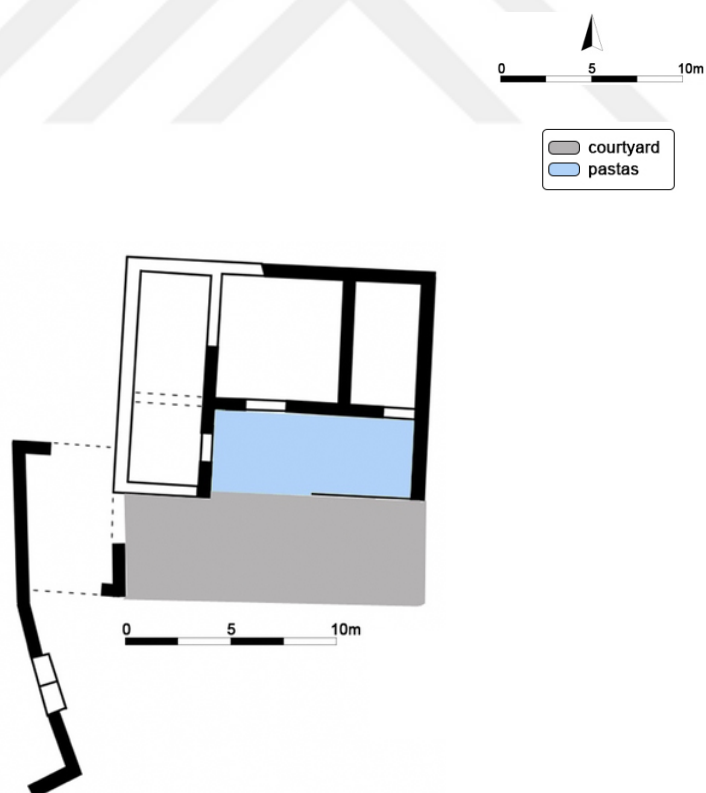


Figure 50: Plan of a house, 4th century BC, Herakleia, Latmos (after Wulf-Rhedit, 1998, p. 326)

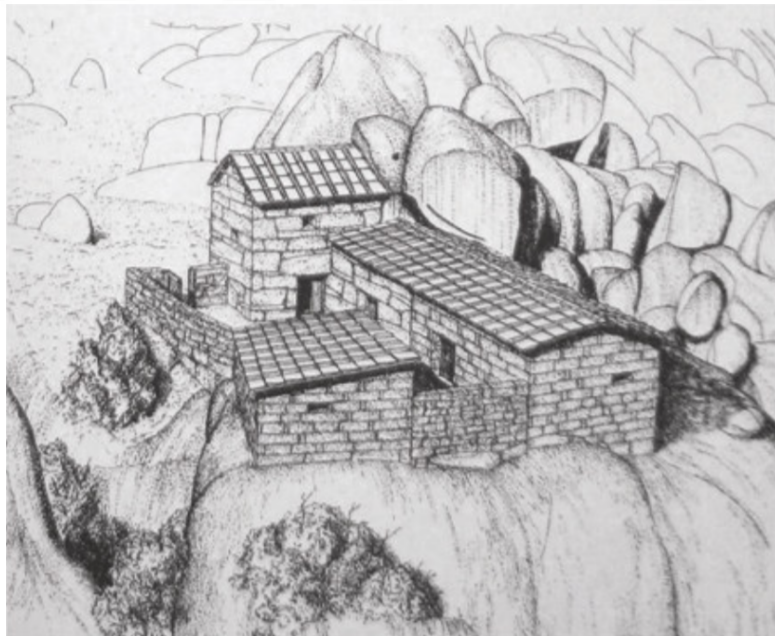


Figure 51: Reconstruction of a cave house, 4th century BC, Latmos (Gönül, 2008, p. 138)



Figure 52: Plan of houses, 4th century BC, Burgaz (after Gökdemir, 2006, pp. 89-92)

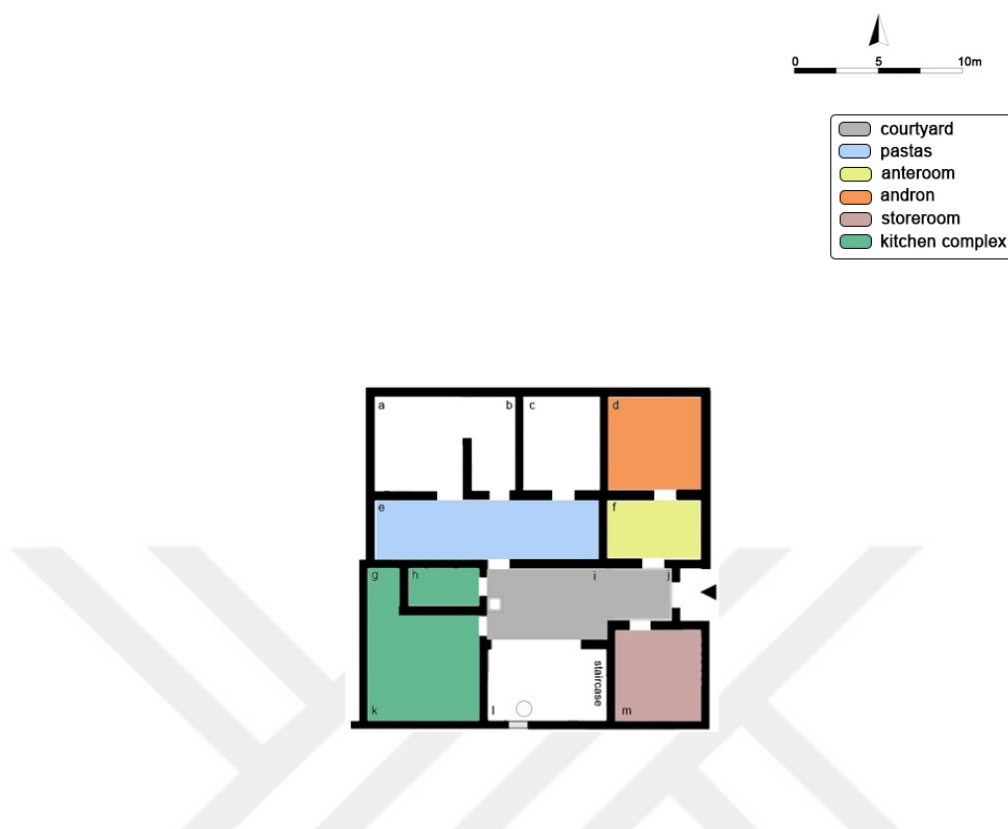


Figure 53: Plan of House of Many Colors, 5th century BC, Olynthus (after Cahill, 2002, p. 104)

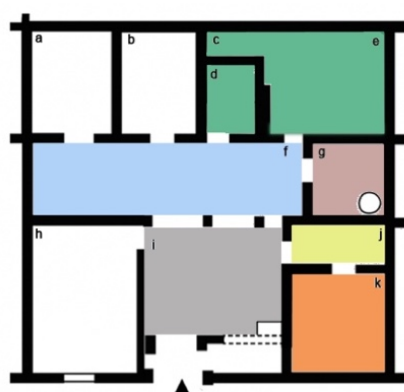


Figure 54: Plan of House A vii 4, 5th century BC, Olynthus (after Cahill, 2002, p. 105)

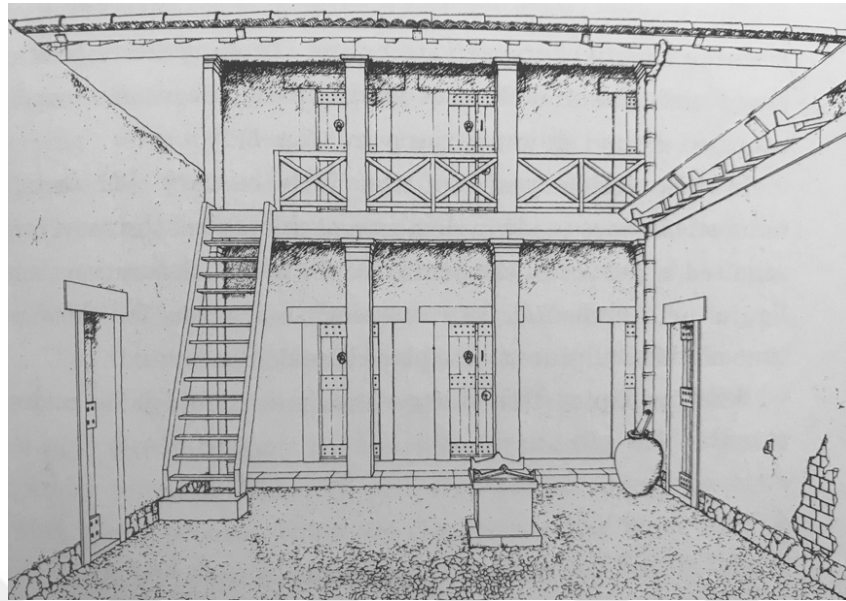


Figure 55: Reconstruction of a courtyard house, 5th century BC, Olynthus (Walter-Karydi, 1998, p. 3)

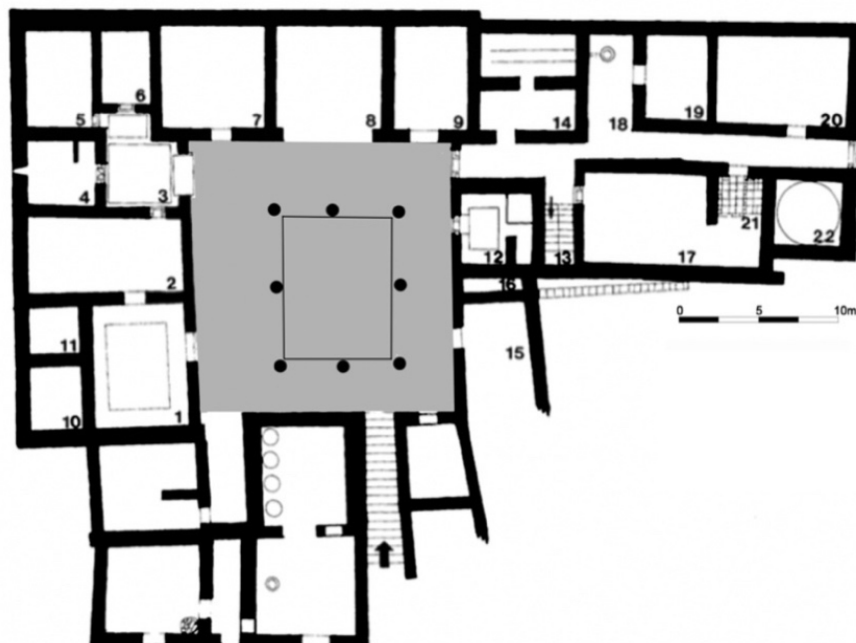
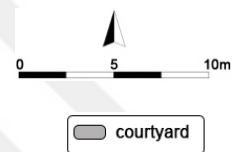


Figure 56: Plan of The House of the Doric Capital, 3rd century BC, Morgantina (after Tsakirgis, 1990, p. 428)

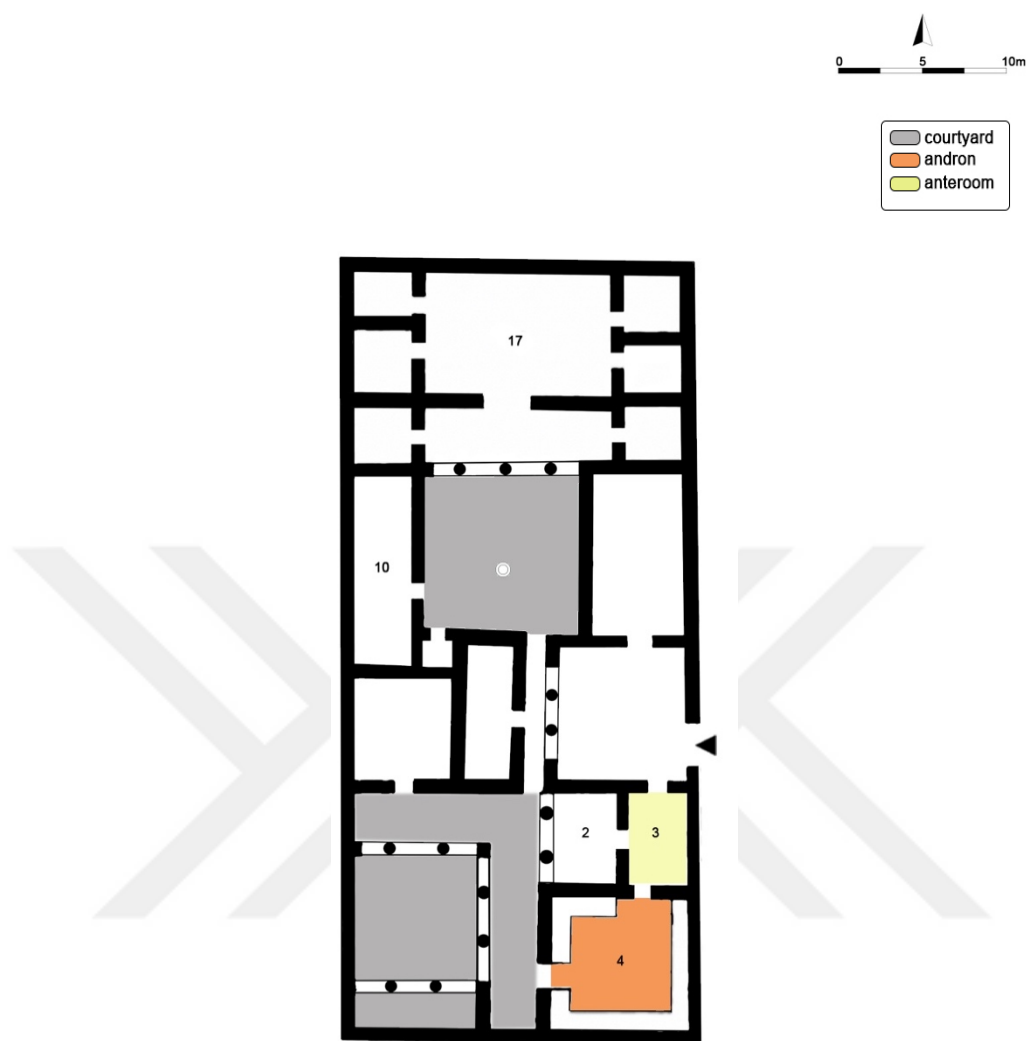


Figure 57: Plan of the House of the Official, 3rd century BC, Morgantina (Phase I) (after Nevett, 1999, p.146)

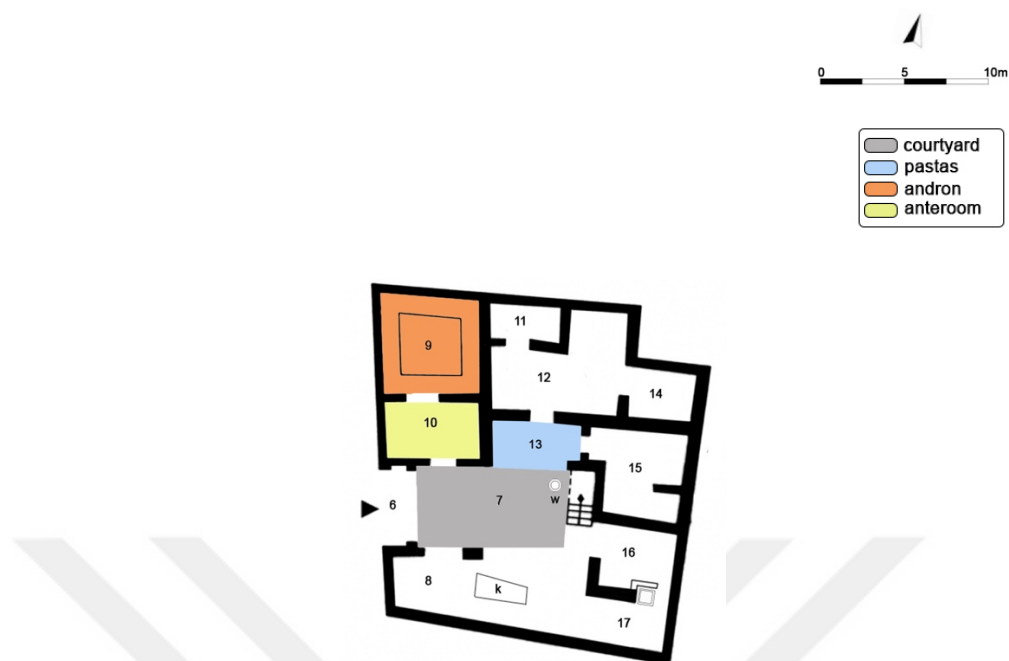


Figure 58: Plan of House 7, 4th century BC, Halieis (after Nevett, 1999, p. 98)

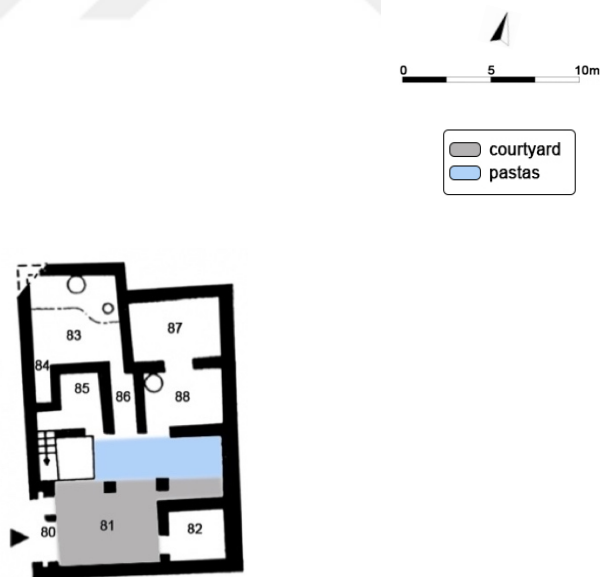


Figure 59: Plan of House A, 4th century BC, Halieis (after Nevett, 1999, p. 99)

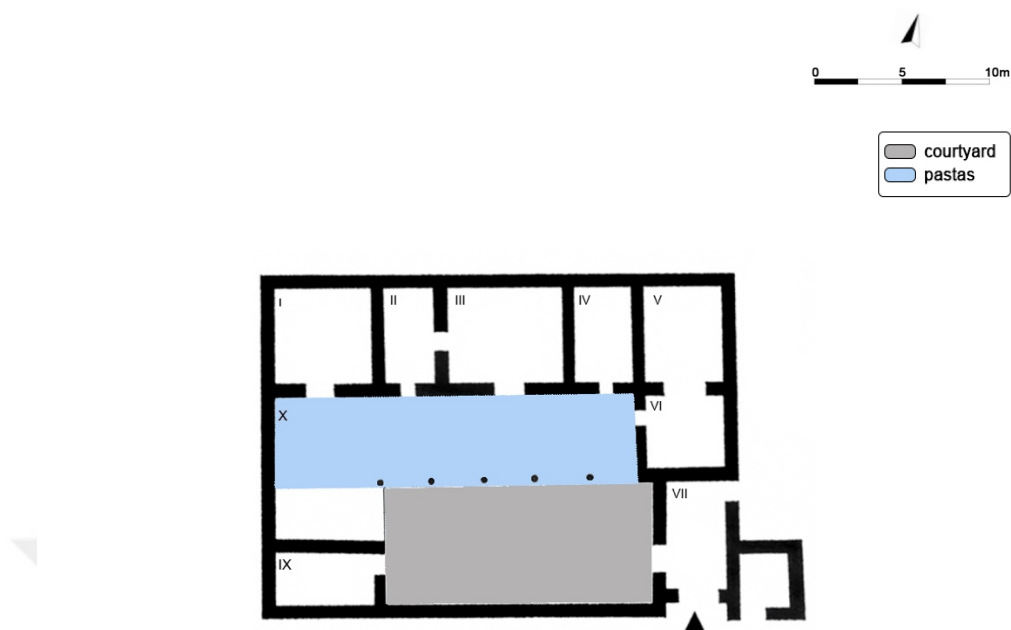


Figure 60: Plan of The Dema House, 5th century BC, Athens (after Nevett, 1999, p.84)

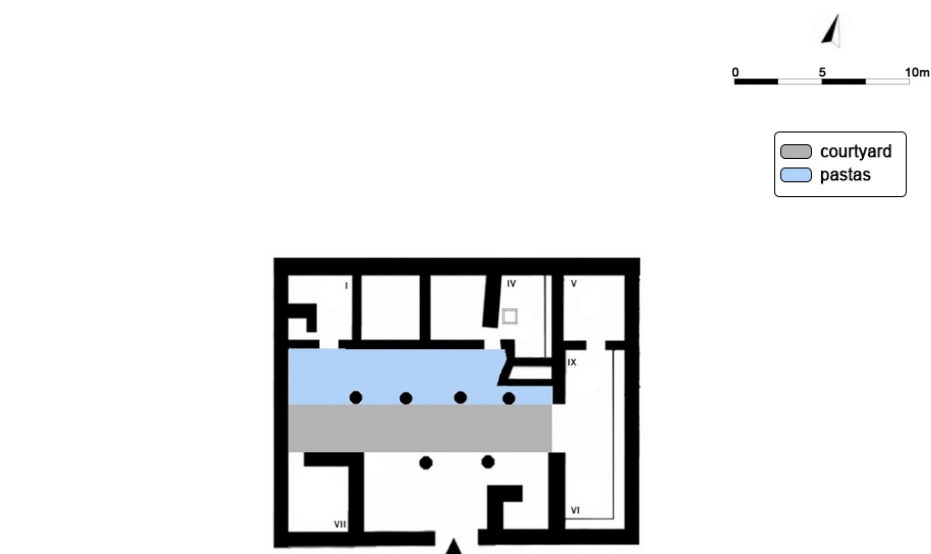


Figure 61: Plan of The Vari House, 4th century BC, Athens (after Nevett, 1999, p. 96)

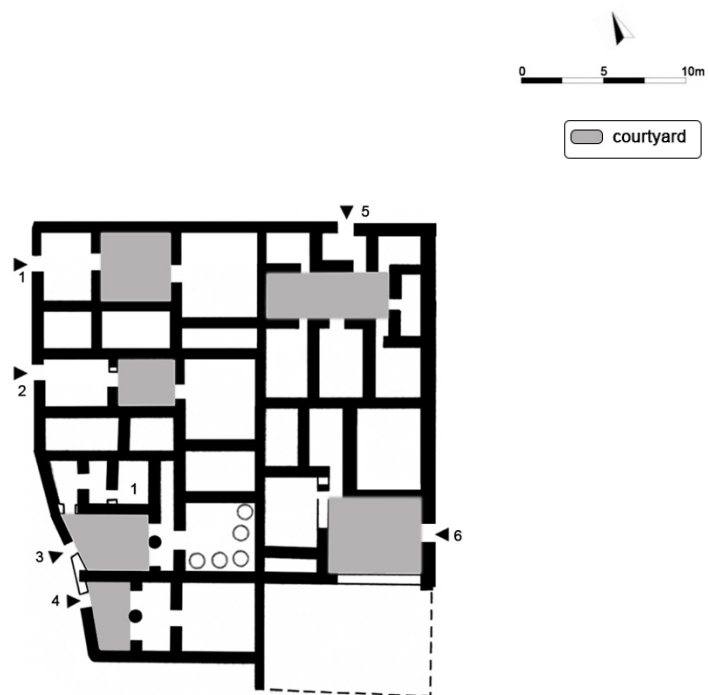


Figure 62: Plan of the houses, 5th century BC, Areopagus, Athens (after Nevett, 1999, p. 91)

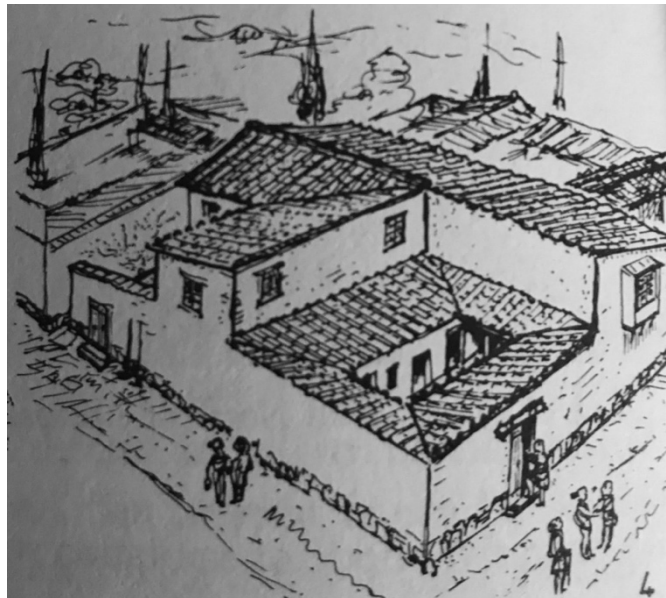


Figure 63: Reconstruction of the houses, 5th century BC, Areopagos, Athens (Wycherley, 1978, p. 242)

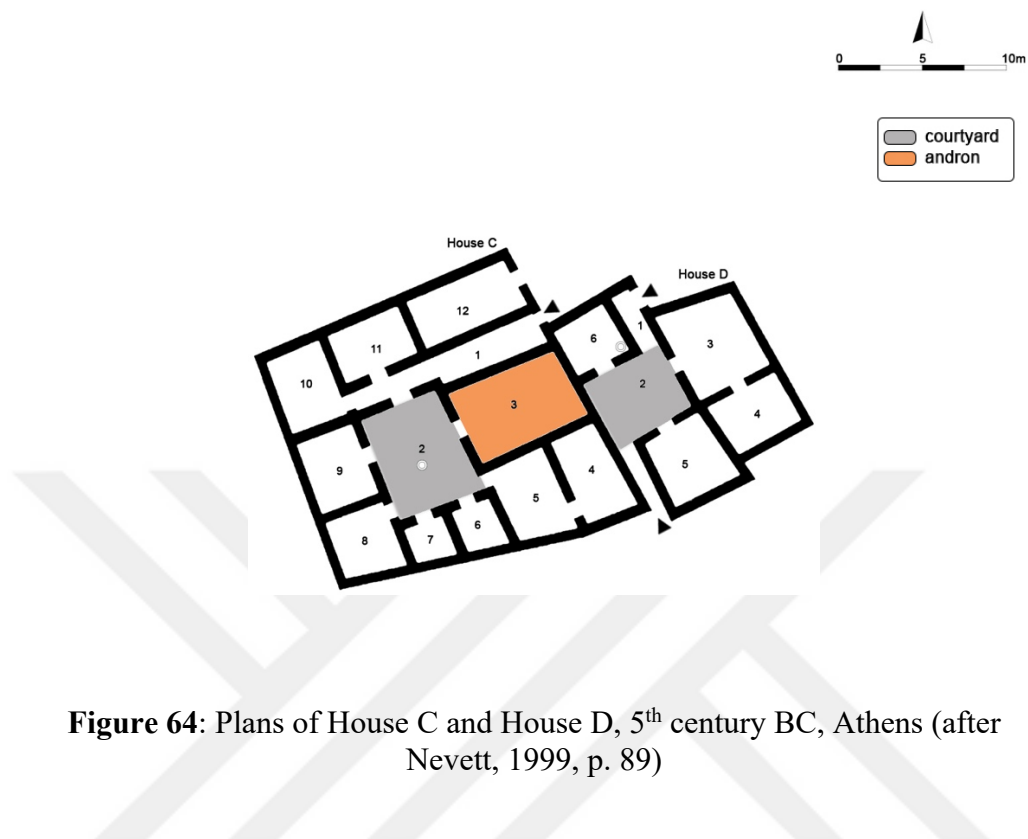


Figure 64: Plans of House C and House D, 5th century BC, Athens (after Nevett, 1999, p. 89)

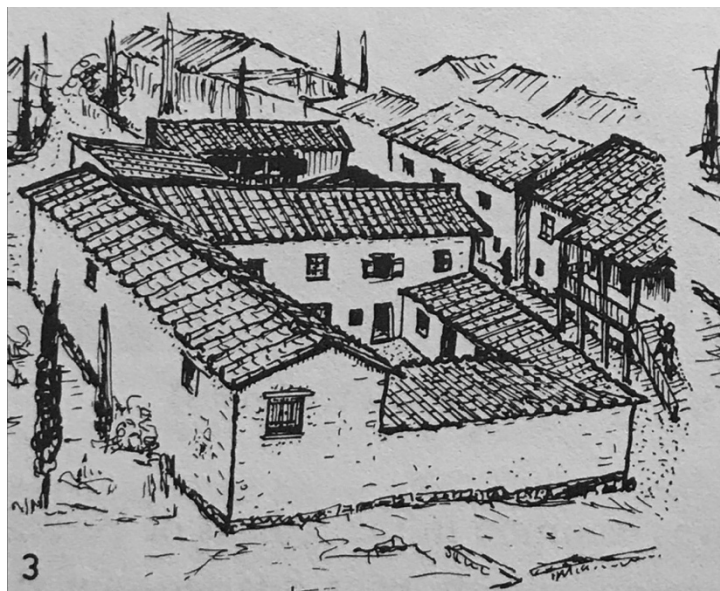


Figure 65: Reconstruction of the House C and House D, 5th century BC, Athens (Wycherley, 1978, p. 242)



Figure 66: Plan of houses, 5th century BC, Piraeus (after Gönül, 2008, p. 143)

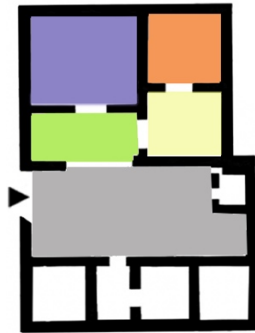
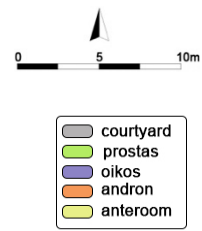


Figure 67: Plan of House C, 4th century BC, Abdera (after Nevett, 1999, p. 102)



Figure 68: Attic red-figure *hydria*, third quarter of 5th century BC, Painter of BM E215, London British Museum (Leader, 1997, p. 687)



Figure 69: Stele of Hegeso, first quarter of the 4th century BC, Athens National Museum, 3624 (Leader, 1997, p. 688)

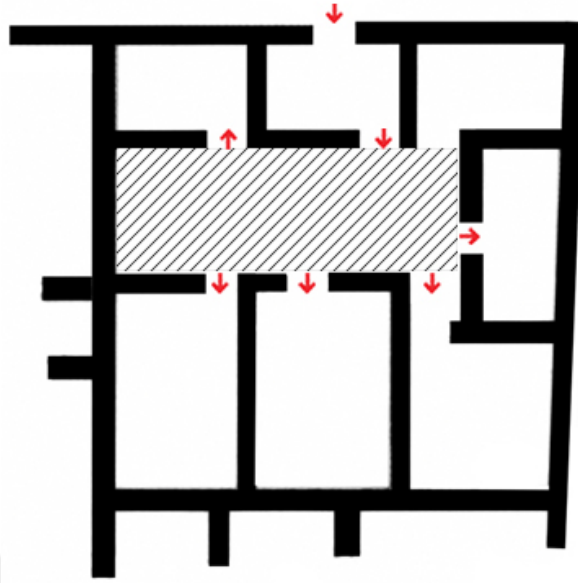


Figure 70: Plan of a house, 5th century BC, Athens (after Nevett, 2007, p.6)



Figure 71: Reconstruction of House IV, Kolophon (Özgenel, 1997, p.18)

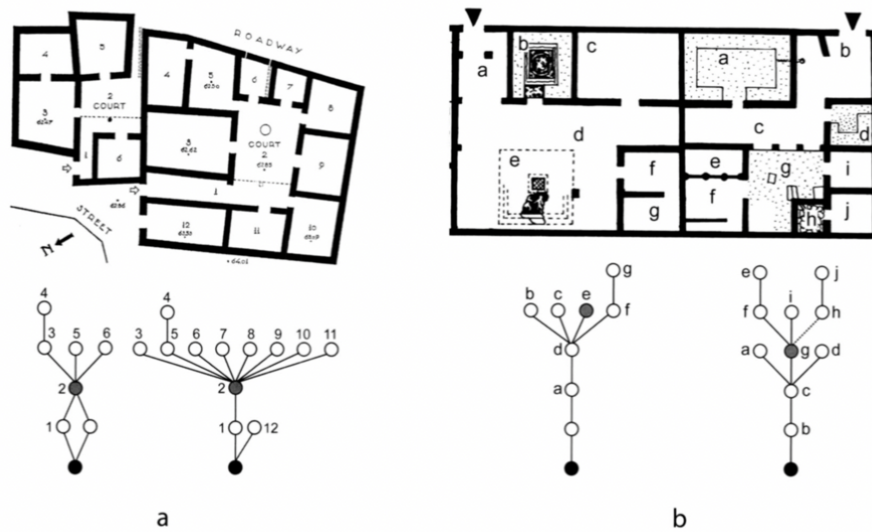


Figure 72: Access maps of (a) House C and D, 5th century BC, Athens, (b) House A vi 3 and A vi 5, 5th- 4th century BC, Olynthus (Westgate, 2007, p. 425)



Figure 73: The *pyxis* showing woman with distaff and woman with hand loom (Painter of the Louvre Centauro-marchy, Paris, Musée du Louvre, CA 587) (Bundrick, 2008, p. 287)



Figure 74: The *pyxis* showing woman spinning and woman with *alabastron* and chest, (Phiale Painter, Vienna, Kunsthistorisches Museum 3719) (Bundrick, 2008, p. 303)



Figure 75: The *pyxis* showing woman sitting by a *kalathos*, (Veii Painter. South Hadley, Mass., Mount Holyoke Art Museum 1932.5.B.SII) (Bundrick, 2008, p. 307)

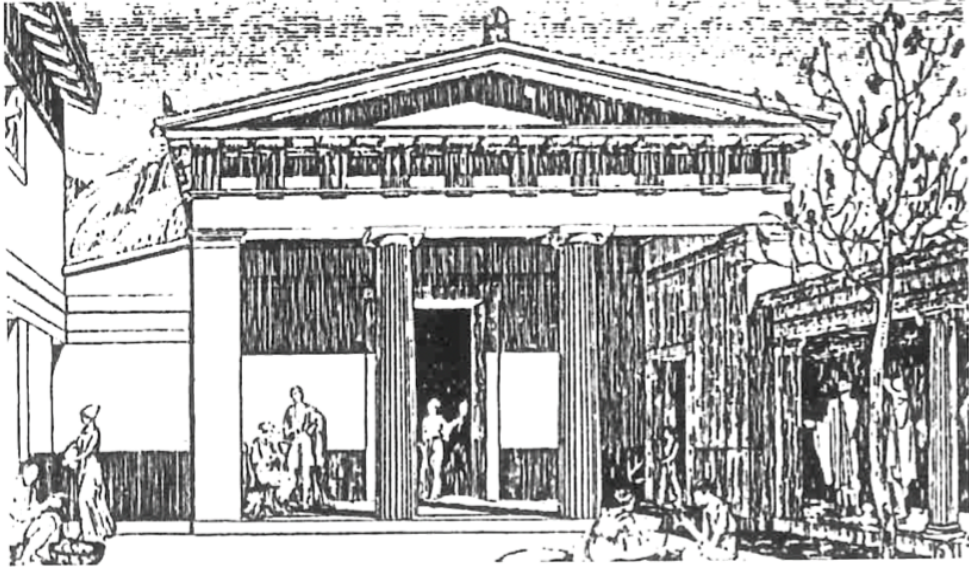


Figure 76: Reconstruction of daily life in a *prosta* house, Priene
(Özgenel, 1997, p.19)

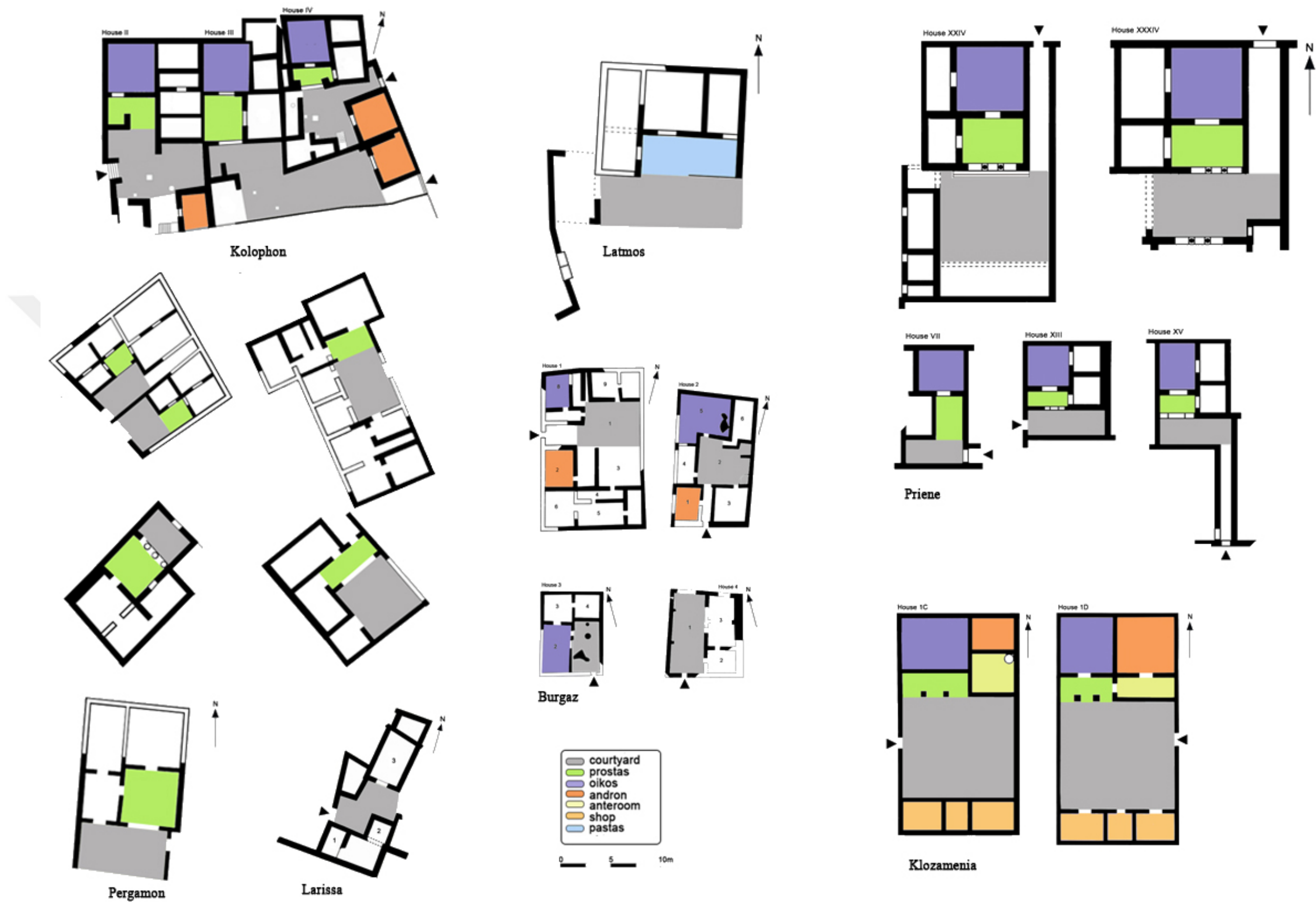
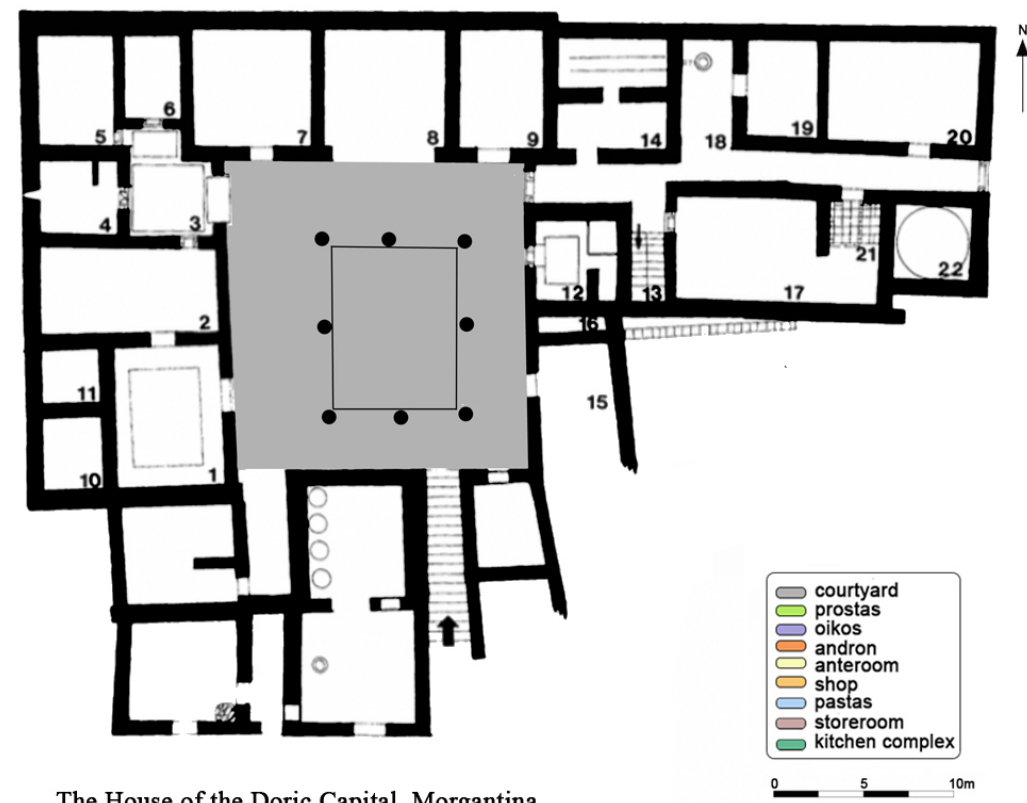
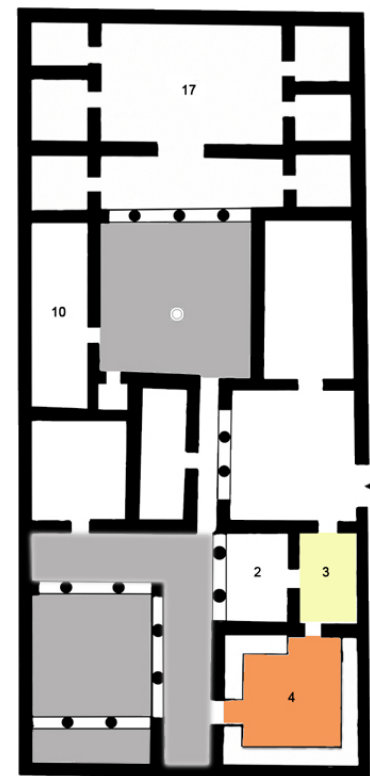


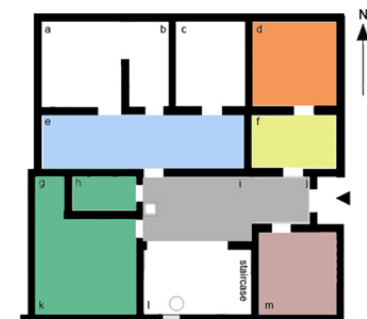
Figure 77: Plan of courtyard houses in the Classical Period, Anatolia



The House of the Doric Capital, Morgantina



House of the Official, Morgantina



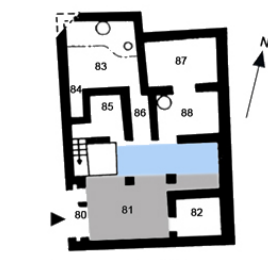
House of Many Colours, Olynthus



House of A vii 4, Olynthus



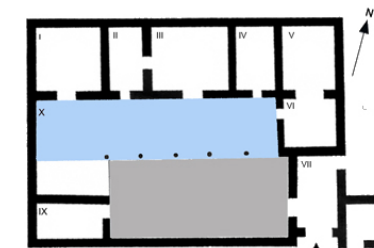
House 7, Halieis



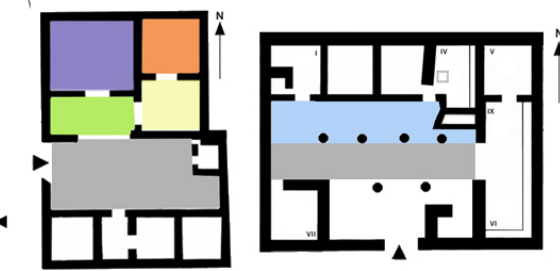
House A, Halieis



House block, Athens

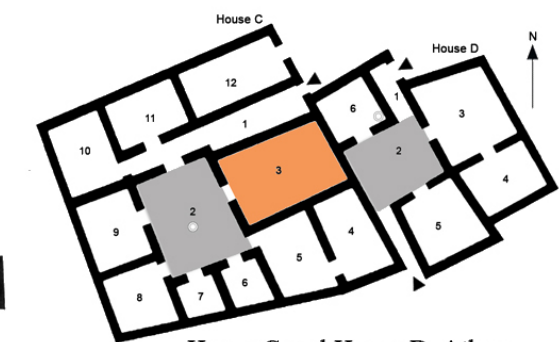


Dema House, Athens

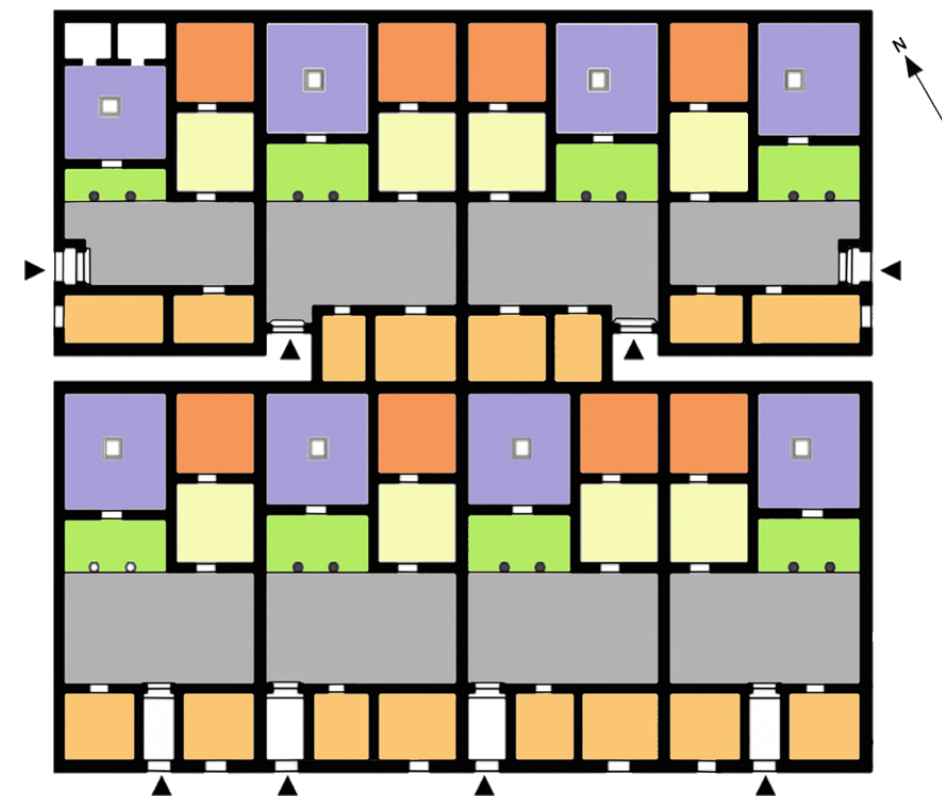


House C, Abdera

Vari House, Athens



House C and House D, Athens



Houses, Piraeus

Figure 78: Plan of courtyard houses in the Classical Period, Greece

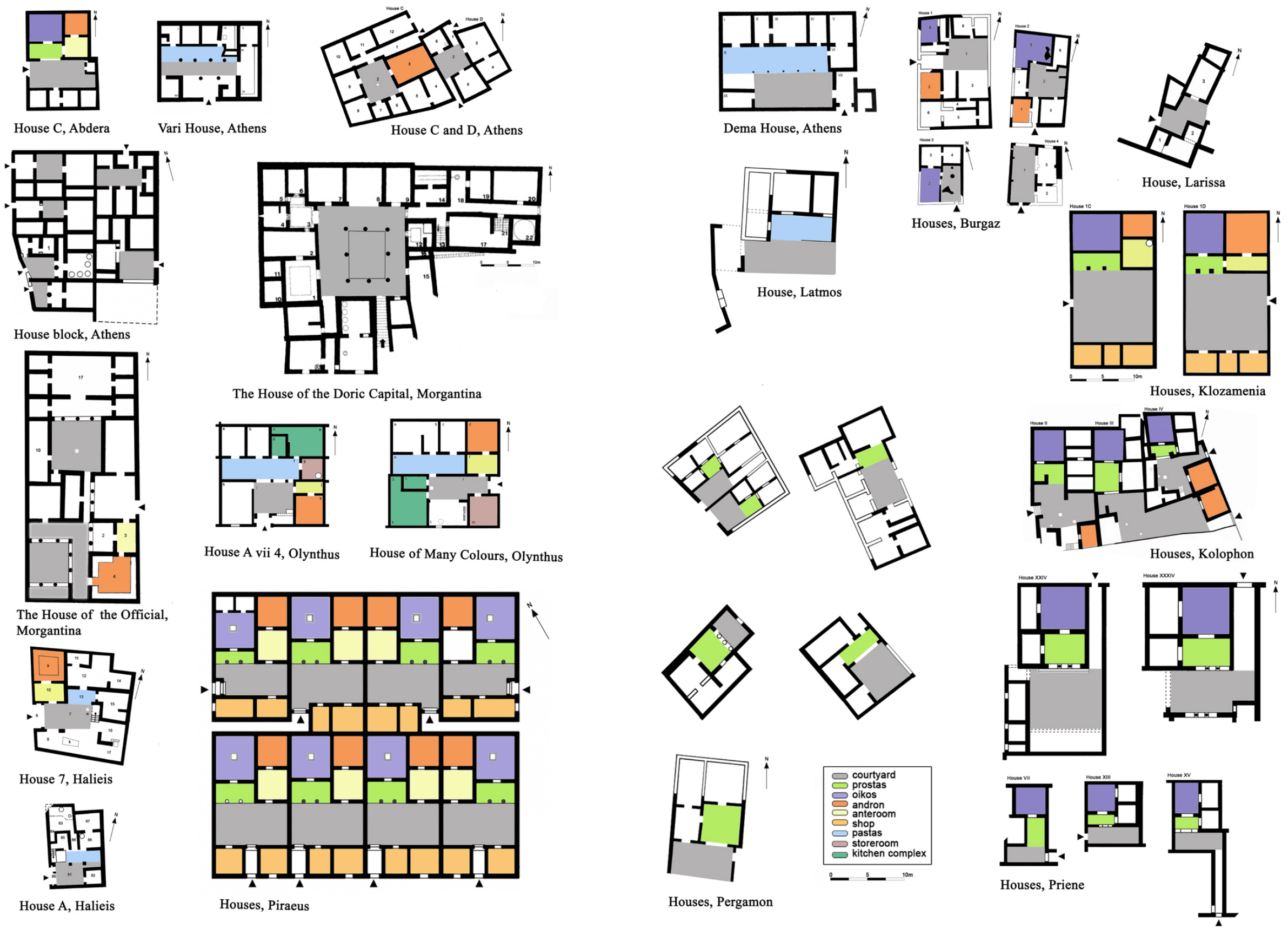


Figure 79: Comparative plan of courtyard houses in ancient Anatolia and Greece

B. TURKISH SUMMARY / TRKE ZET

Mimarlık tarihi boyunca, konut bir toplumun kltrel ve sosyal yapısını gsteren nemli bir yapı olarak birok alışmanın konusu olmuştur. Konut, mimari zelliklerinin yanı sıra bir toplumun aile yapısı, mahremiyet anlayışı, kltrel ve sosyal ncelikleri hakkında da bilgi verir. Dolayısıyla konutun tanımı ve kullanımı her toplumda farklıdır. Ancak farklı coğrafyalarda yer alan konutlarda ortak mekanlar tanımlamak mmkndr. Bu anlamda, avlulu konut, Orta Doęu, Akdeniz, Gney Amerika ve Uzak Doęu gibi ok eřitli coğrafyalarda bulunan rnekleriyle mimarlık tarihindeki en eski konut trlerinden biridir. Erken rneklerde, avlu daha ok vahşı hayvanlar ve iklim gibi evresel koştullardan korunmak iin tasarlanmıştır. Zaman iinde toplumun deęiřen ve geliřen sosyal, kltrel, ekonomik ve politik yapısına baęlı olarak daha kompleks bir yapıya dnmştr. Avlu, fonksiyonel ve sosyal zellikleri ile konutu geniř bir perspektifte, herhangi bir tanıma baęlı kalmadan deęerlendirmemizi ve mimari bir erevede tartıřmamızı saęlar. Bu anlamda, birok arařtırmacı avlulu konutu meknsal, tarihsel ve blgesel baęlamlar iinde deęerlendirmiştir. rneęin; Sedat Hakkı Eldem Trk Evini ve geleneksel konutu avlu ve sofanın mekansal iliřkisiyle deęerlendirmiştir. Memarian ve Brown avlulu konutu Arap ve İran rneklerinde incelerken; Donia Zhang, in'deki geleneksel avlulu konutların mekansal ve kltrel deęerlendirmesini yapmıştır. Bu rnekler dıřında, farklı coğrafyalarda avlulu konutlar zerine yapılmıř birok alışma vardır. Amos Rapoport farklı coğrafyalardan setięi birok rnekle, avlulu konut zerine en kapsamlı alışmaları yapan arařtırmacıdır. "House, Form and Culture" ve "The Nature of the Courtyard House: A Conceptual Analysis" alışmalarında avlunun konuta ve hane halkının yařamına saęladıęı meknsal, iklimsel ve fonksiyonel katkılarını belirledięi kriterleri incelemektedir. Bu kriterlerden "form" ve "řekil" ayırması (distinction between form and shape) řekil daha ok yapının biimini, yani kare veya dikdrtgen planlı olmasını ifade ederken, form bir yapının meknsal iliřkileri ve buna baęlı olarak kltrel ve sosyal kullanımlarını da ierir. Avlulu konut, bu anlamda řekilden ziyade

form kavramı üzerinden, bütüncül bir yaklaşımla ve konut içinde yer alan mekansal ve sosyal ilişkilere göre yorumlanmalıdır. Mahremiyet (privacy mechanism) ikinci kriter olarak avlunun konut içindeki temel işlevlerinden birini ifade eder. Bu kriterde mahremiyet mekânsal (iç-dış, kamusal-özel) ve sosyal açıdan (kadın-erkek, köle-özgür, hane- misafir) değerlendirilmiştir. Üçüncü kriter (subsystem of settings) avlunun birçok aktiviteye olanak veren çok amaçlı, üretken ve değişken bir mekan olduğunu tartışır. Dördüncü kriter avlunun konutta ana ulaşım mekanizması olduğunu (means of access) ve her mekanın avlu ile olan mekansal ilişkisinin farklı olduğunu irdeler. Beşinci kriterde (efficient use of space) avlunun özellikle yoğun yerleşim yerlerinde konutlar için kullanışlı açık alanlar tanımladığını ve bunun avlulu konutun önemli bir katkısı olduğunu anlatır. Altıncı kriter (climatic efficiency) avluyu, hane halkı için konforlu bir açık alan olarak kullanılan ve birçok iş ve aktivitenin yapıldığı yer olarak tanımlar. Bu çalışmalarda, belirtilen kriterler esas alınarak, Klasik dönem Yunan konutlarında avlunun, tasarım, kullanım ve anlam açısından tartışılması ve bu kriterler ışığında avlulu konutun daha bütüncül ve geniş bir mimari çerçevede değerlendirilmesi amaçlanmıştır.

Bu çerçeve kapsamında Anadolu'da Priene, Kolophon, Klazomenai, Bergama, Burgaz, Latmos, Larissa kentleri; Yunanistan'da Atina, Pire, Abdera, Olynthus, Halieis, ve Morgantina şehirleri arkeolojik veriler açısından iyi belgelenmiş konutlar sunmaktadır. Seçilen örneklerde avlu, toplumun kültürel ve sosyal yaşamının merkezinde yer alan, üretken ve değişken bir mekan olarak belirlenen kriterlere göre değerlendirilmiş ve tartışılmıştır.

Avlulu konutun Tunç Çağından itibaren Anadolu ve Yunanistan'da kullanıldığı bilinmektedir. Ancak Klasik Dönem, avlunun konut mimarisinde belirgin olarak tanımlandığı ve sınıflandırıldığı dönemi temsil eder. Klasik Dönemde avlulu konutlar portiko tasarımına göre *prostas*, *pastas*, *peristyle* ve *herdraum* olarak dört plan tipine göre sınıflandırılmıştır. Avlunun bu sınıflandırma kapsamında tüm konutlarda mekânsal ve işlevsel ortak tanımlanabilen tek ortak mekân olması iki farklı coğrafyadaki konut

mimarisinin dinamiklerini karşılaştırmalı olarak değerlendirmeye olanak sağlamaktadır. Antik yazılı kaynaklar, seramik objeler ve mezar taşları üzerindeki tasvirler, disiplinlerarası çalışmalar, kazı raporları ve raporlara bağlı olarak yayınlanmış güncel bilimsel çalışmalar kullanılan ana kaynaklardır.

Tezin ikinci bölümünde, avlulu konutun kökeni ve kullanımı ile ilgili, sosyal, politik ve ekonomik etkenler, kültürel değerler ve geleneklere bağlı olarak yapılan çeşitli sınıflandırmalar sunulmaktadır. Buna göre, avlulu konut çoğunlukla kırsal ve geleneksel mimari kapsamında ele alınmaktadır. Örneğin; Anadolu'da Neolitik dönem yerleşmesi olan Çatalhöyük'de konutlara çatılardan girilmekteydi ve her konut ortak bir avluya açılmaktaydı. Sınırlı sayıda açıklığa sahip bu konutlar için avlu ışık, havalandırma gibi fonksiyonel işlevlere sahipken, konutların düz çatıları tarımsal faaliyetler ve uygun hava koşullarında oturma alanı olarak kullanılmıştı. Zaman içinde, artan ekonomik faaliyetlerle, çatıda yer alan konut girişleri avluya taşındı ve avlu sosyal ve ekonomik faaliyetlerin yapıldığı bir mekân haline dönüştü. Anadolu'da Erken Tunç Çağı yerleşmeleri olan Demircihöyük ve Kültepe konutları, avlunun hem depolama, ve hayvanlar için barınak hem de ekonomik faaliyetler için kullanıldığını göstermektedir. Geleneksel Çin konutunda da avlu sosyal ve kültürel düzenin bir parçası olarak Feng-Shui ve Ying-Yang teorilerine göre düzenlenmişti. Tartışılan tüm örnekler avlunun birçok amaca hizmet eden kullanışlı bir mekân olmasının yanında sembolik ve kültürel anlamlar içerdiğini de göstermektedir. Bu bağlamda, birçok araştırmacı avlulu konutu değişen kullanım, mimari özellikler, sembolik anlamlara göre tanımlamış ve sınıflandırmıştır. Anadolu, Kordoba, Arabistan, İran'dan seçilen örnekler avlulu konutun her toplumun kendi kültürel ve sosyal bağlamında değerlendirildiğini göstermektedir. Antik Yunan avlulu konutu da benzer biçimde toplumun değişen sosyal yapısı, politik anlayışı, mimari özellikleri ve farklı kullanımlarına göre birçok çalışmanın konusu olmuştur.

Amos Rapoport'un belirlediği “form” ve “şekil” ayrımına göre, mevcut sınıflandırmaların hemen hepsi Antik Yunan konutlarını öncelikle ve çoğunlukla şekil ya da biçim olarak değerlendirmektedir. Yapıların formu ise ancak avlu ve diğer odaların mekânsal ilişkileri ve buna bağlı olarak sosyal ve kültürel kullanımları ele alınarak değerlendirilebilir. Örneğin Çin ve Fas geleneksel konutları ile İtalya'dan bir antik dönem konutunu, avlulu konut olarak tek bir başlık altında tanımlamak mümkündür. Fakat konutların mekânsal ilişkileri yani konut formları birbirinden farklıdır. Fas örneğinde, avlu ve çevresindeki odalar daha organik bir yapısal formda tanımlanırken; İtalya örneğinde avlu mekânsal olarak konutun merkezinde yer almaktadır ve konut boyunca devam eden simetrik aksın parçasıdır. Çin örneğinde ise yaşam birimleri bir avlu etrafında organize edilmiştir. Bu bağlamda “form” ve “şekil” ayrımı avlunun diğer katkıları olan mahremiyet, etkin mekân kullanımı, ana ulaşım aksı tanımlaması, üretken ve kullanışlı mekân olanağı ve iklimsel konfor gibi özellikleri tanımlamaya ve konutların tasarımı ve kullanımında etken olan farkları ve ortaklıkları bunlar üzerinden tartışmaya imkân sağlamaktadır.

Mahremiyet kavramı avlulu konutlarda iki şekilde ele alınmaktadır. Avlu, ilk olarak kamusal ve özel alan arasında bir geçiş mekânı tanımlamaktadır. Örneğin İslam dünyasında, konut mahrem ve kadına ait bir yer iken, camii, çarşı, pazar gibi kamusal alanlar daha çok erkekler tarafından kullanılmıştır. Dolayısıyla avlu, konut içinde aile mahremiyetini sağlayan yarı-özel alandır. İç ve dış mekan arasındaki geçiş ve kontrol, kapı ve pencerelerin konumu, portiko tasarımı gibi düzenlemelerle sağlanmaktadır. Örneğin, Atina'da Bizans dönemine ait konutta avlu ile sokak girişi arasında yer alan eşik konut özel alanın mekânsal ve görsel olarak dışardan gözlemlenmesini engellemektedir. Mahremiyet, ikinci olarak konutun içindeki mekansal düzenleme ile sağlanmıştır. Örneğin; Kore'de özellikle üst sınıfa ait geleneksel konutlarda, kadın, erkek ve hizmetçiler için üç ayrı avlu tanımlanmıştır. Her avluya tek bir girişten ulaşılmaktadır ve avlular arasında geçiş mekânı yoktur. Konut içinde tanımlanmış üç ayrı avlu ve özellemiş yaşama alanının aile içinde kadın ve yabancı olarak görülen hizmetçiler

arasında tercih edilen mahremiyet ilişkisini sağlamak adına yapılmış olduğu düşünülebilir. Dolayısıyla avlu, konutta kamusal-özel alanları tanımlayan ve sosyal ilişkileri kontrol eden mekandır. Amos Rapoport, avluyu bu anlamda özel ve kamusal alan arasında geçiş sağlayan bir kilit (lock) olarak kabul eder. Bu tanıma göre; avlu özel alan olan konutta, yarı-özel ve yarı-kamusal alan olarak kullanılabilir. Avlu aynı zamanda kadın-erkek, hane-misafir, köleler/çalışanlar-özgür olanlar arasındaki sosyal ilişkileri de düzenleyen mekândır.

Kore gibi yoğun kentlerden seçilen örnekler, aynı zamanda, avlunun konutlar arasında koridor gibi herhangi bir geçiş mekânı gerektirmediğini, havalandırma ve aydınlatma sağladığını ve daha az yer işgal ettiğini göstermektedir. Bangladeş kırsal ve kentsel konut örnekleri bitişik nizamda inşa edilmiş avlulu konutların, kırsal tekil konutlara göre daha az yer işgal ettiğini göstermektedir.

Avlu, bu özelliklerinin yanı sıra, konutta odalar arası geçişi sağlayan ana mekândır. Örneğin, geleneksel Çin konutu, birden fazla avludan oluşmaktadır. Pekin'den seçilen iki avlulu bir örnekte; girişe yakın avlunun daha çok misafirleri karşılama alanı olarak kullanıldığı; ikinci avlunun ise aile üyeleri tarafından kullanıldığı bilinmektedir. Her avlu kendi içinde bir ulaşım merkezi tanımlasa da her iki avlu da konuttaki ana mekânsal sirkülasyonun bir parçasıdır.

Avlu özellikle sıcak iklimlerde doğal havalandırma sağlamak ve altyapı sistemleri ile yağmur suyunun toplanabildiği bir mekan sunmaktadır. İran geleneksel mimarisinde, konutun ve avlunun güneşten faydalanmak için güneyde konumlandığı bilinmektedir. Konutta farklı yönlerde konumlanan ve az eşya barındıran odalar gün içinde ve farklı mevsimlerde, oturma alanı, yatak odası, depolama alanı olarak kullanılabilir. Örneğin; üç kapılı oda genellikle yatak odası, kış ve sonbaharda oturma odası ve genelde akşamları misafir odası olarak kullanılmaktadır. Avluda bazı alanlar kış ve yaz kullanım alanı olarak belirlenmiştir. Kordoba'dna seçilen geleneksel

avlulu evlerde, avluda bir çeşme veya küçük havuzdan akan su ile doğal bir havalandırma sağlanmaktadır. Avluda bulunan ağaçlar da gölgelendirme yaparak özellikle yaz mevsimlerinde aile için konforlu bir açık alan sağlamaktadır.

Avlu aynı zamanda Çin’de mevsim geçişi seremonileri, anma törenleri için, Kordoba ve Jordan konutlarında, tarım ürünlerinin ayıklanması, kurutulması, depolanması işlemleri için kullanılmaktadır. Sonuç olarak geleneksel konutlarda avlu tüm bu fonksiyonları aynı anda içerebilen çok amaçlı, kapsayıcı ve kullanışlı bir mekândır.

Üçüncü bölümde, antik dönem Yunan konutunda avlunun kökeni, zaman içindeki gelişimi ve kullanımı antik yazılı kaynaklar ve arkeolojik verilere dayanarak değerlendirilmiştir. Yazılı kaynaklarda (Xenophon, Vitruvius, Galen, Demosthenes) avlu dışında üç farklı mekandan bahsedilmektedir. Bunlar *oikos*, *andron/andronitis* ve *gynaikonitis*’dir. *Oikos* üç farklı anlamda kullanılmaktadır; hem mimari yapı olarak konutu ve ailenin gün içinde vakit geçirdiği odayı ifade etmekte; hem de hane halkı anlamına gelmektedir. *Andron/andronitis* erkeklerin şölensel nitelikli yemek ve içki buluşmaları için toplandıkları mekândır. *Gynaikonitis*, ise kadınların günlük işler için kullandığı ve vakit geçirdiği alan olarak tanımlanır. Vitruvius Yunan konutu tasvirinde konutu iki avlulu olarak tanımlamıştır. İki avlulu konutlar yoğunlukla Helenistik ve Roma döneminde kullanılmıştır ve Klasik Dönemde yaygın değildir. Aynı şekilde, kadınlar bölümü olarak tanımlanan *gynaikonitis*’in varlığı ve konut içindeki konumu tartışma konusudur ve varlığı arkeolojik verilerle kanıtlanamamıştır. Bu kaynaklarda bir ideal Yunan konutu tanımlanmış olabilir, yani sadece antik yazılı kaynakları esas alarak genel bir konut tanımı yapmak olası değildir.

Arkeolojik ve mimari veriler ise avlunun kökeni ve değişen kullanımları ile ilgili daha somut bilgiler vermektedir. Anadolu ve Yunanistan’da *megaron* Thermi, Troya, Beycesultan, Karataş-Semayük, Mersin ve Tarsus gibi birçok bölgede Tunç çağından itibaren yaygın olarak kullanılmıştır. Arkaik

Dönemde, toplumun ekonomik, sosyal ve politik yapısına bağlı olarak tekil konutlar daha karmaşık yapılara dönüşmüştür. *Megaron*'dan avlulu konuta geçiş Zagora, Kalabaktepe ve Bayraklı yerleşmelerinde gözlemlenmektedir. Arkaik Dönemde Bayraklı'da yer alan Çift Megaronlu Konut ve Onythe'de tespit edilmiş *megaron* konut, Klasik Dönemde avlulu konut için yapılan portiko temelli sınıflandırmaların, *prostas/pastas* öncülü kabul edilmektedir. Her iki örnekte de *megaronlar* biraraya gelerek portiko ve avlu etrafında daha geniş konutlar tanımlamıştır. Çift Megaronlu Konut'ta tek odanın önünde uzanan portiko Anadolu'da yaygın olarak kullanılan *prostas* tipinin erken örneği kabul edilirken, Onythe konutunda portiko daha uzundur ve iki oda önünde konumlanmıştır; dolayısıyla Klasik Dönemde Yunan anakarsında yaygın olarak kullanılan *pastas* tipinin öncüsü sayılmaktadır. Tüm sınıflandırmalar, Rapoport'un form ve biçim ayrımında belirttiği gibi mekan/konut şekline atfen tanımlanmış olduğu için mekansal ilişkileri kapsama açısından eksik kalmaktadır. *Megaron* ve avlulu konutlar için Tunç Çağı ve Arkaik dönem de yapılan tanımlamalar, Anadolu ve Yunanistan örneklerinde Klasik Dönemde gelişecek konut formunu tartışmak için genel bir çerçeve sunmaktadır.

Çalışmanın dördüncü bölümünde, önceki değerlendirmeleri esas alarak Anadolu ve Yunanistan'dan seçilen konutlar Rapoport'un tanımladığı ve tartıştığı kriterlere göre yeniden yorumlanmıştır. Anadolu'da Priene, Kolophon, Klazomenai, Bergama, Burgaz, Latmos ve Larisa'dan seçilen konutlar "form" ve "şekil" ayrımını birçok açıdan örneklemektedir. Klasik Dönemde Anadolu'daki konutlar portiko tasarımına göre sınıflandırılmıştır. Kuzeyde bir oda önünde uzanan ve avludan diğer mekanlara geçiş sağlayan portiko, *prostas* olarak tanımlanmıştır. Priene, Kolophon, Klazomenai ve Bergama'dan seçilen konutlar *prostas*-avlulu konut olarak sınıflandırılmıştır. Latmos'dan seçilen konutlar, Klasik Dönemde Yunanistan'da yaygın olarak kullanılan *pastas*-avlulu konut planına uyumlu olarak sınıflandırılmıştır. Burgaz ve Larissa örnekleri ise bu sınıflandırmalar dışında kalmaktadır. Seçilen örneklerde *prostas*, *pastas*, *oikos*, *andron*, *gynaikonitis*, ön-oda, atölye ve depolama mekanları, arkeolojik verilere dayanarak bazı örneklerde

kazıcılar tarafından kesin olarak belirlenmiştir. Bu mekanlar dışında, seçilen tüm örneklerde bulunan tek ortak mekan ise avludur. Dolayısıyla örnekleri avlulu konut olarak tek bir çatı altında toplamak mümkündür. Priene, Kolophon, Klazomenai, Bergama'dan seçilen konutlar da *prosta*-avlulu konut olarak sınıflandırılabilir. Fakat “form” ve “şekil” ayrımına göre, bu sınıflandırmalar sadece yapıları şekil ya da biçim olarak değerlendirmektir. Yapıların formu ancak avlu ve diğer odaların mekansal ilişkileri ve buna bağlı olarak sosyal ve kültürel kullanımları ele alınarak değerlendirilebilir. Konutların sokak ile olan mekansal ilişkisi, giriş kapılarının konumu, sayısı; konutun iç-dış mekan ilişkileri çerçevesinde değerlendirilmesine olanak sağlamaktadır. Seçilen tüm konutlarda yalnızca bir sokak girişi belirlenmiştir, birden fazla girişi olan konut sadece bir kaç evde görülmektedir. Priene, Klazomenai, Kolophon, Bergama, Larisa, Latmos konutlarında iki farklı konut girişi düzenlenmesi saptanmıştır; birincisi sokak girişi ile avlu arasında bir geçiş mekanı bulunan konutlar, ikincisi ise sokaktan doğrudan ulaşılan konutlar. Priene, Burgaz ve Kolophon konutlarında her iki tür sokak girişi de gözlemlenmektedir. Klazomenai, Larissa ve Latmos konutlarında avlu ile sokak girişi arasında herhangi bir geçiş mekanı saptanmamıştır.

Avlu ve *prosta* arasındaki mekansal ilişki “form” ve “şekil” ayrımını tartışmak için önemli bir kriterdir. Priene, Kolophon, Klazomenai, Bergama konutlarında *prosta* avludan *oikos* ve *andron*'a geçiş sağlayan bir ara mekan olarak düzenlenmiştir. Priene konutlarında, *prosta* ve avlu arasında doğrudan mekansal bir ilişki varken, Kolophon konutlarında *prosta* ve avlu arasında tanımlanmış bir ara mekan vardır. Priene konutlarında *prosta*, *oikos*'un önünde yer alan, yarı açık bir yaşam alanı olarak tanımlanırken; Kolophon konutlarında, *prosta* daha çok bir geçiş mekanı olarak yorumlanabilir.

Kadın ve erkek mekanları olarak tanımlanan *andron* ve *gynaikonitis*'in konumu ve diğer odalarla olan mekansal ilişkisi konut formunu anlamada diğer önemli kriterdir. *Gynaikonitis*'in konutlarda varlığı ile ilgili kesin bir kabul olmamasına rağmen, antik yazılı kaynaklar, *gynaikonitis*'in konutun

ikinci katında yer aldığını ifade etmektedir. Bu kaynaklara göre, Priene ve Kolophon konutlarında *andron* mekanının ikinci katını *gynaikonitis* olarak kullanıldığına dair varsayımlar vardır fakat bu önermeler arkeolojik verilerle kanıtlanmamıştır. Priene konutlarında *andron* ve *oikos* 'un aynı mekana, yani *prostas* 'a açılması bu konutlarda farklı bir mahremiyet gereksinimi olduğuna dair yorumlar yapılmasına yol açmıştır. Kolophon konutlarında *andron* avlunun güneyinde yer almaktadır ve kuzeyde bulunan *prostas* ve *oikos* 'dan mekansal olarak ayrılmıştır. *Andron* günün belirli bir zamanında erkek misafirlerin ağırlandığı ve yemek şölenlerinin düzenlendiği mekan olarak bilinmektedir. Dolayısıyla mahrem konut alanı içinde kamusal kullanımı olan bir mekan olarak da tanımlanabilir. Kolophon konutlarında *andron* güneyde konumlanır ve kuzeyde yer alan aile üyelerinin kullandığı özel mekanlardan ayrılmıştır. Aynı zamanda girişe yakın konumlanan *andron* bu konutlarda mahremiyetin öncelikli olduğunu göstermektedir.

Anadolu kentlerinde seçilen örneklerde, konut formundaki değişiklikler *avlu*, *prostas*, *oikos*, *andron* ve *gynaikonitis* arasındaki farklı mekansal ilişkiler üzerinden yorumlanabilir. Fakat form konusu kentlerin planlaması üzerinden açıklanamaz. *Prostas*-avlulu konut tipi yaygın olarak yeni kurulan kentlerde uygulanmıştır. Örneğin; Priene, Burgaz ve Klazomenai Klasik Dönem 'de grid plana göre yeniden kurulmuş kentlerdir. *Prostas*-avlulu konut tipi Priene ve Klazomenai 'da uygulanırken, avlu etrafında tasarlanmış olan Burgaz konutları *prostas* bulunmaz. Kolophon 'da ise, Klasik Dönemde yeniden kurulmuş bir şehir olmamasına rağmen, *prostas*-avlulu konut tipi uygulanmıştır. Latmos ise kayalık alana kurulmuş bir şehirdir ve seçilen örneklerde konutun coğrafik koşullara göre şekillendiği gözlemlenmektedir. Avlunun konumu ve büyüklüğü diğer odaların yerleşimine göre belirlenmiştir. Burada Anadolu 'daki diğer kentlerden farklı olarak *pastas* konut tipi kullanılmıştır. *Pastas* da *prostas* gibi bir geçiş mekanı tanımlamaktadır fakat *prostas* 'dan farklı olarak *pastas* birden fazla oda önünde konumlanmaktadır. *Pastas* 'ın Klasik Dönemde daha çok Yunanistan anakarasında uygulandığı bilinmektedir. Bu anlamda *pastas*-avlu tipi olarak tanımlanan Latmos 'daki örnek, konut formundaki değişikliğin bölgeler arası

etkileşiminin de bir sonucu olduğunu göstermektedir. Latmos’da arazi koşullarının grid plan için uygun olamaması ve dolayısıyla *prostat*-avlulu konutun bu yüzden bölgede uygulanamadığına dair varsayımlar da vardır. Fakat, benzer şekilde dik bir arazide konumlanan Bergama konutlarında *prostat*-avlulu konut tipinin gözlemlenmesi bu varsayımı geçersiz kılmaktadır.

Anadolu’da seçilen örneklerin mekansal analizi ve şehirlerin yerleşim planları, konut formunun konut biçiminden çok daha fazla mekansal ve kültürel bilgi içerdiğini göstermektedir. Anadolu’da farklı konut tiplerinin ortaya çıkması ortak kültürel değerlerin bir sonucu olarak da değerlendirilebilir. Arkaik Dönemde Anadolu’ya yerleşen İyonyalıların, Klasik Dönem boyunca kent planlamasında ve konut tasarımında ortak bir dil benimsediği bilinmektedir. Anadolu’daki bilinen en eski İyon konutu, *prostat* konut tipinin da atası kabul edilen Bayraklı’da yer alan Çift Megaronlu Konut dur. Dolayısıyla diğer İyonya kentleri olan Priene, Klazomenai ve Kolophon’da aynı konut tipinin uygulanması mahremiyet, cinsiyet ve kölelik gibi kavramlar üzerinde ortak bir kültürel kabulün olması olarak da değerlendirilebilir.

Yunanistan’da Olynthus, Pire, Abdera, Atina, Morgantina, Halieis konutları örnek alınarak “form” ve “şekil” ayrımı için benzer bir mekansal değerlendirme yapılabilir. *Oikos*, *prostat*, *pastas andron*, ön-oda, depolama alanı yanısıra mutfak kompleksi ve *exedra* (avlunun uzantısı olan yazlık yaşam alanı), Olynthus konutlarında dabelirlenmiştir. Anadolu’da incelenen konutlarda *oikos* ana yaşama birimi olarak tanımlanırken, Olynthus’da ana yaşam alanları “kuzey odaları” olarak tanımlanmıştır. Sokak girişi ve avlu arasındaki geçiş mekanı Halieis ve Olynthus kentlerinde belirlenmiş ve *prothyron* olarak tanımlanmıştır. Avlu tüm konutlarda bulunan tek ortak mekandır. Anadolu’da uygulanan *prostat*-avlulu konut tipi Yunanistan’da Abdera ve Pire kentlerinde görülmektedir. Olynthus, Halieis ve Atina’da bulunan kırsal konutlarda ise *pastas*-avlulu konut tipi uygulanmıştır. Morgantina örnekleri iki avlulu, ve sütunlu revakları olan, *peristyle* plan tipini

örneklemektedir. Bu özellikleri ile diğer örneklerden farklı olarak Geç Klasik ve Helenistik Dönemde konut formunun tartışılmasına olanak sağlamaktadır.

Avlu ve *pastas* arasındaki mekansal ilişki incelediğinde; Abdera'daki *prosta*-avlulu konut örneğinde, kamusal ve özel alan ayrımı net bir şekilde okunabilmektedir. Kuzeyde yer alan *prosta*, ön-oda ve *oikos* arasında geçiş mekanı olarak yer almaktadır. Güneyde konumlanan mekanlar ikincil işlevlere sahip alanlar olarak kullanılmıştır. Avlu kuzeydeki özel alanları, güneydeki kamusal ve ortak kullanım alanlarından ayırmaktadır. *Prosta* yarı-özel bir alan tanımlamaktadır. Pire kentinden seçilmiş örneklerde benzer bir kamusal-özel alan ayrımı vardır. Olynthus konutlarında ise avlu evin mekansal olarak merkezinde yer almaktadır ve ayırıcı mekandan çok birleştirici mekan özelliği göstermektedir. Abdera konutlarında *prosta* yarı-özel alan olarak tanımlanırken, Olynthus konutlarında birden fazla oda önünde yer alan *pastas*, ana yaşam alanının devamı olarak yorumlanabilir.

Olynthus, Morgantina, Halieis, Atina Abdera, Pire konutlarında *andron* mekansal olarak tanımlanırken, *gynaikonitis* ve ikinci katın varlığı arkeolojik verilerle doğrulanmamıştır. Ancak, avlu ve *pastas*'da bulunan dokuma tezgahı buluntuları ve yemek pişirme gereçleri kadınların evin farklı bölümlerini kullandığının ve iş yaptığının bir kanıtıdır. Antik yazılı kaynaklarda belirtildiği gibi *gynaikonitis* kapalı bir mekan olarak değil, kadınlarla ilişkili domestik aktivitelerinin yapıldığı yer(ler) olarak da değerlendirilebilir.

Tüm mekansal ve kültürel değerlendirmeler, Anadolu ve Yunanistan'da standart bir konut tipinin olmadığını göstermektedir. Avlu tüm konutlarda bulunan tek ortak mekandır, fakat avlu ve diğer mekanlar arasındaki mekansal ilişki her örnekte farklılık göstermektedir.

Konut formundaki bu değişiklik, Yunan konutu kapsamında ilk olarak Yunan kentlerinin (*polis*) oluşması ve avlunun kullanımı arasındaki ilişki üzerinden tanımlanabilir. Rapoport, avluyu tekil kırsal konutlarla kıyaslayarak, yoğun

kent dokusunda etkin mekansal kullanımı açısından değerlendirmektedir (efficient use of space). Atina kırsalındaki konutlar avlunun tarımsal faaliyetler ve günlük işler için kullanıldığını göstermektedir. Fakat Yunan kentlerinde avlunun kullanımı kent devlerinin oluşması ve demokrasi anlayışı ile de ilgilidir. Klasik dönemde kentlerin planlanmasında ve konut tasarımında her bireyin eşit yaşam alanına sahip olması fikri vardır. Ancak eşit parsel büyüklüklerine göre kurulmuş kentlerde konutlar planlama ve büyüklük açısından aynı değildir, fakat avlu tüm konutlarda ortaktır. Avlunun kullanımı ve eşitlik kavramı arasında çeşitli görüşler olsa da, avlunun evin beyi için kontrol edilebilir bir kamusal alan tanımladığı görüşü yaygındır. Bergama, Latmos, Larissa gibi ızgara planı uygulanmamış kentlerde avlunun kullanımının kültürel ve kültürler-arası etkileşimin bir sonucu olduğu kabul edilmektedir.

Antik Yunan konutunda, mahremiyet kavramı avlunun mekansal ve görsel organizasyonu üzerinden değerlendirilmiştir. Konutlarda erkek mekanı olarak tanımlanan *andron*'un depolama alanı gibi farklı amaçlar için de kullanıldığı gözlemlenmiştir. Eşik, kapı ve yüksek konumlu pencere konutta mahremiyeti sağlamak için yapılan mimari düzenlemeleri ifade ederken, Halieis konutlarında kullanılmış olduğu varsayılan perde gibi geçici meteryaller de görsel mahremiyeti sağlamak için kullanılmış olmalıdır.

Avlu Yunan dönemi konutunda çevre ve iklim koşullarına uyumlu ve konforlu bir alan sağlamaktadır. Seçilen örneklerde konutların kuzey-güney yönünde yönelmesi ve ana yaşama birimlerinin güneyde yer alması bunun bir sonucudur. Bu yönelim ilkelerine uymayan Atina ve Latmos konutlarında coğrafi özelliklerin etkin olduğu söylenebilir. Olynthus ve Halieis konutlarında saptanan taşınabilir ocaklar avlunun güneşli havalarda yemek pişirmek ve yemek için kullanıldığını göstermektedir. Yunan konutunda pencere türü açıklık fazlaca saptanmamıştır, dolayısıyla avlu havalandırma ve aydınlatma için ana kaynak olarak kullanılmıştır.

Seilen rnekler avlunun ana ulařım aksını tanımladıėını gstermektedir. Avlunun konuttaki diėer mekanlarla olan iliřkisi kadın-erkek, ocuk, kle ve misafirler arasındaki sosyal iliřkilere gre řekillenmiřtir. Avlu bu anlamda, antik Yunan konutunda tm bu iřlevlere olanak saėlayan kapsayıcı, deėiřken ve esnek, bir retken (generic) mekan olarak kullanılmıř ve antik Yunan kltrel coėrafyası iinde varlıėını deėiřen portiko mekanları ile birlikte srdrmřtr.



C. TEZ İZİN FORMU / THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE

Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences

Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences

Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics

Enformatik Enstitüsü / Graduate School of Informatics

Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences

YAZARIN / AUTHOR

Soyadı / Surname : Bilge

Adı / Name : Elif

Bölümü / Department : Mimarlık Tarihi

TEZİN ADI / TITLE OF THE THESIS (İngilizce / English) :

The “Courtyard House”: A Spatial Reading of Domestic Architecture in Ancient Anatolia and Greece

TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master

Doktora / PhD

1. **Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide.**
2. **Tez iki yıl süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of two years.**
3. **Tez altı ay süreyle erişime kapalı olacaktır. / Secure the entire work for period of six months.**

Yazarın imzası / Signature

Tarih / Date