

## ABSTRACT

Title of Document: DIFFERENT LAYERS OF A CULTURE:  
EMPOWERING TRADITIONAL TURKISH  
VILLAGE LIFE THROUGH ARCHITECTURE

Kemal Koray Aysin, M.ARDV, 2014

Directed By: Brian P. Kelly, AIA, Director, Associate  
Professor  
University of Maryland, College Park, School of  
Architecture

Can an architectural intervention provide positive and sustainable cultural, economic and environmental developments for a Turkish village? The architectural formation of a cultural center that fortifies cultural traditions and creates bridges between locals and visitors, diminishes the negative effects of migration and brings economic dynamism to the area is the aim of this thesis project.

Migration from villages to big cities is a common occurrence in Turkey. However, due to constantly increasing population and limitation of the resources in major cities, most of the time, people who migrate from villages with the desire to find better living conditions cannot fulfill their dreams.

On the other hand, there are many qualities and aspects of villages such as agricultural production, unique arts and crafts and folkloric/traditional values. With proper coordination, these qualities may easily become economic, social and cultural drives. Therefore, a program that strengthens these values and makes them viable economic and cultural resources for village populations, may contribute to the development of villages and small-scale neighborhoods.

DIFFERENT LAYERS OF A CULTURE: EMPOWERING TRADITIONAL  
TURKISH VILLAGE LIFE THROUGH ARCHITECTURE

by

Kemal Koray Aysin

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Master of Architecture and  
Real Estate Development  
2014

Advisory Committee:

Associate Professor Brian P. Kelly, Chair

Professor Steve Hurtt, Committee Member

Professor Robert L. Vann, Committee Member

© Copyright by  
Kemal Koray Aysin  
M.ARDV 2014

## **Dedication**

To my grandmother Türkan Aysin, who always supported me through all of my educational life.

To my grandmother Emel Ağirnasli, who shared her infinite love and joy with me graciously.

To Gürkan Özaysin, who is one of the most inspirational individuals in my life.

&

To all of my family and friends who surrounded me with their love and support.

## Acknowledgements

I would like to thank to my thesis committee; Brian Kelly, Steve Hurtt and Lindley Vann for all of their support and help.

I would like to also thank to my friends Stephen Neuhasuer, Theresa Lucarelli and Joe Largess for all of their help during my thesis studies.

I would like to thank to Izmir Provenience Governance's Planning and Coordination department for providing me with the digital CAD documentation of Sirince Village.

Also, I want to thank to instructors and students of Middle East Technical University's, Department of Architecture, Graduate Program in Restoration of Fall 2007-2008 "REST 507 Planning and Design in Urban Conservation 'Conservation Project for Şirince/İzmir'" studio for sharing their research with me.

&

Thank you:

Helpful and hospitable people of Sirince Village

and

Craft masters of Turkey

## Table of Contents

Dedication .....	ii
Acknowledgements .....	iii
Table of Contents .....	iv
List of Figures .....	vii
Chapter 1: Site/Context/Place .....	1
Site: Sirince/Turkey .....	1
Introduction .....	1
Location .....	1
History .....	3
Climate .....	5
Geography .....	8
Zoning, Entitlements and other Regulations .....	9
Sirince Village's Architecture .....	9
Traditional Architectural Typology of Sirince .....	10
Modern Architecture in the Area .....	12
Functional Considerations and Program .....	16
Special Problems, Issues and Possible Examples .....	16
Pragmatic Design Objectives, Approaches and Opportunities .....	17
Elements of Cultural Heritage .....	18
Weaving .....	18
Coppersmithing .....	20
Felt-Making .....	22
Pottery .....	22
Glass .....	25
Woodworking .....	25
Tourism .....	29
Tourist interaction .....	30
Program Formation .....	35
Program: Connected to the Village .....	35
Program: Outside of Village .....	36
Program: Scattered/Satellite .....	36
Program: Mobile Component .....	37
Program: Hybrid Formation .....	37
Precedents Analysis .....	40
Precedents: Program and Site .....	40
Environmental Nature Center, Newport Beach, CA .....	40
Hawaii Preparatory Academy, Kamuela, HI .....	41
Precedents: Historic Context .....	41

Pier Arts Centre, Orkney, United Kingdom.....	41
Selexyz Dominicanenn Bookstore, Maastricht Netherland .....	42
Linkage .....	43
Parc de la Villette, Paris, France .....	43
Il Forte di Fortezza, Fortezza, Italy .....	44
Craft Production Places.....	45
Pottery .....	45
Felt Making - Weaving .....	45
Chapter 2: Sirince Craft and Cultural Center.....	46
Program.....	46
Program Components.....	46
Crafts Workshops (2,000 sq ft).....	46
Multi-Purpose Room (3,000 sq ft).....	46
Community Improvement (1,500 sq ft) .....	47
Learning Spaces (1,000- 1,500 sq ft) .....	47
Restaurant-Café (1,500 sq ft).....	47
Offices (400 sq ft).....	47
Users .....	47
Sites and Related Design Strategies.....	50
Village Entrance.....	50
Village Entrance + Village (Existing buildings).....	50
Village (New Structure) + Village (Existing buildings) .....	51
Opportunities.....	53
Live/Work .....	53
Courtyards–Public Spaces .....	53
St. John’s Baptist Church.....	54
Chapter 3: Strategies.....	56
Strategies.....	56
Location for Proposal.....	56
Location Consideration According to the Buildings’ Condition .....	57
Location Consideration According to the Topography .....	58
Program: Creating a Culture Village .....	60
Access and Circulation .....	61
Public Spaces as Event Spaces .....	62
Understanding Public Space Formation in the Cultural Context.....	64
Urban Intervention Study: Juxtaposition Scenarios.....	66
Insightful Guidelines: Architectural Elements of Sirince.....	70
Facades.....	70
Fenestration.....	70
Materials .....	70
Chapter 4: Proposed Design.....	72
Village Scale .....	72
Proposed “Village of Culture” Program .....	72
Program Entrance – Building Scale.....	78
Elements.....	82
Chapter 5: Conclusion.....	85

A Village of Culture.....	85
Sirince as a Case Study .....	86
Bibliography .....	87



## List of Figures

Figure 1: Sirince Village, Selcuk- Izmir Provincine.....	2
Figure 2: Sirince Village Satellite View (Retrieved from Google Earth).....	3
Figure 3: Average Climate Chart of Izmir Province.....	5
Figure 4: Site Plan of Sirince Village (Uyar, 2004).....	6
Figure 5 Sirince Vehicular Access (Edited from Google Maps).....	7
Figure 6:Topographic Map of the Area (Retrieved from Google Maps, 2013).....	8
Figure 7: Historic Houses of Sirince (Uyar, 2004).....	12
Figure 8: Traditional House and Building Materials.....	13
Figure 9: Roof Cornice Detail.....	13
Figure 10: Renovated Historic House.....	13
Figure 11: Renovated House with an Oriel.....	13
Figure 12: Traditional house with exposed building materials.....	14
Figure 13: Extrusion with wooden supports.....	14
Figure 14: House which is not renovated with second floor living area.....	15
Figure 15: Abandoned house, highly damaged.....	15
Figure 16: Population Change in Turkey (data from Saglam, 2006).....	17
Figure 17: Carpet Making Process.....	19
Figure 18: Copper making process.....	21
Figure 19: Coppersmith's workshop component.....	21
Figure 20: Pottery Production Process.....	24
Figure 21: Main Spatial Components of a Pottery Workshop (Plan Edited from Glassie, 1993).....	24
Figure 22: Turkish Carpets (Creative Commons, ©Rick Payette).....	26
Figure 23: Turkish women use vertical loom to weave carpets (Creative Commons, ©pennews).....	26
Figure 24: Felt products in Sirince Marketplace.....	27
Figure 25:Handmade olive oil soaps and "evil eye" beads in Sirince Marketplace ...	27
Figure 26: Artisan makes glass jewelry in front of St. John's Church.....	28
Figure 27: Sirince and major tourism destinations in the area (edited from Google Map 2013).....	31
Figure 28: Tourist Attractions in Sirince (edited from Google Earth, 2014).....	31
Figure 29: Stalls on the main street.....	32
Figure 30: A villager sells "tarhana" in streets.....	32
Figure 31: Sirince marketplace with visitors.....	33
Figure 32: Ephesus Celcius Library (Creative Commons, ©elephotography).....	33
Figure 33: Ephesus Amphitheater (Creative Commons, ©HBarrison).....	34
Figure 34: Program in Village (edited from Google Earth).....	38
Figure 35: Program out of Village (edited from Google Earth).....	38
Figure 36: Program-Satellite(edited from Google Earth).....	39
Figure 37: Program-Mobile (edited from Google Earth).....	39
Figure 38: Cathedral's column and Bookstore's Mezzanine (used with permission of ©Terry Zink, , UMD Arch'13).....	43

Figure 39: Inside of the Cathedral with the new addition (used with permission of ©Terry Zink, UMD Arch'13) .....	43
Figure 40: Program Components .....	48
Figure 41: Users and Activities .....	49
Figure 42: Sirince Village and plain sites (edited from Google Map image) .....	51
Figure 43: Connection Plan; village entrance, village houses, St. John's Church (edited from Google Map image) .....	52
Figure 44: A live work space for craftsmen .....	53
Figure 45: Existing damaged house .....	53
Figure 46: A dynamic courtyard with weaving activities .....	54
Figure 47: St John's Church Interior with Library Activity .....	55
Figure 48: St. John's Church Interior .....	55
Figure 49: Sirince Building Conditions .....	56
Figure 50: Sirince Commerce Corridor .....	56
Figure 51: Sirince Village buildings classified as out-of context .....	57
Figure 52: Modified Buildings .....	58
Figure 53: Site Model Showing Elevation Change in 2m intervals .....	59
Figure 54: Topography Diagram .....	59
Figure 55: Possible intervention areas .....	59
Figure 56: Cultural Center (one center) .....	60
Figure 57: A village of Culture (satellite programs) .....	60
Figure 58: Current Access and Circulation Diagram .....	61
Figure 59: Existing Public Spaces .....	62
Figure 60: Existing Commerce Line .....	62
Figure 61: Existing Site Plan .....	63
Figure 62: Existing Conditions .....	63
Figure 63: Urban Space Diagrams .....	64
Figure 64: Initial Intervention Ideas .....	66
Figure 65: Urban Interventions: Form and Program -1 .....	68
Figure 66: Urban Interventions: Form and Program -2 .....	69
Figure 67: Materials and Architectural examples in the village .....	71
Figure 68: Sirince Facade Analysis .....	71
Figure 69: Proposed Site Plan .....	73
Figure 70: Intervention Diagrams .....	73
Figure 71: Proposed Public Spaces .....	74
Figure 72: Proposed Access .....	75
Figure 73: Commerce + Craft .....	76
Figure 74: Proposed View of Sirince Square .....	77
Figure 75: Proposed Village Entrance .....	77
Figure 76: First Floor Building Plan .....	79
Figure 77: First Floor Plan .....	80
Figure 78: Second Floor Plan .....	80
Figure 79: Building Views .....	81
Figure 80: Building Section .....	82
Figure 81: View Inside of Colonnade and Seller's Stoles .....	83
Figure 82: Truss Forms .....	83

Figure 83: Column Form .....	83
Figure 84: Colonnade Module .....	84

\*Photos without citations were taken by author.

## **Chapter 1: Site/Context/Place**

### **Site: Sirince/Turkey**

#### **Introduction**

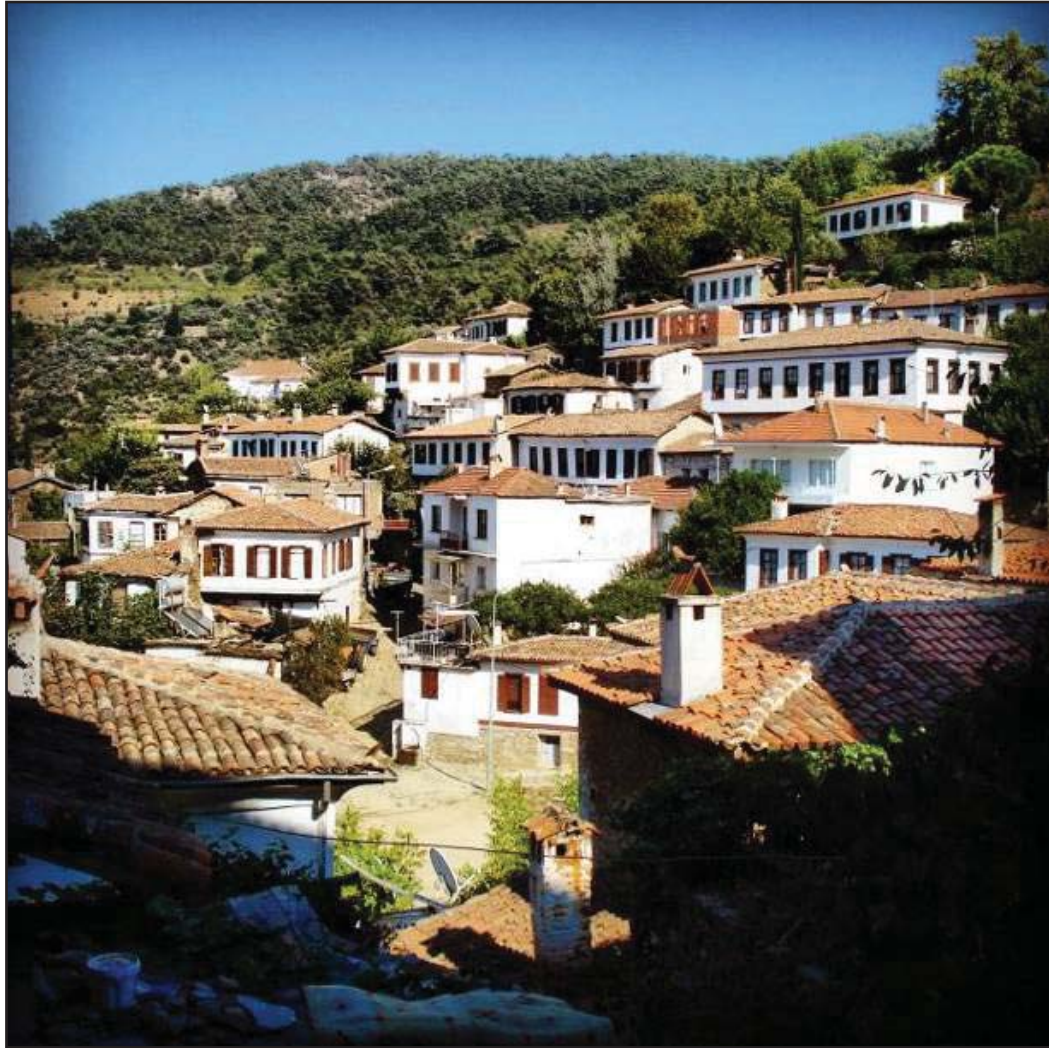
Sirince is a small traditional Turkish village located near the Aegean shore of Anatolia. This village is connected to the municipality of the city of Izmir. The traditional architectural and cultural fabric of the village has been preserved. The village of Sirince has an old history. Written documents from the 14<sup>th</sup> century mention this village. Currently most of the existing buildings in the village date from the late 19<sup>th</sup> century.

#### **Location**

The location of Sirince is important because of its connections to major urban settlements, historic sites and tourist destinations. Sirince is one of the eight villages of Selcuk town of Izmir City Province. This village is located in a valley about 52 feet (16 m) above sea level.

Sirince village is located four miles away from the Selcuk town center, five and half miles away from the ancient Greek city, Ephesus. Two major metropolitan cities of the Aegean region of Turkey, Izmir and Aydin Provinces, are located in close proximity to the village, as well. (53 and 42 miles, respectively)

Sirince village is located on a strategic point with convenient connections to major highways, railroads (located at Selcuk) and airports. In addition, Sirince is close to most major tourist attraction points of the country such as the town of Kusadasi, the House of the Holy Virgin Mary, and the ancient cities Ephesus, Miletos and Priene.



**Figure 1: Sirince Village, Selcuk- Izmir Provincine**





**Figure 2: Sirince Village Satellite View (Retrieved from Google Earth)**

## History

Ephesus, which was one of the important settlements in antiquity, has an important place in the history of Sirince. Research and archeological findings indicate Sirince was as a countryside extension of Ephesus. Although there are not any exact findings, it is believed that Sirince was once an important source of agricultural products for Ephesus due to its prolific agricultural soils and freshwater sources. Presently, Roman aqueduct remnants can be observed on the way to Sirince. Moreover, some remnants of the Roman periods can be found in the village, such as marble urns that were reused in fountains. Most of these found materials belong to the 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> centuries.

The first written reference related to Sirince comes from the 14<sup>th</sup> century. Initially, the village's name was Çirkince (meaning “somewhat ugly”) and, then, its name was changed to Şirince (meaning “in a nice/beautiful way, pleasant”). In the early twentieth century, Sirince's population was between 4,000-7,000 Greek inhabitants and the number of dwellings ranged between 1100-1800. (Beker, 2002)

In 1923, there was a population exchange protocol between Greece and Turkey. According to this protocol, all the Greek inhabitants in Turkey were required to return to Greece; similarly Turkish inhabitants in Greece's boundaries were required to return to Turkey. The number of Turkish migrants returning to the village was less than the Greek immigrants departing; therefore, many houses were left empty and unattended. This situation resulted in a loss of architectural fabric and a decrease in the village's population. Currently, the population of Sirince is around 530 and there are 152 registered historic building in the area. (TUIK, 2012)

## Climate

The climate of the area is a typical Mediterranean climate with hot and dry summers and rainy and cold to mild winters. Average temperatures variations of Izmir Province are shown in the climate chart.

Average Climate Chart of Izmir Province													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high °C (°F)	12.6	13.4	16.5	20.9	26.1	31.0	33.3	32.8	29.1	24.0	18.2	13.9	22.7
	(54.7)	(56.1)	(61.7)	(69.6)	(79.0)	(87.8)	(91.9)	(91.0)	(84.4)	(75.2)	(64.8)	(57.0)	(72.8)
Daily mean °C (°F)	8.9	9.4	11.8	15.9	20.9	25.8	28.1	27.6	23.7	18.8	13.7	10.3	17.9
	(48.0)	(48.9)	(53.2)	(60.6)	(69.6)	(78.4)	(82.6)	(81.7)	(74.7)	(65.8)	(56.7)	(50.5)	(64.2)
Average low °C (°F)	5.9	6.2	8.0	11.5	15.6	20.2	22.9	22.7	18.9	14.8	10.4	7.5	13.7
	(42.6)	(43.2)	(46.4)	(52.7)	(60.1)	(68.4)	(73.2)	(72.9)	(66.0)	(58.6)	(50.7)	(45.5)	(56.7)
Rainfall mm (inches)	118.6	103.8	75.3	48.3	26.9	8.5	1.9	2.0	17.3	44.5	95.5	147.5	690.1
	(4.7)	(4.1)	(3.0)	(1.9)	(1.1)	(0.3)	(0.1)	(0.1)	(0.7)	(1.8)	(3.8)	(5.8)	(27.2)
Avg. rainy days	11.2	10.8	8.9	8.4	5.1	1.9	0.5	0.5	2.1	5.4	8.5	12.9	76.2
% humidity	68.0	63.0	62.0	58.0	55.0	48.0	42.0	47.0	53.0	60.0	68.0	70.0	57.8

**Figure 3: Average Climate Chart of Izmir Province**  
(data obtained from Turkish Meteorological Service, World Meteorological Organization, and BBC Weather)



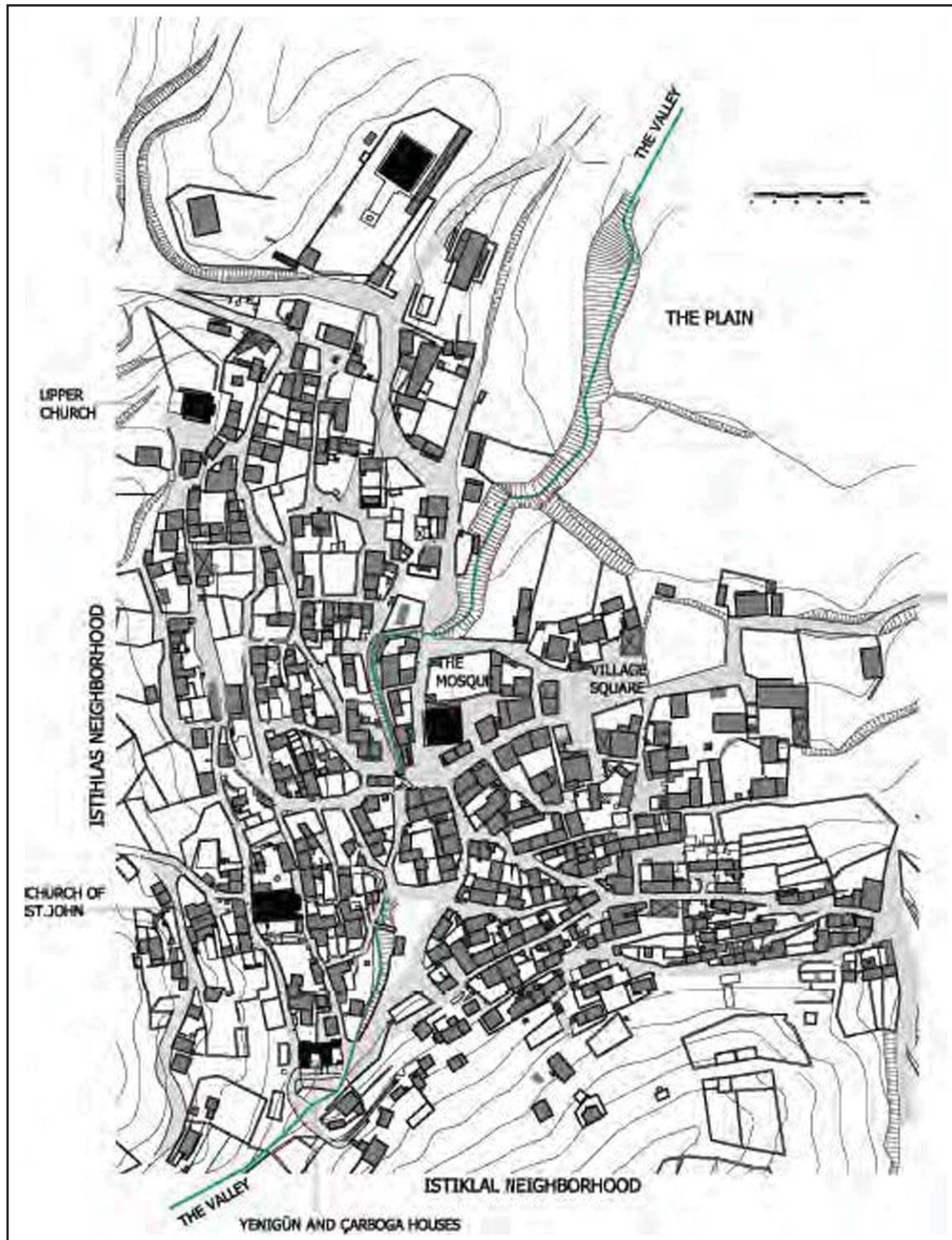


Figure 4: Site Plan of Sirince Village (Uyar, 2004)

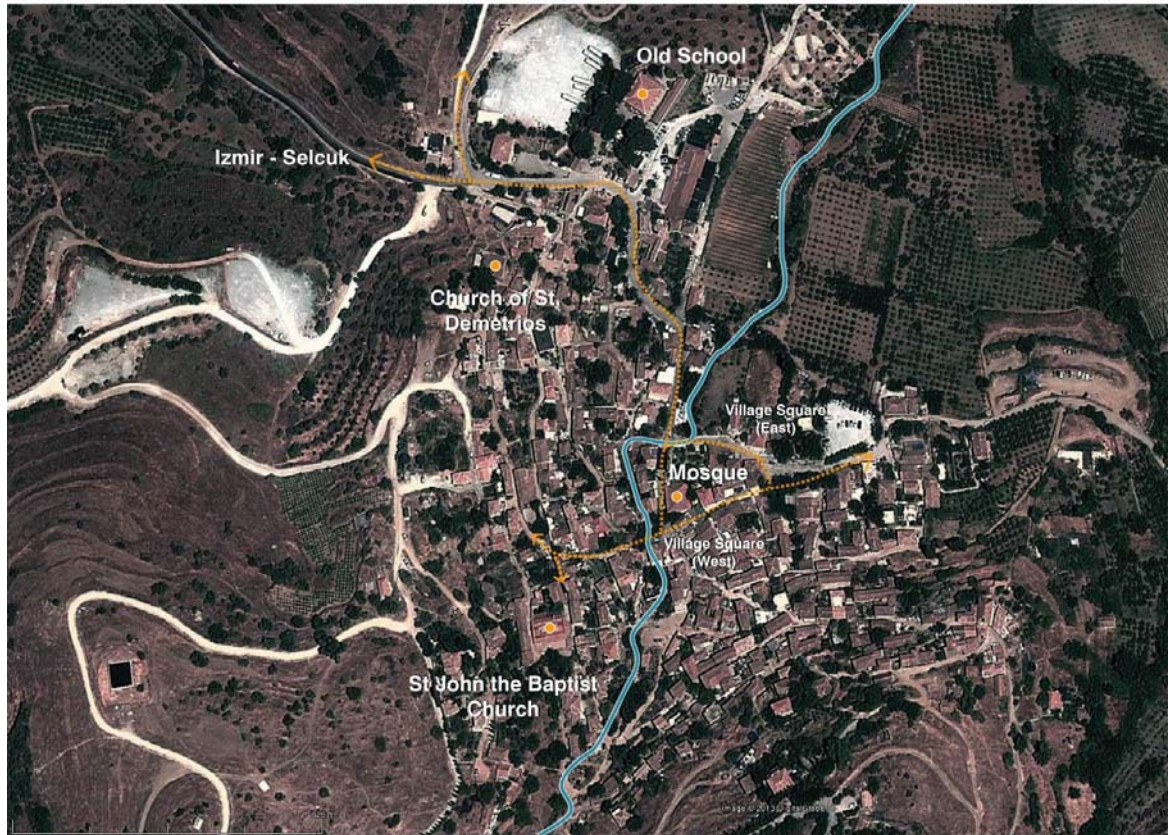


Figure 5 Sirince Vehicular Access (Edited from Google Maps)



## Geography

Sirince is located at the south and east sides of the valley. There are hills with higher elevation on the south and the east boundaries of the village. On the north side there is a plain, and there is a smaller valley on the western part of the valley. There are many vineyards, fields and gardens mostly in the plain area located outside of the residential settlement. However, it is possible to observe gardens inside of the village, as well.



Figure 6: Topographic Map of the Area (Retrieved from Google Maps, 2013)

### **Zoning, Entitlements and other Regulations**

Prior to 1978, there were not any specific initiations in terms of historic conservation in the village of Sirince. The first conservation program was in 1978, with the registration of two historic churches as historic monuments, namely, St. Demetrious Church and Church of St. John. In 1979, two houses were registered as historic landmarks by the Supreme Council for the Immovable Historic Assets. In 1984, Sirince village was designated as a Historic Site and an additional 88 houses were registered as cultural and historic properties.

In 1997, a more comprehensive conservation plan for the village was accepted and the Historic Site area was extended to its present formation by the Conservation Council. In addition, surrounding lands that are used mainly for agricultural purposes were designated as “Natural Sites.” Starting from 2002, Conservation Plan studies were initiated by the Turkish Ministry of Culture and Tourism in order to sustain the historic and cultural heritage of the region. These plans were approved in 2006 and many houses and buildings in the village were registered as cultural assets, totaling to a total number of 125 properties. (Akdogan, 2007)

Although there are not any specific zoning regulations for the area, the conservation plan brings comprehensive limitations and requirements for any new construction and restoration projects.

### **Sirince Village’s Architecture**

Most of the historic houses of Sirince date to the end of the 19<sup>th</sup> century and the beginning of the twentieth century. Presently, there are 125 registered historic

buildings in the village. These building are the Churches of St. Demetrious and St. John, 111 traditional houses, fountains, stores and a primary school. The school has been adapted for reuse as a restaurant. (Akdogan, 2007)

### Traditional Architectural Typology of Sirince

Traditional houses generally have two stories. It is possible to observe three-storied and one-storied buildings in steep or changing elevations; however, there are few in the village. More than half of the village's houses have courtyards, and access to the house is maintained through courtyards. Houses without courtyards have their main façade to the street. Generally, courtyard walls are not high. Rubble stone is used as the construction material for these walls, and are they covered with slate stone paving or earth.

In two-storied houses, the first level is generally used as storage or a barn and the second level is used as a main living area. Construction techniques of the two levels are different. The ground-level wall is constructed using a dry stone technique. Mortar covered rubble stone masonry is typical for ground-floor construction with lime mortar as a binding element. For the upper levels, wood construction covered with plaster is used. This typology of construction is generally used for the façades facing the streets. Rubble stone masonry construction may be observed in the rear facades of houses. The typical thickness of the stone masonry is 1.64 ft (50 cm), and in some cases it may be 2.3-2.6 ft (70-80 cm) (Figure 10). The materials used in stone walls are local in the area. This brown stone gives flat layers and it is easy to use in masonry and pavement applications.

In Sirince, houses generally are located parallel to the topography. In the southeast portion of the village (Istiklal Neighborhood), houses' facades are oriented towards the south, whereas, in the western portion of the village (Istihlas Neighborhood), houses' facades are oriented toward the north. There is an order in terms of orientation and height among structures in the village and that gives harmonious and aesthetic architectural that is characteristic to the village.

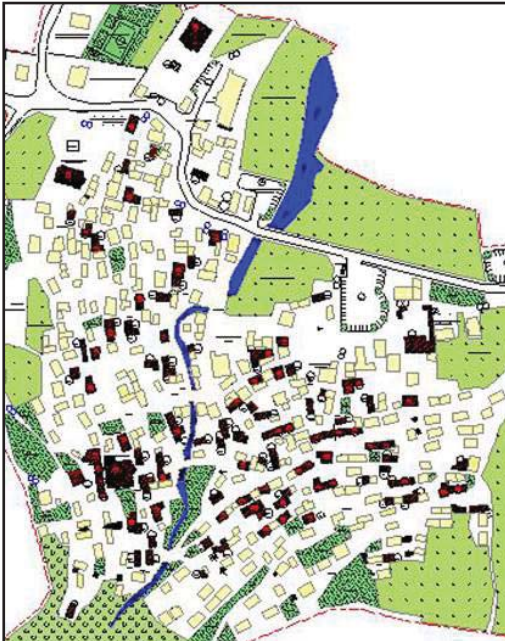
The elevation of a typical Sirince house is about 26.5 ft (8.10 m). There are also double-sized elevations with 52.4 ft (16 m), narrow elevations with 17.7ft (5.4m) and half-elevations with 13.2 ft (4.05m) dimensions. Houses with L-type plans have wider and narrow elevation formations in one façade. The average height of the second floor ceiling height is about 8.85 ft (2.7 m) Ground-level ceiling heights are generally higher with 11.5 ft-13 ft (3.5 m-4 m) compared to second-level ceiling heights. Generally, ceiling heights of ground levels change in order to create a harmony and alignment with adjacent houses' heights. In addition, houses do not block adjacent houses' visual connection to the panorama of the valley. Traditional houses have pitched roofs and sloped roofs covered with traditional tiles.

Common architectural typology is that the second floor of the houses may get larger towards street; these parts are supported with diagonal buttresses. (Figure 8) There are houses without extensions, but in these houses the distinction between first and second floors are highlighted with architectural elements like moldings and cornices. Usually, these extensions vary between 1.3 ft and 2 ft. (40 cm and 60 cm). In traditional Sirince houses, there are no balconies on the second floor, but there may be oriels (Figure 9) (Yapi, 2009).

### Modern Architecture in the Area

After 1960, various structures were added to Sirince Village. Most of these structures followed traditional building construction techniques and architectural appearance. Conservation plan studies involved identifying modern structures that are inconsistent with the historic fabric. Such properties should be modified according to the conservation plan criterion. Moreover, if there are any illegal properties in the area (squatter houses), these structures shall be demolished.

Recent municipality development plans for the area are highly controversial due to their strict regulations. According to the plan, if a property is registered as a cultural asset, it is prohibited from having any major changes to building exteriors and interiors. Some of these properties, which are registered as cultural assets and preserved under the conservation plan, require comprehensive structural renovation and major architectural intervention. Therefore, acquiring the necessary permits is challenging for most of the cases.



**Figure 7: Historic Houses of Sirince**  
(Uyar, 2004)





**Figure 10: Renovated Historic House**



**Figure 8: Traditional House and Building Materials**



**Figure 11: Renovated House with an Oriel**



**Figure 9: Roof Cornice Detail**





**Figure 13: Extrusion with wooden supports**



**Figure 12: Traditional house with exposed building materials**





**Figure 14: House which is not renovated with second floor living area**



**Figure 15: Abandoned house, highly damaged**

## **Functional Considerations and Program**

### **Special Problems, Issues and Possible Examples**

Turkish village life has many cultural, socioeconomic and traditional layers that contribute to the country's culture. It is possible to observe different attributes of traditional Turkish culture in these villages. Each village has different attributes related to the specific region, location, climate and culture.

Some of the important cultural elements of these villages are handicraft production, agricultural production, and regional cuisine and folkloric attributes such as traditional music and dance. These cultural elements pass from one generation to the next one. Traditionally, elderly people in the families, masters of any craft branch or any knowledgeable individuals in a village educate the younger generation and, therefore, they create a sustainable culture. However, from the beginning of the twentieth century, a decrease in the village population began. According to the data obtained from the Turkish Statistical Institution, in 1950, 75% of the total population of the country lived in villages, whereas this number dramatically decreased to 35% in 2000. The main reason for this decrease was changed living conditions. Cities' possible opportunities started to become more appealing for villagers in terms of job opportunities and better living standards. This negatively affected continuation of traditional culture in villages. Although the village of Sirince is rather popular due to its proximity to major tourist destinations, its population continues to decrease.

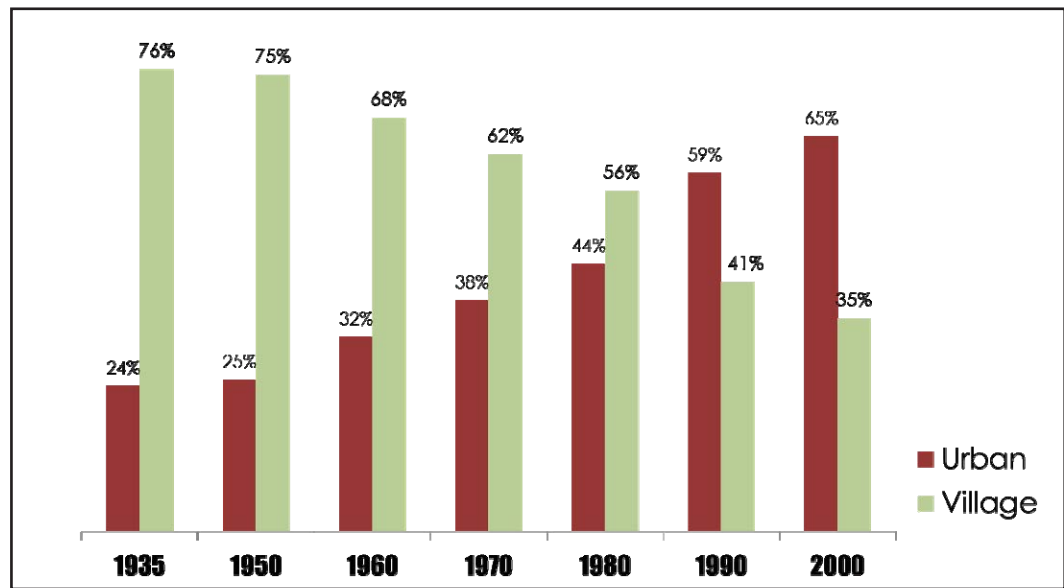


Figure 16: Population Change in Turkey (data from Saglam, 2006)

### Pragmatic Design Objectives, Approaches and Opportunities

The architectural formation of a cultural center, which fortifies cultural traditions and creates bridges between locals and visitors, diminishes the negative effects of migration and brings economic dynamism to the area is the aim of this thesis project.

Sirince Village is one of the important sources of cultural heritage. In the village, various handicraft and agricultural production like weaving, felt making, coppersmithing, glass jewelry making, pottery, wine production, olive oil production and natural soap production exist. This location is also excellent for its tourism potential. The popularity of the village increases each day, as the monthly tourist visitor numbers reveal. Proposing a cultural center where people can learn, experience, share and sustain their cultural riches can provide a viable cultural and economic base for the village population. This program will contribute to the development of the village area while preserving its cultural heritage and incorporating tourism as a supporting element. Thus, traditional elements of cultural

heritage and tourism potential of the village are important opportunities for the program.

## **Elements of Cultural Heritage**

### Weaving

Weaving is one of the most prominent and well-known Turkish crafts. Turkish carpets and rugs are made by hand. Their production techniques, colors and patterns change from region to region: for the Aegean region, carpet and rug weaving is important; in Selcuk and Sirince areas, silk weaving is a common practice.

Colors and patterns of carpets and rugs tell stories. Different colors have different meanings in regional part of the country. (Figure 22) Therefore, besides being functional and decorative elements, these products transmit stories associated with their patterns and production to the next generations.

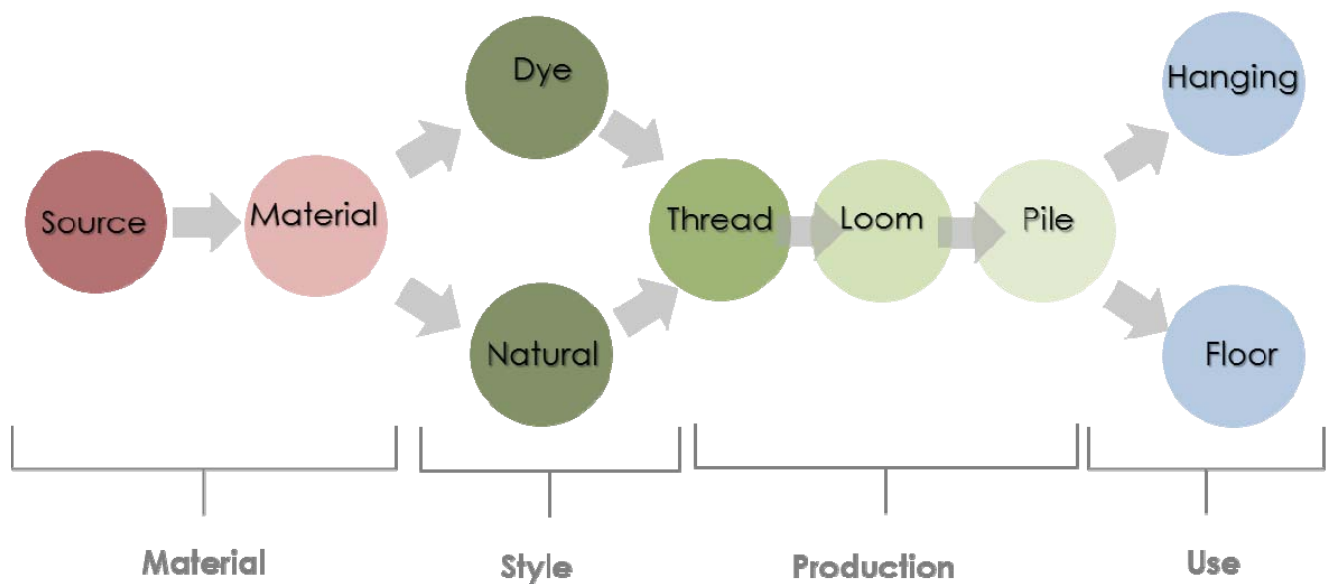
The construction methodologies of carpets differ, but the most common practice is using the double-knot method (also called Turkish Knot) to weave. There are various materials and tools that are used to weave carpets. The most important tool is the loom, which is the main frame where the weaver works on a carpet. Most commonly vertical looms are used in traditional carpet production, but horizontal looms are also used. Vertical threads that are strung on looms are called “pile.” The most common materials for carpet making are wool, cotton and silk. Most of the Turkish carpets use wool pile and wool as the main weaving elements. Silk carpets are the most intricate ones. Some silk carpets may contain more than 780 knots in one square centimeter. These types of carpets are used as decoration elements and hung on walls.

Wool and other weaving materials usually are obtained from local sources. This also creates a distinction between carpet and rugs from various regions.

### *Process and Required Space*

Carpet weaving is a very intricate and labor-intensive process. According to the details and size of the carpet, it may take up to couple years to finish weaving a carpet. Wool, cotton and silk are the main materials that are used.

The required space for weaving may be versatile and flexible. There are factory-sized workshops where mass production occurs, as well as small room-sized workshops where simply a loom and materials are located.



**Figure 17: Carpet Making Process**

### Coppersmithing

Copper is a highly used material in Turkey for many items, due to its abundance in the country. Only 20 years ago, copper kitchenware, pots and teapots were irrevocable parts of daily life. However, with the improving technology, other materials are taking the place of copper. Currently, copper is used mainly for decoration. There are four main production techniques for making copper products, namely, roughing, casting, plating and pressing.

As a process, after copper is obtained as layers, it is forged for a substantial time. This makes the material more malleable and strong. After that, the material is put on a specially shaped anvil to give its shape. The finished product is covered with tin (in Turkish “kalay”) if it is intended for use as kitchenware. The color of the material may be either reddish or silver like. Decoration, techniques such as embossing and crossing, are also used on the finished product.

#### *Process and Required Space*

The copper making process starts with raw material, which is generally a form of copper sheets. Then, it continues with forging it and giving its shape. Traditional Turkish coppersmiths use vertical thin anvils. They place copper material on anvil and forge it into shape. After that process, coppersmiths use different techniques to decorate the craft. These techniques are creating reliefs, hammering and bending. Different chemical applications may be used for finishes. These processes may give the copper a distinct reddish color or aluminum-like appearance.



In the copper workshops it is essential to have a working space where different sized vertical anvils are available. Some coppersmiths have mechanical rooms for rolling, indenting and processing the metal.

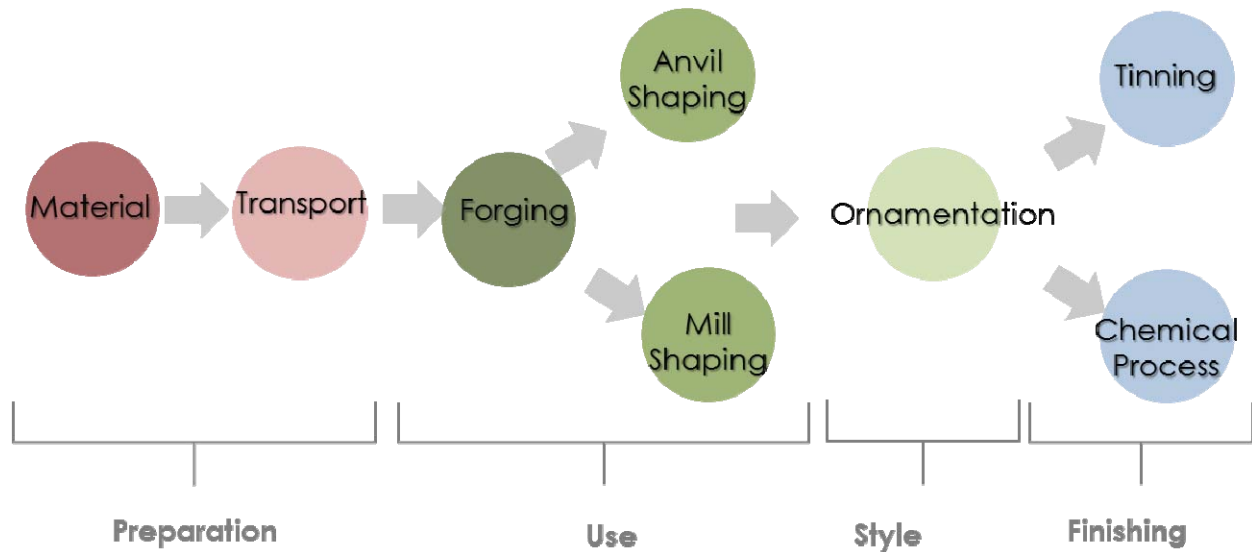


Figure 18: Copper making process

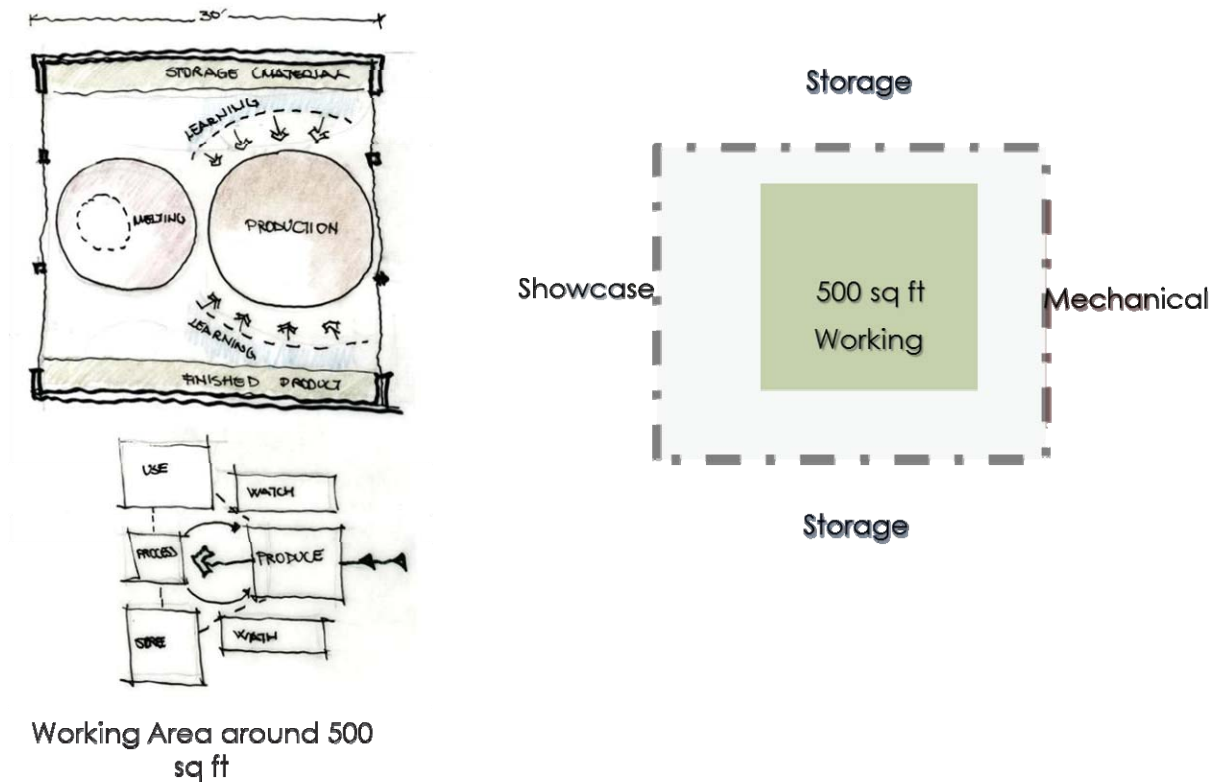


Figure 19: Coppersmith's workshop component



### Felt-Making

Felt is a tissue obtained by joining animal fibers, especially wool, under heat, dampness and pressure with the help of soap, oils and acid. After the wetting process, the hair is moved at a 90-degree angle towards the friction source and then away again, in effect making little “tacking” stitches. While at any given moment only 5% of the fibers are active, the process is continual, so different ‘sets’ of fibers become activated and then deactivated, thereby building up the cloth (kultur.gov.tr).

### Pottery

Anatolian ceramic art, whose initial source was the Turkish ceramic art outside Anatolia, became one of the predominant, widely respected and exported art styles under the Ottoman Empire. Many ink wells, bowls, long-spouted pitchers, carafes, goblets, oil lamps, vases, censers and plates were made by using such methods as hard white glaze or silvering. The clay used in ceramics is mixed with water, and becomes a thick, dough-like substance. It may be shaped by hand, in molds, by compression, by turning, or by other techniques.<sup>1</sup>

Ceramic objects are covered with a transparent glaze. This consists of metal oxide and helps to provide and fix the colors at high temperatures. Metal oxides enhance colors and can be used singly or mixed to create different colors. The metal oxides used for coloring are chrome, iron, tin, copper, cobalt, manganese, zircon, nickel, vanadium and rutil. Tin and titanium are used for opaque glazes (kultur.gov.tr).

---

<sup>1</sup> <http://www.kultur.gov.tr/EN,35236/traditional-arts-using-clay.html>

The “Guvec,” is an earthenware cooking pot commonly used in Turkey. There are various special foods that use the “guvec” as their primary cooking pot and it is integrated into daily modern life in Turkish families.

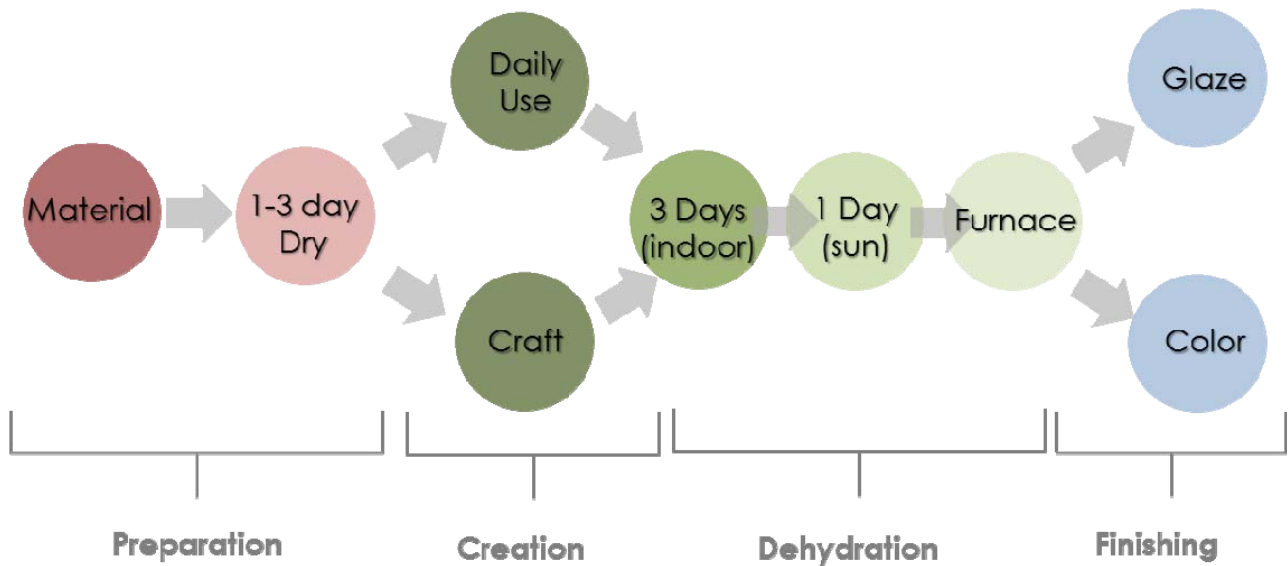
#### *Process and Required Space*

Pottery making has some specific production processes. First, necessary earth-base materials are prepared (clay). These materials are dried for one to three days. The duration may be different according to the use and type of the pottery and, after that, the clay is shaped via a turntable. Traditionally, artists turned these turntables with their feet while working on their crafts. Currently, motorized turntables are widely used. This process is about the transformation of the clay. A subtle hand gesture of an artist may change whole appearance of the craft. When the crafts take their final shapes, the dehydration process begins. Time of this phase differs from region to region, but generally, allowing for four to five days for the dehydration process is common. During that stage, crafts are kept in indoor areas, then outdoors, and then they are put in a furnace as a final stage. After the product becomes completely dry, the desired color and veneer is applied to the potteries at finishing stage (Figure 20).

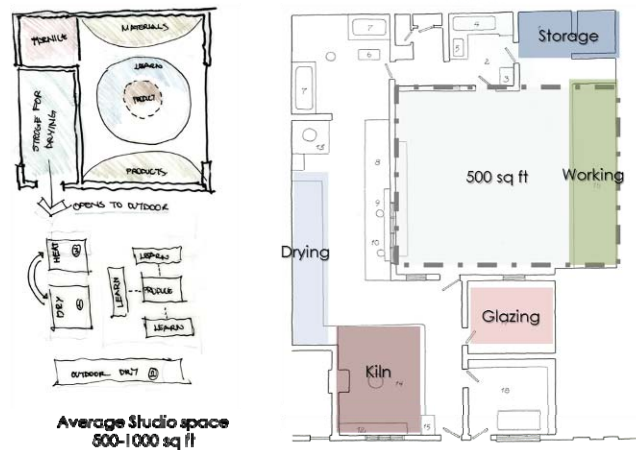
Similar to the production methods, pottery workshop formation differs according to the region and products. Fundamental elements of pottery workshops are working areas, which include turntables and storage spaces, dehydration rooms/spaces, a room for the kiln (outdoor or indoor), glazing areas and wet areas.

Working spaces of the workshops change between 500 sq ft and 1000 sq ft, which allow for three to four people to work simultaneously. Most of the pottery

workshops have a direct connection to the open area or courtyard to have an easy access to outdoor drying areas. Using sunlight in the dehydration process is a common application in the Aegean region of Turkey (Figure 21).



### Figure 20: Pottery Production Process



**Figure 21: Main Spatial Components of a Pottery Workshop (Plan Edited from Glassie, 1993)**

## Glass

Glass is an important material for Turkish art and craft. There are many different examples of glass materials, but the most famous one is the “nazar boncugu,” evil eye beads. The first examples of these glass beads, which was used to ward off the evil eye, were produced in the village of Görece in the province of Izmir. Evil eye beads can be seen today in every corner of Turkey.

It is believed that all living and non-living things can be protected from the evil eye by such beads. It is also believed that these beads serve to divert malicious evil eye glances. Amulets to ward off the evil eye are therefore put in places where everyone can easily see them ([kultur.gov.tr](http://kultur.gov.tr)).

## Woodworking

Wood is a highly used material in art and craft objects in Turkish culture. There are many functional and decorative elements that use wood as their main element such as cane sticks, musical instruments, packsaddles, wooden spoons, architectural applications/ornaments and furniture.

There are many different techniques in wood craft production. Inlaying, which is made by putting mother of pearl pieces in wood, in addition to engraving and woodcarving, are among the most popular techniques.



**Figure 22: Turkish Carpets (Creative Commons, ©Rick Payette)**



**Figure 23: Turkish women use vertical loom to weave carpets (Creative Commons, ©pennews)**





**Figure 24: Felt products in Sirince Marketplace**



**Figure 25: Handmade olive oil soaps and "evil eye" beads in Sirince Marketplace**



**Figure 26: Artisan makes glass jewelry in front of St. John's Church**

## **Tourism**

Tourism is an important economic resource for Turkey. Especially, for specified locations, the importance of Tourism is considerable. Because of Sirince's convenient location and approximation to Ephesus and Kusadasi, it can benefit from tourism. Demonstration of authentic cultural life and its products to visitors is viable for the tourism industry.

According to the data of Ministry of Culture and Tourism of Turkey, more than one million native and foreign tourists visit Kusadasi and Ephesus each year. Besides, recreational and summer tourism, visitors recently started to discover the area with tourism trends like "terroir tourism" and cultural tourism. The word "Terroir"—in French means place—is used to express a set of special characteristics that when the geography, geology and climate of a certain place interact, the plant's genetics are expressed in its agricultural products.<sup>2</sup> These excursions aim to give a sense of the real culture and an opportunity to experience it.

Potentially, tourism may provide Turkey with important financial support, which is necessary to sustain traditional crafts, cultural values and improve living conditions in Sirince. Hazel Tucker explains that notion in his book as follows: "Tourism is now recognized as a major player in the interaction between the local and global, especially within economic and social process." (Tucker, 2003) Although tourism is a part of the village life, there is not any specified tourism management program in the village of Sirince. There is not any proper visitor center where

---

<sup>2</sup> <http://www.musingsonthevine.com>



individuals may obtain collective data about the area's characteristics such as culture, history and regional crafts.

Incorporating the major tourism market that exists in nearby locations like Kusadasi and Ephesus would enhance the village's economic standing. This move may also complement the success of the proposed craft and culture center idea. The crucial idea is to make tourists visit an interesting and unique experience. All traditional values of the country show distinctions in terms of occurrence and production methodologies. Thus, a cultural center in place would be ideal for comprehending Aegean Turkey's authentic cultural heritage elements.

#### Tourist interaction

In Sirince there are various accommodation opportunities such as hotels, boutique hotels and pensions. Most of these facilities are traditional residential buildings, and owners have conserved the authentic architecture of these buildings since it is a main attraction point for visitors. In addition, there are restaurants and cafes in the village and traditional Turkish cuisine is the main theme for these restaurants.

Interaction between sellers and the visitors in terms of marketing and trade is mainly conducted via stalls. (Figure 28) These stalls are located on both sides of the streets. Sellers use a textile cover on the top stalls to protect merchants and themselves from weather conditions. These elements make it difficult to observe the architecture context of the village, since they cover most of the first level façade of the houses. Besides, textile overhangs prevent having to see upper levels of the houses.

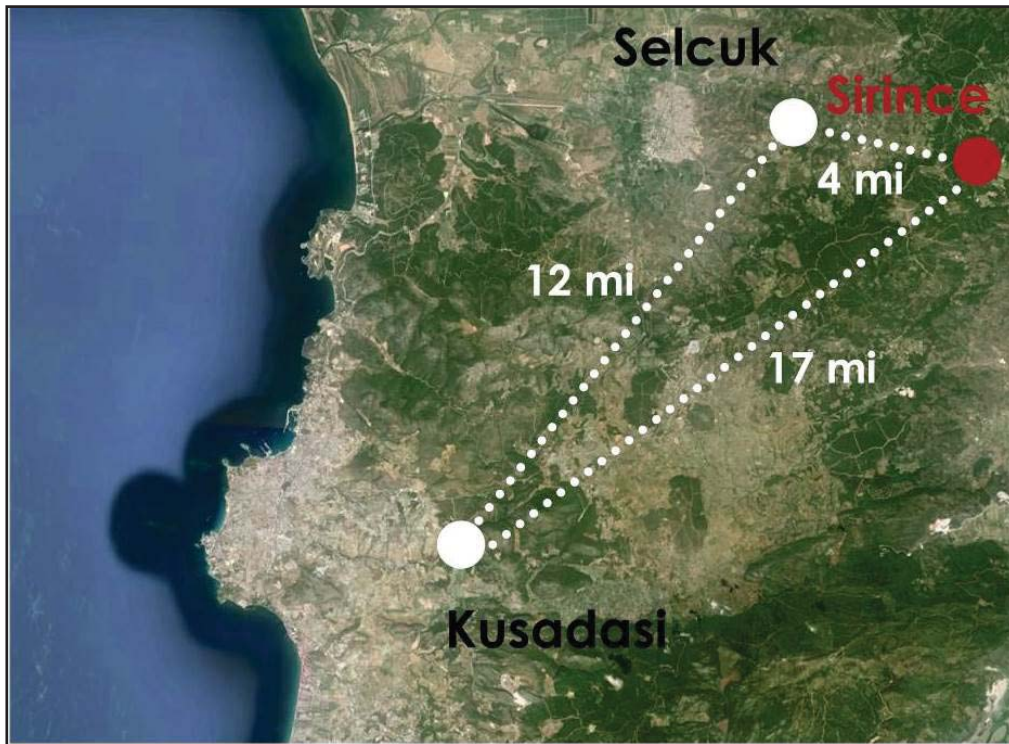


Figure 27: Sirince and major tourism destinations in the area (edited from Google Map 2013)



Figure 28: Tourist Attractions in Sirince (edited from Google Earth, 2014)



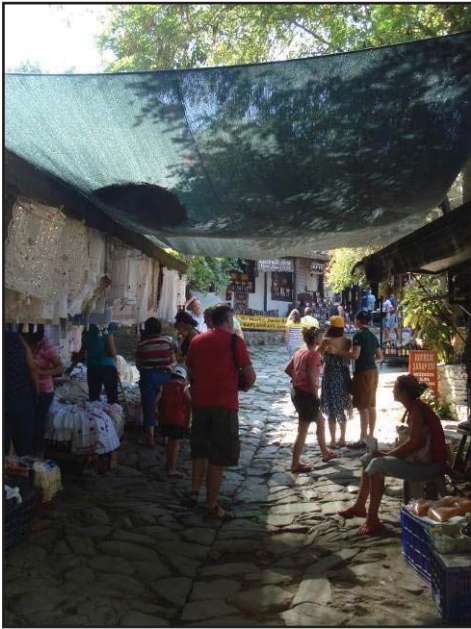


**Figure 29: Stalls on the main street**



**Figure 30: A villager sells "tarhana" in streets**

\*tarhana: a dried foodstuff made chiefly of curds and flour to make a traditional Turkish soup



**Figure 31: Sirince marketplace with visitors**



**Figure 32: Ephesus Celcius Library (Creative Commons, ©eleephography)**



**Figure 33: Ephesus Amphitheater (Creative Commons, ©HBarrison)**



## **Program Formation**

The proposed program includes a village cultural center that can be used by both villagers and visitors. Education programs related to cultural heritage elements of the region will be the primary focus of the program. Thus, understanding of the program elements and regional requirements are crucial. In order to decide the exact location and formation of the program, some alternatives have been considered. These alternatives are: a formation that is connected to the village, a program which is located in between village center and the Selcuk town center, satellite/scattered composition of a program and a central structure with the addition of mobile components.

### Program: Connected to the Village

A program formation that is connected to the village is favorable in terms of the accessibility for villagers. In this case, a cultural center will be located in the Sirince Village. This may enable more cohesive interaction within the new proposed program and village life. However, there is an effective comprehensive conservation plan, which makes it difficult to propose a new building structure for the village. Authorities favor adaptive reuse and restoration projects for proposed programs. In addition, steep topography, narrow street grids and delicate existing architecture patterns are other important consideration that may affect the proposal of a new structure in village.



#### Program: Outside of Village

In between Selcuk town and Sirince Village, there is approximately four miles of long crooked road connections. Its location and this road would be a possible location selection for this program.

There are several possible attributes for this case. Public transportation, shuttle services between Selcuk and Sirince, works on this road. It may be more appealing for tourist volume due to its proximity to Selcuk and Ephesus.

However, this location makes it difficult for pedestrians to have access to the program. This is an important aspect since children and young adults should use this center to learn cultural heritage elements from knowledgeable adults. Pedestrian access may be the most convenient solution for the village population.

#### Program: Scattered/Satellite

This formation suggests different sized modules located in different locations in the village. Instead of using one centralized structure, smaller satellite buildings may serve as specific programmatic functions.

This formation provides flexibility in terms of land use and program separation. Some of the craft production techniques cannot share the same location. Thus, this formation may be both convenient to separate program requirements and for providing other opportunities as covered. This formation could support adaptive reuse of existing buildings in village.

One drawback for this format may be difficulties in terms of communication between modules. Contribution, sharing and experiencing will be core values of this

cultural center; therefore, a constant interaction between visitors, instructors and students is desired.

#### Program: Mobile Component

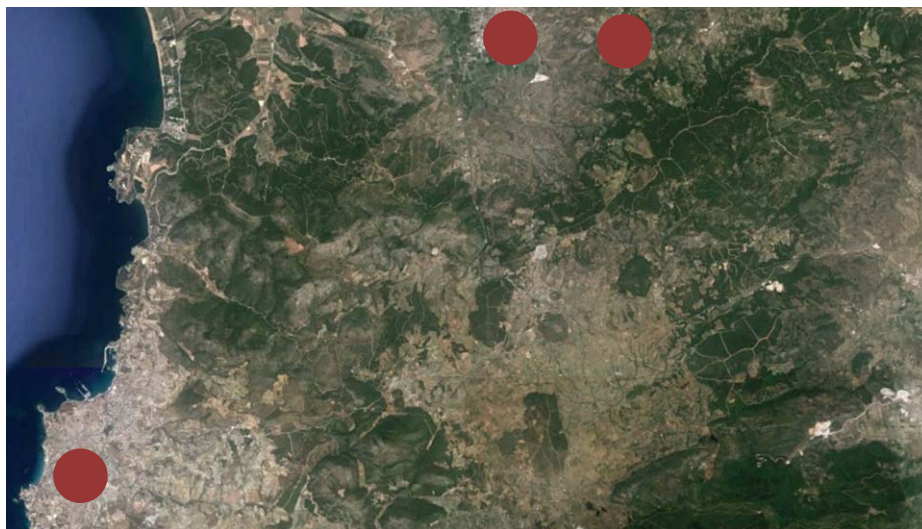
Alternatively to previous examples, a mobile component may be added to a centralized or satellite formation. A mobile component is the auxiliary extension of the program, which may extend the potential area of service of the center. It may also provide an introductory example for the ongoing experiences of a cultural center.

There are similar examples around the world, in terms of mobile exhibitions, information and workshop vehicles. Similar strategies may be adapted for this specific case.

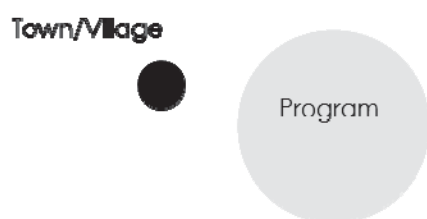
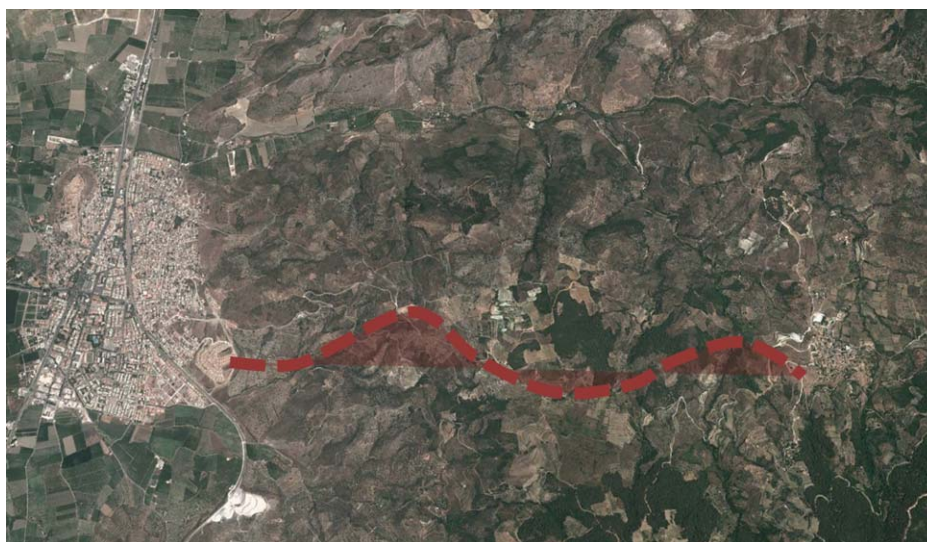
#### Program: Hybrid Formation

Each of these different program proposals has important positive characteristics along with some drawbacks. The ideal formation would be to integrate positive attributes of these different styles.

Therefore, a hybrid formation that takes advantages of the site, architectural formation, regional characteristics like culture and climate, would work best for this case. Each programmatic element requires different spaces. In addition, interaction of these elements within each other may be different. For instance, craft workshops and exhibition areas may be integrated, whereas, eating facilities should be located away from these areas. Thus, a cultural center structure may encompass some of the programmatic elements and other elements may be located in different locations as smaller structures.

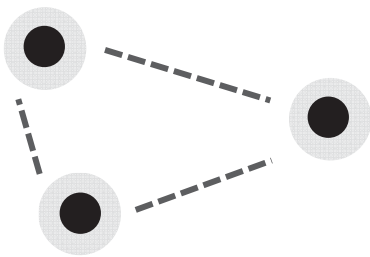


**Figure 34: Program in Village (edited from Google Earth)**

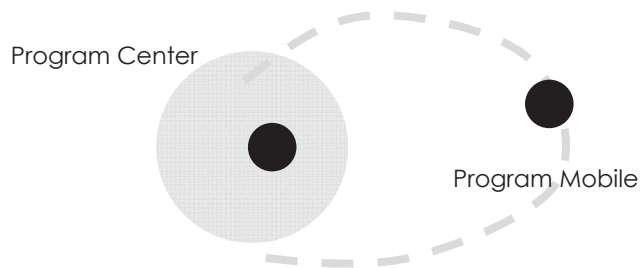


**Figure 35: Program out of Village (edited from Google Earth)**





**Figure 36: Program-Satellite(edited from Google Earth)**



**Figure 37: Program-Mobile (edited from Google Earth)**

## **Precedents Analysis**

Different architectural and cultural structures and formations give important insights about this program. Other handicraft production ateliers are helpful for understanding the architectural requirements of the necessary programs. In addition, cultural centers and educational centers that use vernacular architecture and green design ideologies set imperative precedents for this program. Sirince village has an important historic context and architectural language. Therefore, understanding adaptive reuse application and integration of contemporary design methodologies with existing structures are imperative, as well.

For this program, precedents are studied under three main titles. These subjects are program and site, historic context and linkage.

### **Precedents: Program and Site**

#### Environmental Nature Center, Newport Beach, CA

This facility is designed by LPA Architects and Landscape Architects. This building is a net zero energy/carbon building and has LEED Platinum certification. Project goals are serving community by offering multiple integrated activities like laboratory research, education, gatherings and sustainable living workshops.

This is a single-story, 9,000 square foot building. In its construction, regional, reused and salvaged materials are used. Use of natural light, building's orientation, and energy and water savings are some of the key consideration points of the design.



Building design is aimed to integrate the structure to the surrounding environment. Therefore, earth-tone colored materials are used to create a feeling of a building as an extension of the nature.<sup>3</sup>

#### Hawaii Preparatory Academy, Kamuela, HI

Flansburg architects designed this LEED Platinum certified environmental friendly building, which measures 6,100 square feet. Conceived as a high school science building dedicated to the study of alternative energy, the new Energy Lab at Hawaii Preparatory Academy functions as a zero-net-energy, fully sustainable building.<sup>4</sup> Space arrangements are made to create a convenient flow within the programs. Integration with the site was crucial for design to get maximum benefit from day lighting, passive heating and cooling strategies.

### **Precedents: Historic Context**

#### Pier Arts Centre, Orkney, United Kingdom

This art center and exhibition building was designed by Reich and Hall architects. The project involves two stages: renovation of the existing buildings and addition of the new extensions. Structures occupy more than 11,000 square feet area. Being respectful to the existing fabric, while proposing an innovative and a contemporary design, were some of the key elements. Existing buildings have a harmony with the

---

<sup>3</sup> Green School Primer: Lessons in Sustainability. Mulgrave, Vic: Images Pub, 2009. Print.

<sup>4</sup> <http://www.archdaily.com/64732/hawaii-preparatory-academy-energy-laboratory-flansburgh-architects/>

site. Architects wanted to maintain this characteristic in new structures, as well. Thus, new designed buildings became part of the urban topography, as well. This center has programs such as offices, a library, an artist studio, exhibition places and collections.<sup>5</sup>

#### Selexyz Dominicanenn Bookstore, Maastricht Netherland

This is an impressive adaptive reuse project done by Merckx + Girod Architects. Dominican Cathedral, a 13<sup>th</sup>-century structure, is used as a new retail store of a nationwide bookstore. Architects proposed a modern structure inside of this historically and spiritually important building. Chosen material colors and textures aimed to create a contrast between old and new. A subtle lighting system is introduced to maintain the spiritual atmosphere of the cathedral. New design has its own structural supports to avoid interaction with existing columns' load-bearing capacities.<sup>6</sup>

---

<sup>5</sup> <http://www.pierartscentre.com>

<sup>6</sup> Jäger, Frank P. *Old & New: Design Manual for Revitalizing Existing Buildings*. Basel: Birkhäuser, 2010. Print.



**Figure 39: Inside of the Cathedral with the new addition (used with permission of ©Terry Zink, UMD Arch'13)**



**Figure 38: Cathedral's column and Bookstore's Mezzanine (used with permission of ©Terry Zink, , UMD Arch'13)**

## **Linkage**

### Parc de la Villette, Paris, France

Bernard Tschumi's contemporary urban park design, Parc de la Villette, is an important example for understanding the relationship between the experience and the connection. Tschumi's design has multiple layers that overlap and juxtapose with each other to create a unique experience. There are three elements that are important: lines, nodes and paths. Paths are the circulation pattern of the park: nodes are follies that create event spaces and lines are the grid system that organizes all of the elements.

## Il Forte di Fortezza, Fortezza, Italy

Originally built in 1838 the Fort of Fortezza is located in the southern Tirol region of northern Italy. Original architecture of the buildings reflects heavy and powerful medieval style with granite masonry walls, vaulted ceilings, stone stairs, and rough passage ways. Architects Markus Scherer's and Walter Dietl's intervention to the structure is as powerful as the original architecture. They employed simple materials like concrete and matte-black galvanized steel to competent existing structure. This design links existing building with each other to create a holistic experience. This is the area's biggest cultural center and it encompasses different activities.<sup>7</sup>

---

<sup>7</sup> Blois, Charles. *Old Buildings, New Designs: Architectural Transformations*. New York: Princeton Architectural Press, 2012. Print.

## **Craft Production Places**

### Pottery

Traditional pottery ateliers in Turkey have similar characteristics. One of the differences is the location of the kiln according to the region. Generally, in cooler regions, the kiln may be integrated into the workshop, whereas, in hot regions, the kiln is located outside of the atelier or in the courtyard area. Nevertheless, workshops with kilns located inside is common, as well.

As general architectural compartments, storage room, working area, wet areas, drying storages, kiln areas, glazing areas and so on are common for pottery workshops.

### Felt Making - Weaving

Weaving and Felt making have some similar characteristics in terms of their spatial requirements. Various types of spaces for weaving such as large scale carpet factories or 60 sq ft rooms where a loom can fit exist in Turkey. Thus spatial requirements are generally flexible for this craft. As a difference, felt Making Spaces requires a courtyard to wash and shape wools. Storage places are also necessary. However, similar to the most of the traditional craft production techniques, this craft does not require a specified space.



## **Chapter 2: Sirince Craft and Cultural Center**

### **Program**

#### **Program Components**

The Sirince Craft and Cultural Center aimed to be an integral part of the village. This center would be used by villagers, locals—individuals who live nearby towns and villages, craft masters, students, visiting artists, tourists and different organizations. This location would be an ideal place to observe Turkish culture and its elements, creative crafts, cultural and economic sustainability, cultural contribution, learning and sharing ideas. Therefore, this center would be a cultural learning, sharing and researching place where locals and visitors come together to experience and contribute.

#### **Crafts Workshops (2,000 sq ft)**

Craft workshops will be crucial elements of the program. Different crafts requires different architectural applications. For a group that studies a pottery, a studio with 800 sq ft would be appropriate. Similar to that, copper and metal workshops' sized would be around 800 sq ft, as well. In these workshops four to six people could easily work together. Weaving spaces may be flexible. Use of natural lighting would be main consideration for these workshops.

#### **Multi-Purpose Room (3,000 sq ft)**

A flexible multipurpose room would be used for presentation, large gatherings and performance activities. Movable walls may introduce flexibility into this space.

In addition to that, exhibition and museum components may be integrated into this space, as well.

#### Community Improvement (1,500 sq ft)

A community improvement room may serve as a main gathering place of the village. Weekly community meetings would be done in these areas. Gathering and information sessions related to the villages' daily lives like agriculture, veterinary and marketing may take place in this space.

#### Learning Spaces (1,000- 1,500 sq ft)

A series of classrooms may be integrated as a design for serving local students and other young individuals. These facilities would focus on arts and crafts.

#### Restaurant-Café (1,500 sq ft)

A eating place is necessary to serve visitors and occupants of the center.

#### Offices (400 sq ft)

Office spaces for administrative officials would be needed.

#### **Users**

This program may be used by Sirince villagers, craft masters, locals, visiting national and international artists, tourists, organizations, students and administrative officials. Each user would have different programmatic interaction. (Figure 41)

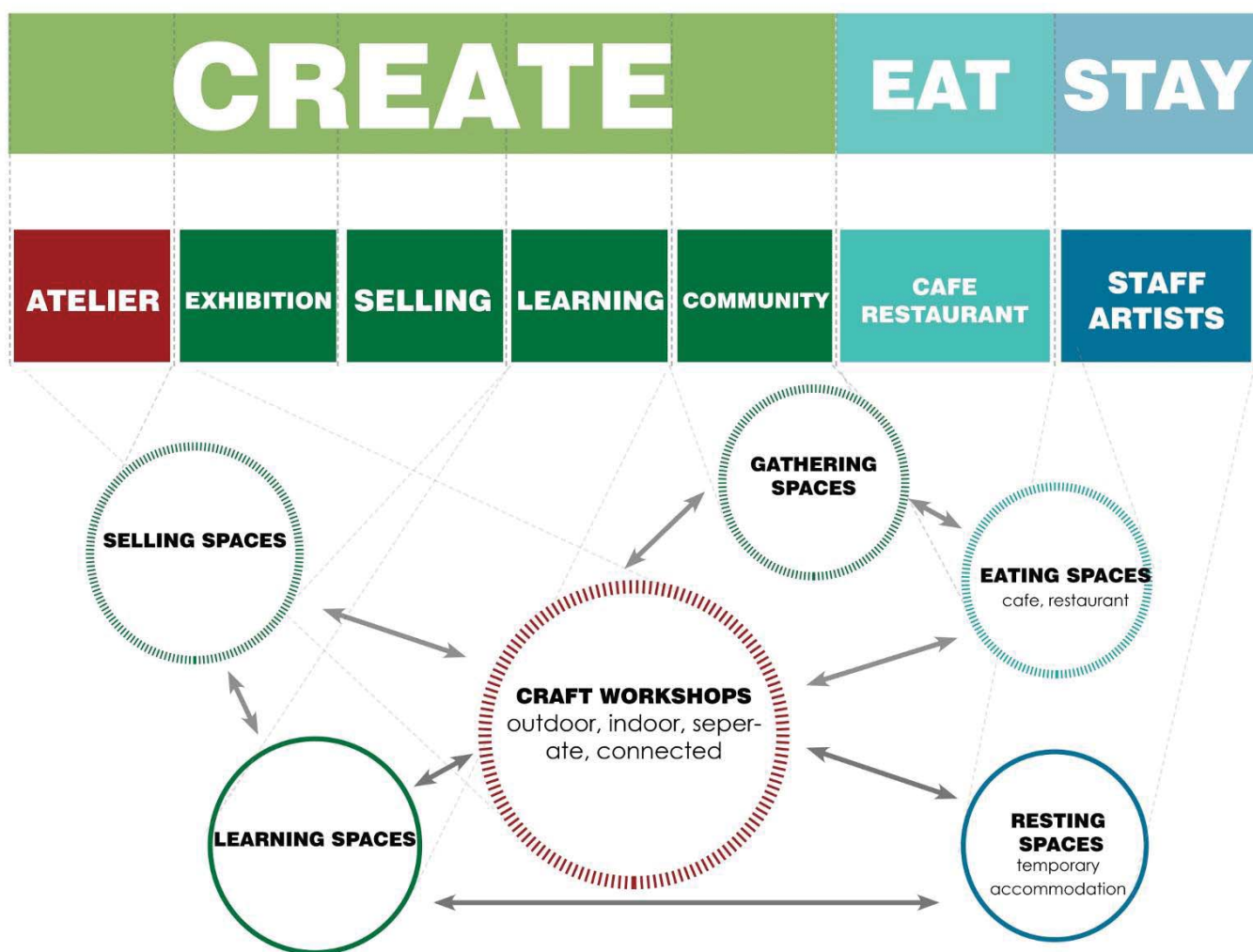


Figure 40: Program Components

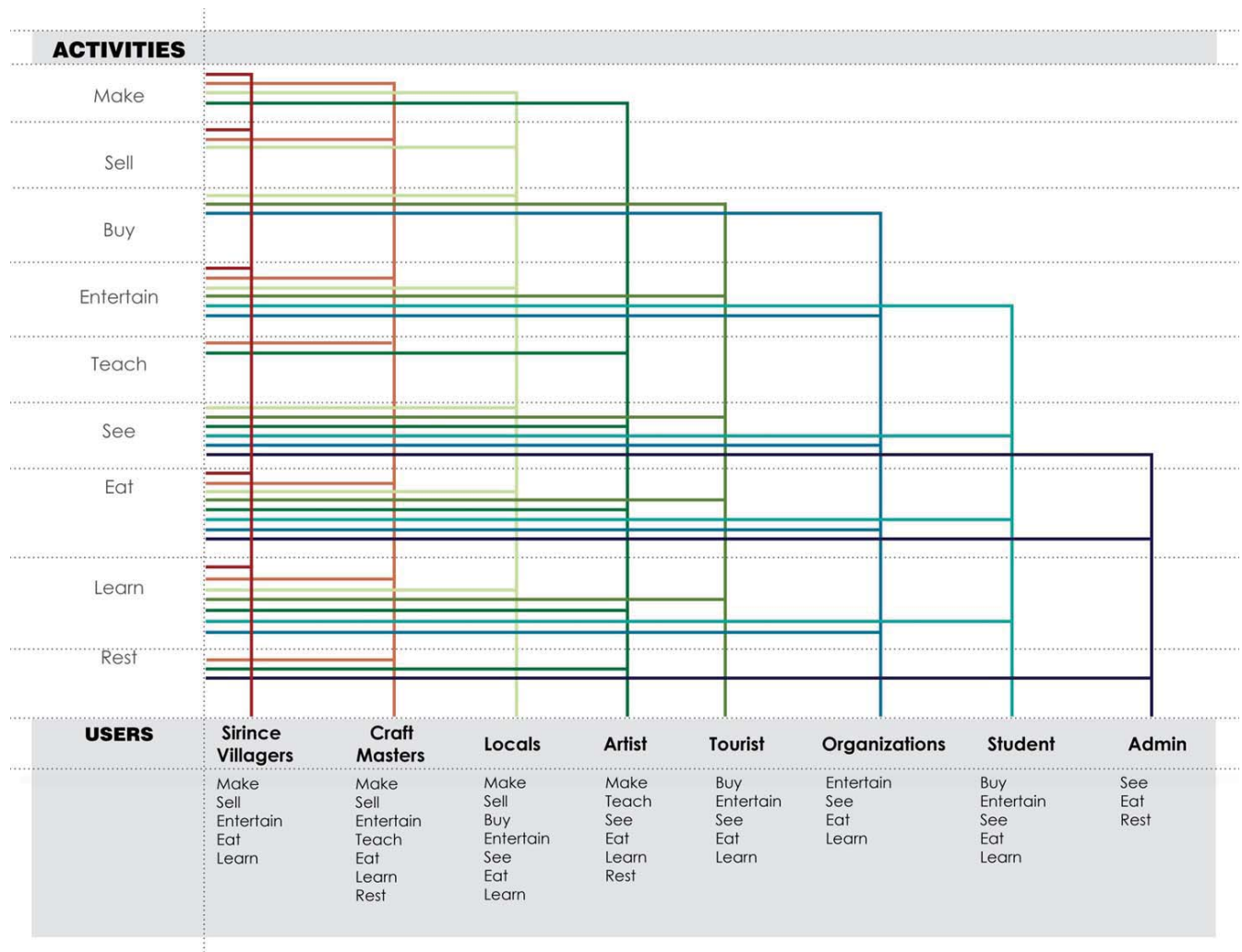


Figure 41: Users and Activities

## **Sites and Related Design Strategies**

### Village Entrance

A site in the Village entrance would be logical since it would work as a marker of the village's threshold. In addition, most of the plain areas are located at the north-west side of the village. Changing elevation in the actual village area may be challenging in terms of proposing a new structure. (Figure 42)

In this case, all of the programs would be gathered under one structure. This may be beneficial in terms of interaction within programmatic elements

### Village Entrance + Village (Existing buildings)

In this case, the program may be separated into different groups. (Figure 43) Therefore, different programmatic elements may be located in different areas of the village. This may allow a unique pedestrian experience. Besides proposed design elements may strengthen village's architecture statement. For instance, a visitor and culture center could be located at the village entrance. Some craft workshops might be integrated in village's existing structures. This may be helpful for separating incompatible programmatic elements from each other. In addition to that, metal and copper workshops may be located in other part of the villages due to their noisy working environment, whereas weaving workshops could easily be integrated in the village.



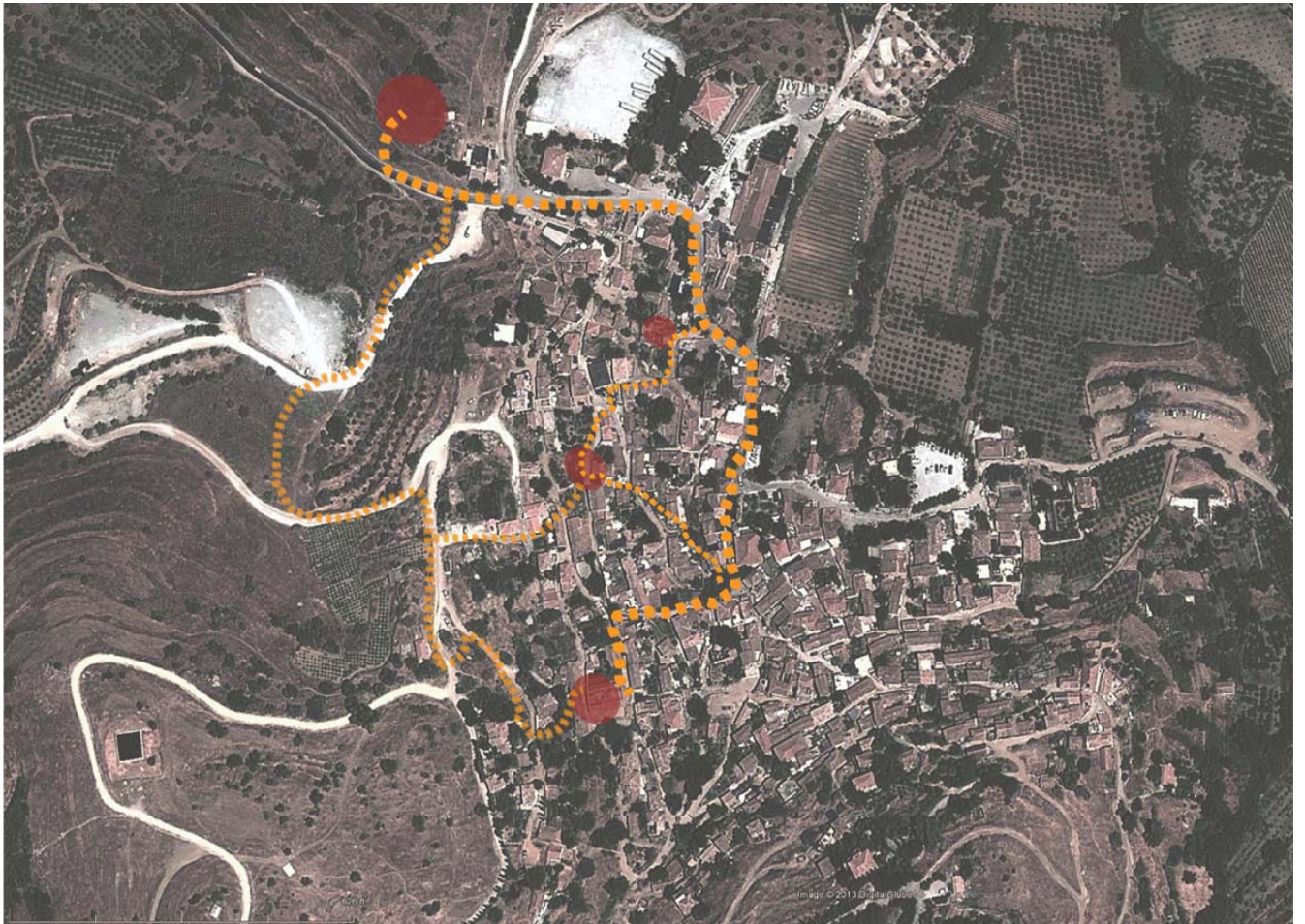
### Village (New Structure) + Village (Existing buildings)

As an alternative, a new structure may be proposed inside of the village. This may allow proposal of a new urban meaning for the specified area. All programs may be gathered in one structure or similar to previous scenario some program may be located in different locations. However, in this scenario, all of the proposed new and adaptive reuse designs would be part of Sirince village.



Figure 42: Sirince Village and plain sites (edited from Google Map image)





**Figure 43: Connection Plan; village entrance, village houses, St. John's Church (edited from Google Map image)**

## Opportunities

### Live/Work

Abandoned and damaged residences in the village may be adaptively reused. These places may become live/work spaces for craft masters, students and visiting artists. Essential construction methodologies, architectural composition and tectonics of these building may form guidelines. Contemporary materials and design application may be incorporated with these guidelines to propose a new sense of structure for craft workshops.



Figure 45: Existing damaged house



Figure 44: A live work space for craftsmen

### Courtyards–Public Spaces

Most of Sirince houses have courtyards. Introduction of different activities may change the appearance and the function of these courtyards.





**Figure 46: A dynamic courtyard with weaving activities**

### St. John's Baptist Church

The renovated St. John's Church is located on one of the highest points in Sirince. It has a different visual connection with its unique vista. In addition, this is one of the oldest structures in the village. However, this is not a museum; therefore, there is not any control in terms of future visitors. People could go inside the church and experience the old structure, but there is not any activity or information associated with it. This space may be used for various different activities and this landmark structure may become a part of the program.



**Figure 48: St. John's Church Interior**



**Figure 47: St John's Church Interior with Library Activity**



## Chapter 3: Strategies

### Strategies

#### Location for Proposal

Site selection was an integral part of the program. Since proposing a unique pedestrian experience is an important part of the proposal, possible appropriate locations were indicated.

To do so series of analyses were conducted. First, Sirince villages existing building and commerce condition were examined.

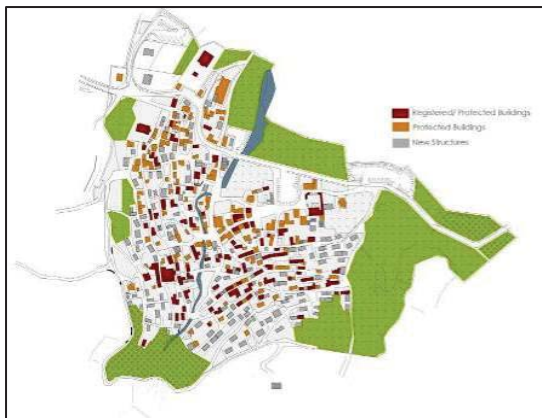


Figure 49: Sirince Building Conditions

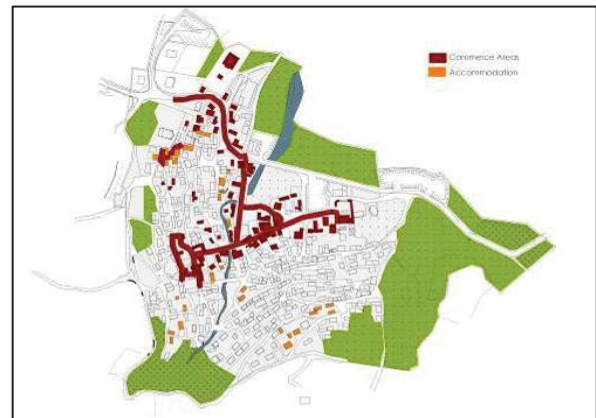


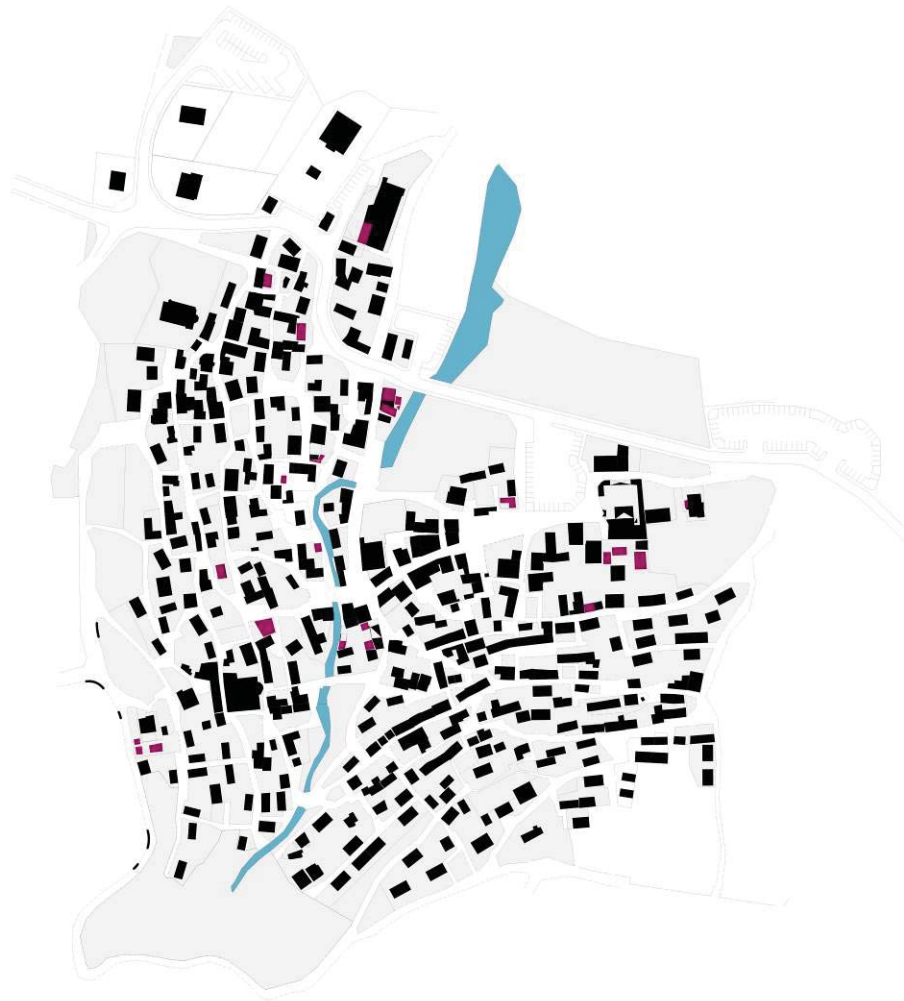
Figure 50: Sirince Commerce Corridor

In Figure 49, buildings registered as historic building in Sirince Conservation plan are shown with red, as protected buildings are shown in orange, and as new structures, which are not follow traditional vernacular architectural language, are shown in grey. Figure 50 indicates Sirince's existing commerce corridor. This

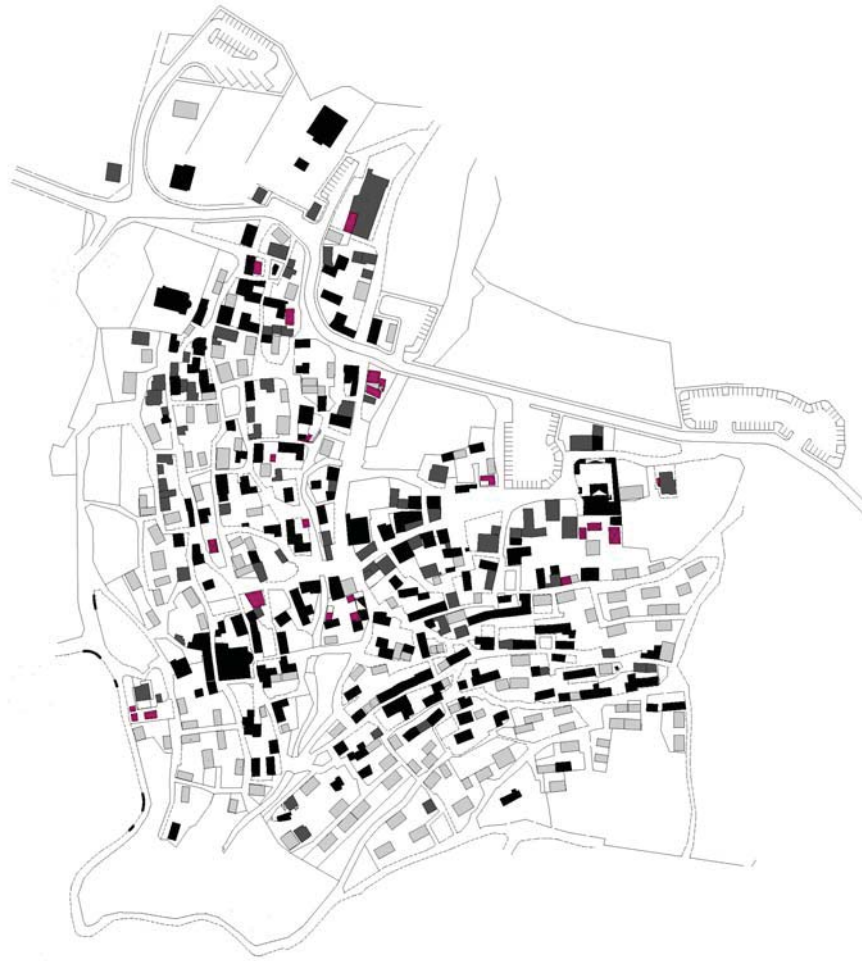
information along with the topographical characteristics of the site were taken into consideration while deciding about the possible intervention points.

#### Location Consideration According to the Buildings' Condition

Buildings' conditions according to the current physical condition, historical importance and location are mapped. In series of diagrammatic exercises, structures that follow Sirince village's vernacular architectural language were preserved. The aim of this hypothetical research is to be able to identify possible open areas within this village's urban conditions. Diagrams below demonstrate this process.



**Figure 51: Sirince Village buildings classified as out-of context**



**Figure 52: Modified Buildings**

#### Location Consideration According to the Topography

Sirince Village's topography is also another important determinant in term of location selection. Elevation change in Sirince village is calculated as 55 meters. Areas with 20% slope were determined as possible location for interventions. Data from topography and building type studies was juxtaposed to identify possible intervention areas.



Figure 53: Site Model Showing Elevation Change in 2m intervals

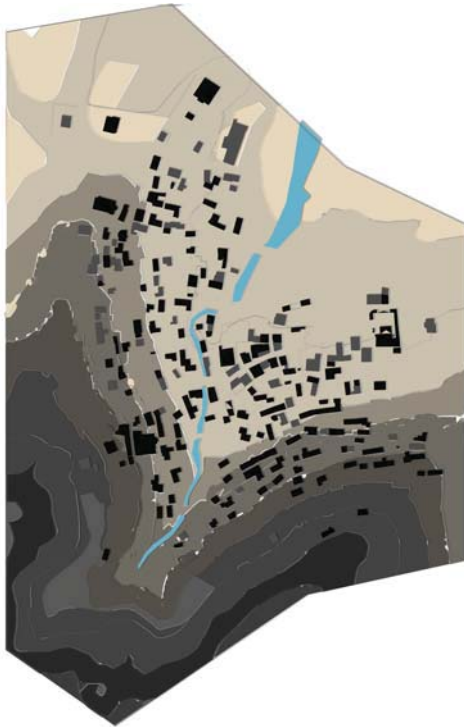


Figure 54: Topography Diagram

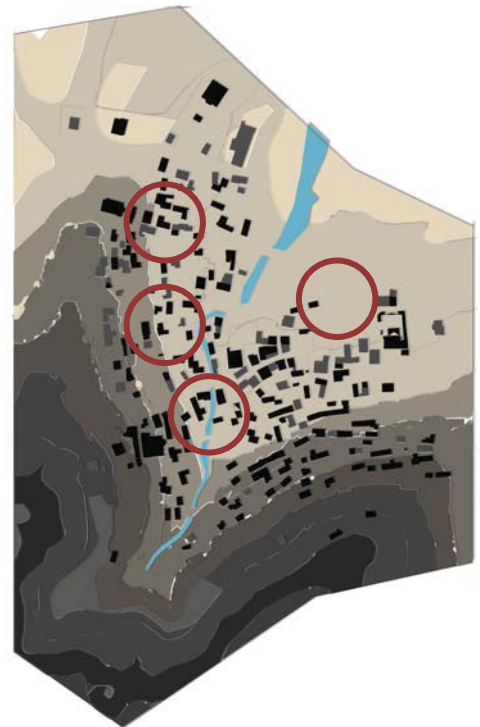


Figure 55: Possible intervention areas



### Program: Creating a Culture Village

Main idea of this proposal was to create a cultural center where locals and visitors may learn and share their knowledge about traditional craft making. This center was also intended to be a main tourist attraction point to provide more financial stability for the village. However, proposing a program that focuses only one location may have brought some restrictions. A centralized program may prohibit pedestrian experience within the village ( Figure 56). On the other hand, a program distributed within the village may encourage more pedestrian connections and a memorable visitor experience ( Figure 57)

“One of the greatest problems in existing communities is the fact that the available public life in them is spread so thin that it has no impact on the community...To create these concentrations of people in a community facilities must be grouped densely round small public squares which can function as nodes.” (Alexander, Christopher., Ishikawa, Sara.,Silverstein, Murray, 164)



Figure 56: Cultural Center (one center)

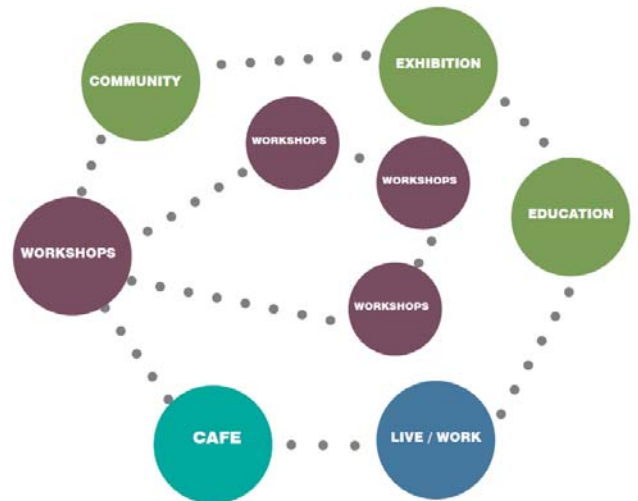


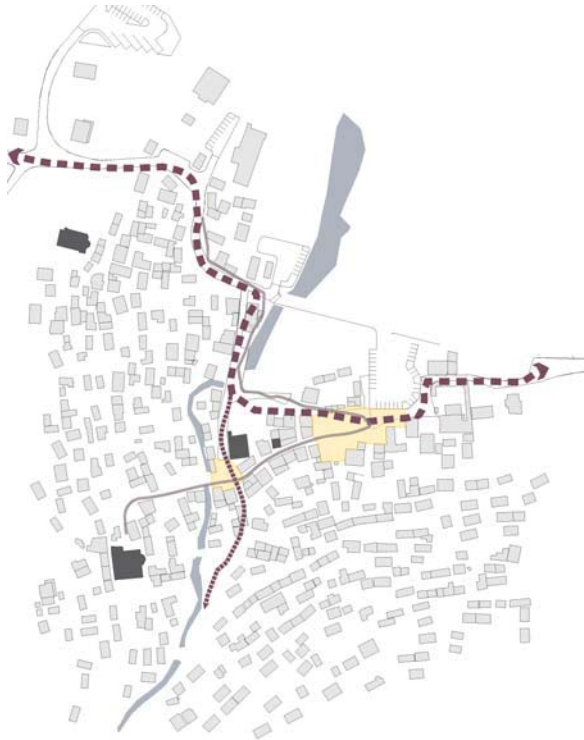
Figure 57: A village of Culture (satellite programs)



## Access and Circulation

Revising current circulation and access paths was another important strategy of this project. Current vehicular access to the parking lot passes through the public square. This inhibits the intended use of this space. Although Sirince Village's conservation plan proposes different vehicular access, this proposal was not adapted.

Pedestrian experience is an important part of the Sirince. Even though, elevation changes may be challenging for visitors, walking in the village provides a unique experience with different visual experience. Nevertheless, this pedestrian experience mostly limited within the path located between St. John's Church and the current parking lot. More opportunities in Sirince may be observed with introduction of various pedestrian experience linked to each other (Figure 58).



**Figure 58: Current Access and Circulation Diagram**

## Public Spaces as Event Spaces

Public space formation became an important part of the project due to adapting the distributed program formation. There are two main existing public squares in Sirince village. One of them is located in front of the parking lot and the other is located around village's mosque (Figure 59). A covered commerce corridor is located between these two public areas. As a part of a program improving these existing spaces' conditions and proposing new spaces was pursued ( Figure 60).

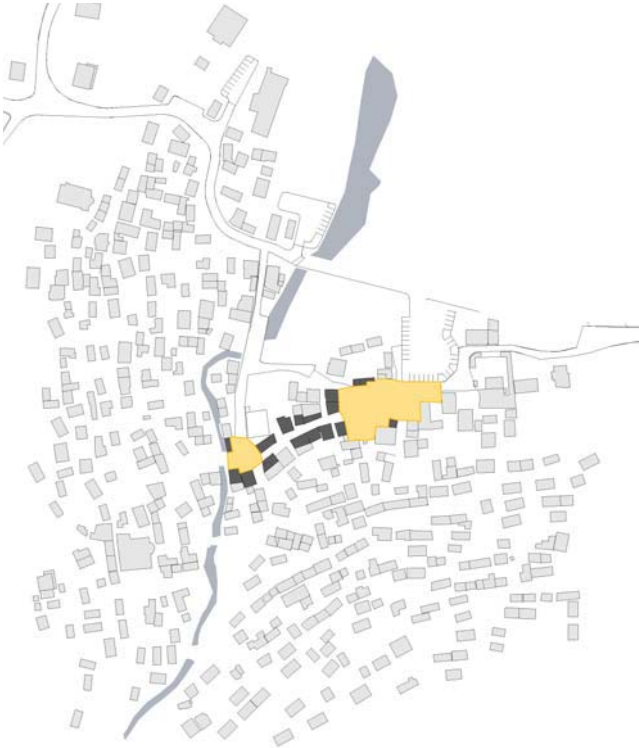


Figure 59: Existing Public Spaces

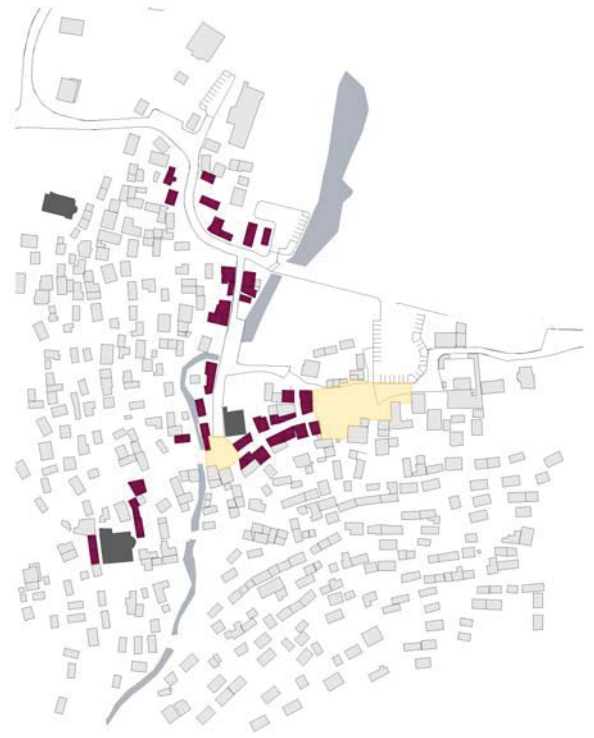


Figure 60: Existing Commerce Line



Figure 61: Existing Site Plan



Figure 62: Existing Conditions



## Understanding Public Space Formation in the Cultural Context

Understanding public space formation in Turkey and the Turkish villages was crucial. A comparison matrix is created to identify important public spaces' characteristic.



Figure 63: Urban Space Diagrams

In this matrix examples from Turkey; Ortakoy Square in Istanbul, Galata Square in Istanbul, Sirince Village Square, Sultanahmet Complex's Courtyard were examined. In addition, some prominent European examples such as Piazza Navona in Rome, Italy, and Amagertorv Square in Copenhagen, Denmark were studied as well. Understanding geometrical formation, access routes, edge condition and solid/void relationship were the main goal of this series of studies. As a result some similar and contrasting points of these examples were extracted. In European models, regularizing geometrical forms were important elements of the public spaces. As it is seen in the Piazza Navona example, the controlling geometry of the square defines this public area. In Turkish examples, this is not always the case. Most of time public spaces have undefined forms and ambiguous edge conditions. Most geometrical approach in public space definition may be observed in mosques' courtyards. In example of Sultanahmet Complex, a regularized space within the courtyard may be seen.

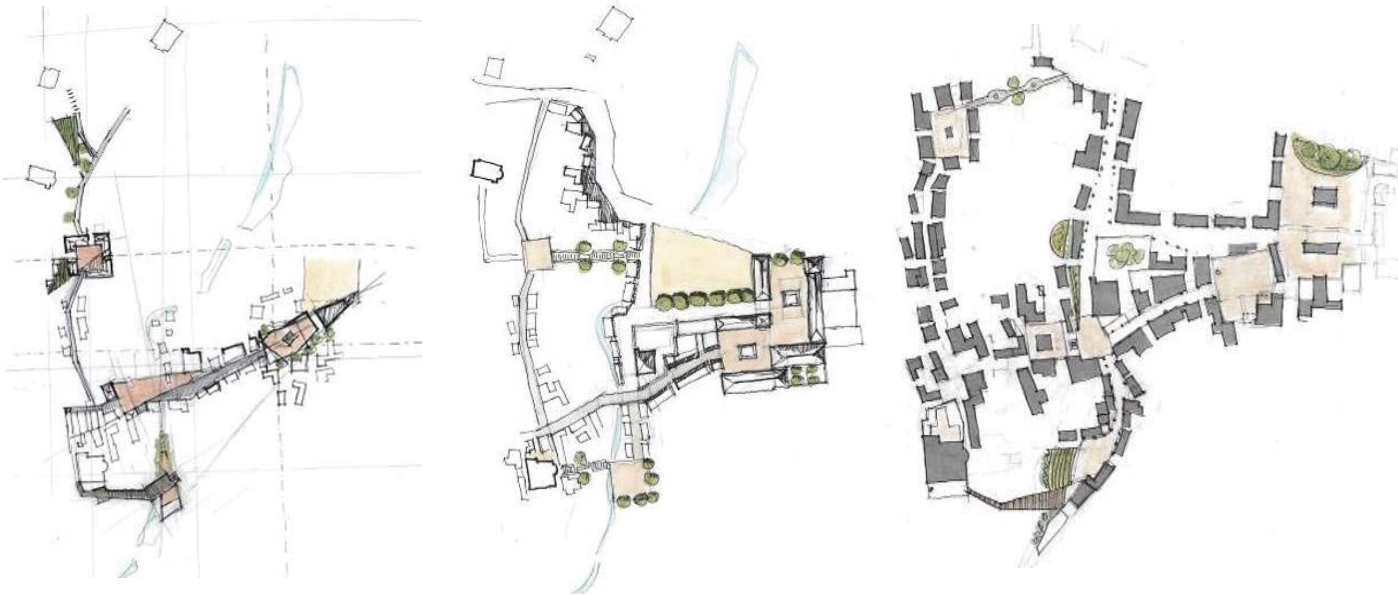
Activity that is taken in place in the public space is a crucial element for Turkish public spaces. Generally these programmatic elements such as shopping, eating, gathering, exploring and so on, give definition to the Turkish public spaces.

Using architectural elements and landmark quality structures to define public spaces is an important common approach in term of public spaces' elements. In each culture elements like, religious building, fountains, colonnades, paving materials and so on are used in different context to identify these spaces.



### Urban Intervention Study: Juxtaposition Scenarios

An urban intervention for Sirince Village is a delicate subject. Currently, conservation plan for Sirince Village brings many restrictions in term of restorations, new building proposals and continuing constructions. In this series of study, possible opportunities of introducing design schemes were examined. In some cases, these proposals were within the limits of conservation plan's guidelines, whereas, in other some other possibilities were explored. This series of interventions used previous analyses' data in term of the location identification.



**Figure 64: Initial Intervention Ideas**

In these strategies existing public square of Sirince were integrated to the proposed design. Existing parking lot's location was adapted as a part of a proposed program. Other proposed public spaces were linked to each other with programmatic elements, pedestrian paths located along commerce corridors and stairs (Figure 64).

Activating proposed public spaces with a program became an important part of the proposal. Therefore, each space were assigned a unique programmatic element that focuses on traditional craft production. This understanding envisioned to create interesting destination points for visitors and local. According to that idea, public spaces will be activated with programs like pottery making, felt making, weaving, coppersmithing and glass making. Thus, most of the craft production spaces will be distributed to these public spaces with in the village.

In addition to these element, a building formation which includes additional elements such as; lobby, administration, craft workshop, classroom, online research areas, multifunctional flexible areas and cafeteria are decided to introduce. Existing parking lot location was a suitable location due to its appropriate topographical condition and location. There are other possible parking lot locations within the village's boundaries. That was also a considered factor for that decision. Following urban studies, takes different elements of urban space definitions; building edges, geometrical forms, connection methods, architectural elements, landmark building, landscape and activities to refine the best proposal for Sirince village (Figure 65, Figure 66).

Figure 65: Urban Interventions: Form and Program -1



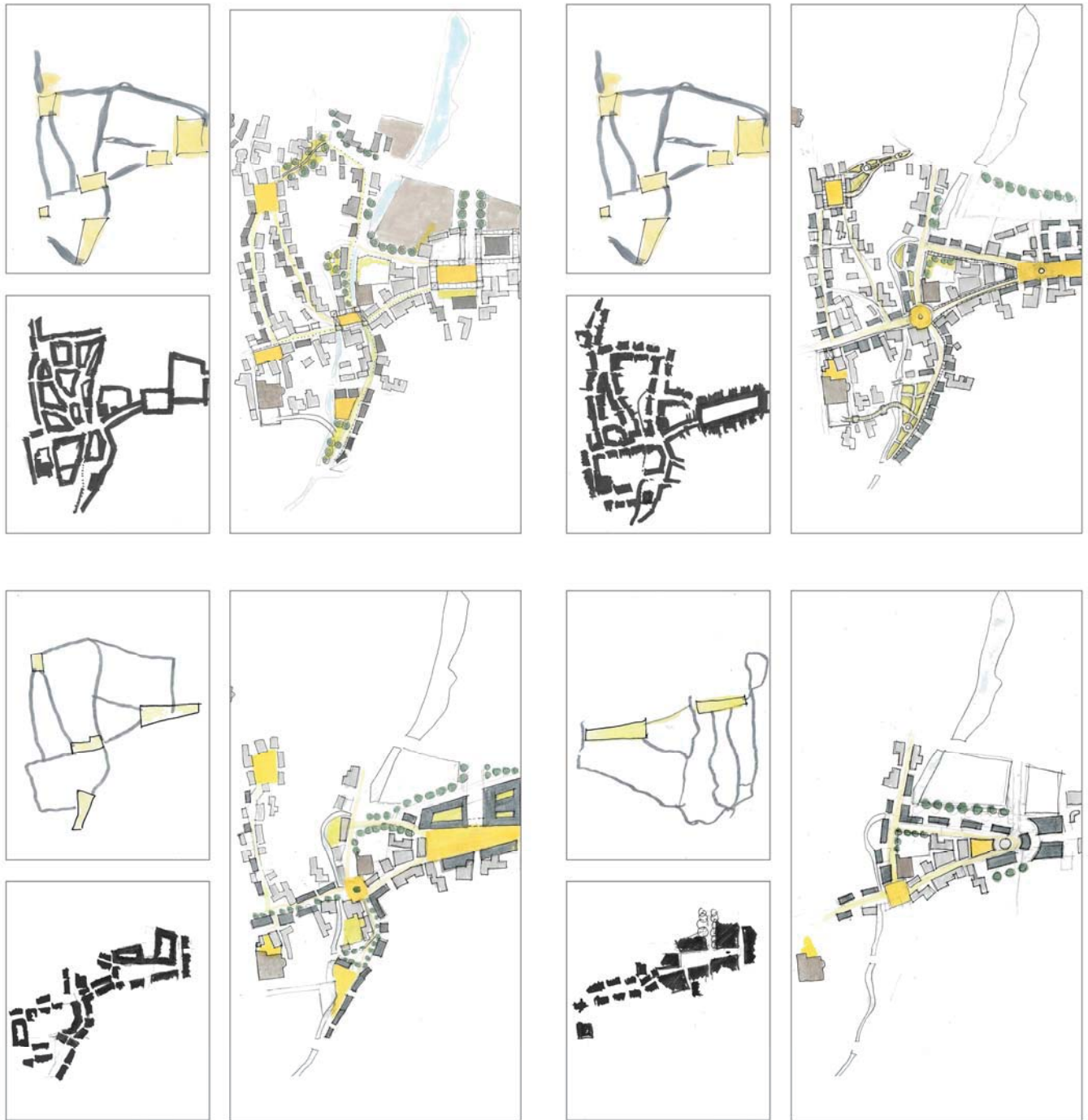


Figure 66: Urban Interventions: Form and Program -2

## **Insightful Guidelines: Architectural Elements of Sirince**

### Facades

Proportional relationships of Sirince houses' facades were taken into consideration for the proposed design. Four meter, size of a half façade of a Sirince house, is the controlling dimension of the proposed design. In addition to this point, height, use and construction techniques of Sirince's traditional architecture were important consideration points (Figure 68).

### Fenestration

Rhythmic and ample fenestration exists on the upper levels of Sirince Houses. This feature is one of the crucial elements of the village that gives it its unique appearance. Windows' dimensions generally use proportional relationship of one by two. –One unit width and to units of heights- This rhythm and harmony is reflected in proposed design.

### Materials

Architectural elements and materials of the village reflect vernacular architecture of the area. Terra-cotta roof tiles, masonry ground floor's walls, various stone pavement materials, wood trims around windows, wooden bracing and support elements of Sirince houses are some of the examples of these elements. These materials' characteristics, assembly methodology and uses were taken into consideration in the proposed design. ( Figure 67).



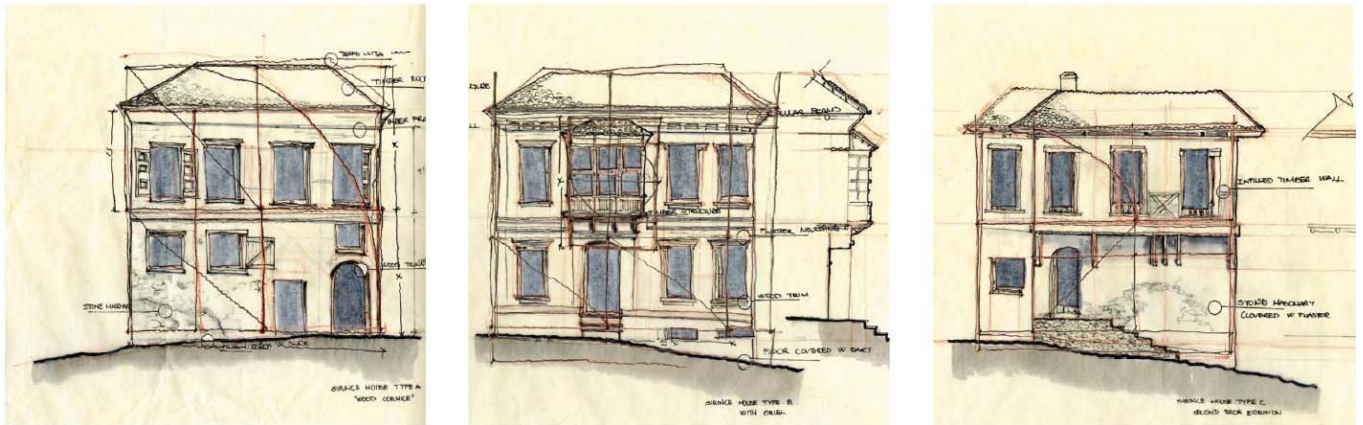


Figure 67: Materials and Architectural examples in the village



Figure 68: Sirince Facade Analysis

## **Chapter 4: Proposed Design**

### **Village Scale**

#### **Proposed “Village of Culture” Program**

In the light of the conducted analyses, a new village plan was proposed for this thesis. This plan improves existing village squares and proposes additional ones. All public spaces will be activated with specific craft production. The main idea is to use existing commerce line and to combine it with proposed program. In this way, pertinent and unique pedestrian experience may be obtained. “Each subculture needs a center for its public life: a place where you can go to see people, and to be seen.” (Alexander, et al.169)

Existing vehicular access road is also altered in proposed plan to maintain a pedestrian experience without interferences. Proposed parking lots have pervious surfaces instead of asphalt. This helps to prevent heat island effect and storm water run-off. Surrounding agriculture fields’ patterns were carried into these spaces to create more nature oriented appearance.



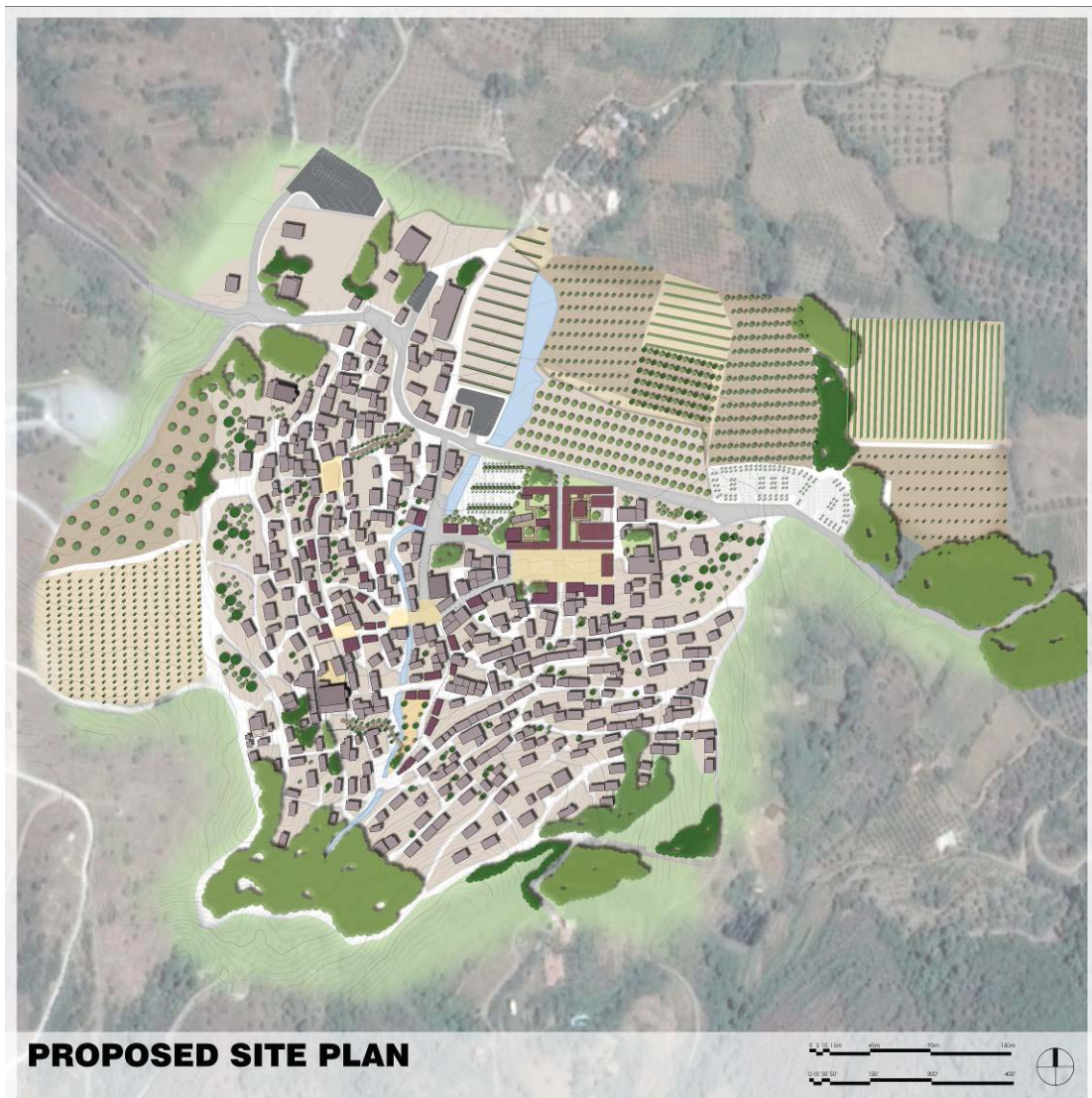


Figure 69: Proposed Site Plan

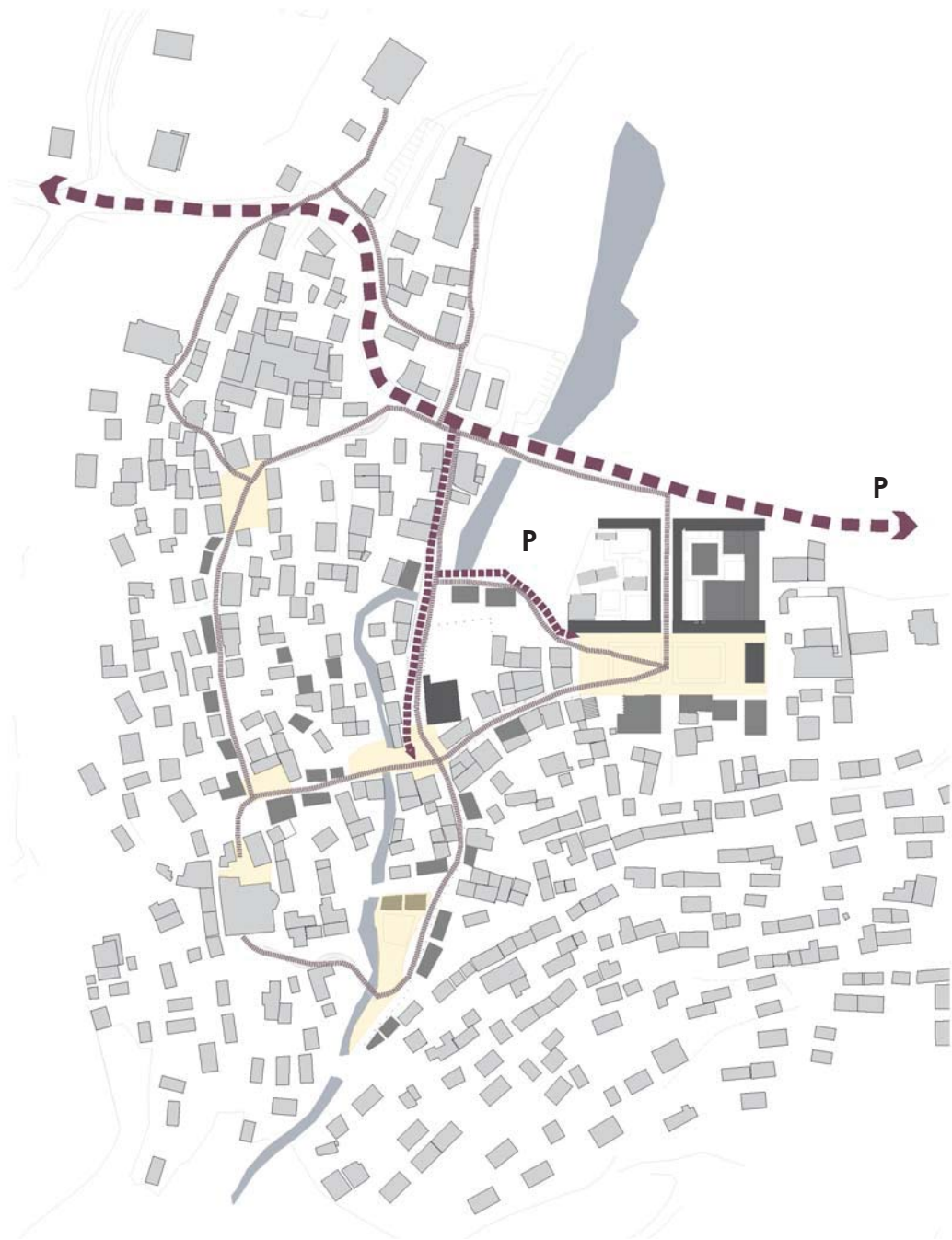


Figure 70: Intervention Diagrams



**Figure 71: Proposed Public Spaces**

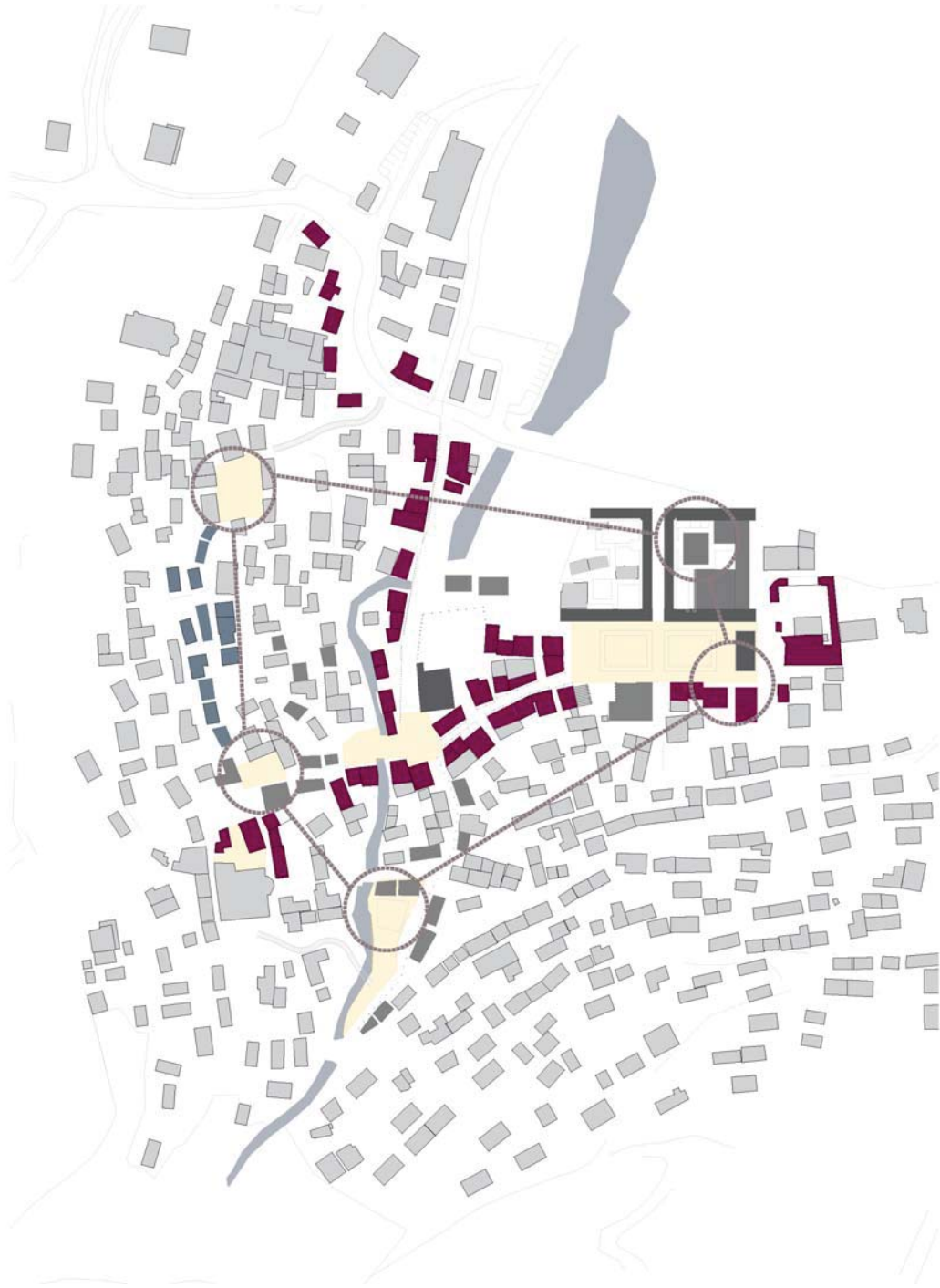
This diagram indicates public spaces and their proposed connections. Main village square has more defined geometry and larger scale. This place may accommodate big art and craft festivals, as well as daily activities such as farmer's market or gatherings.



**Figure 72: Proposed Access**

Vehicular access is reconsidered for the proposed plan as well. This allows more pedestrian experience.





**Figure 73: Commerce + Craft**

Integrating commerce and proposed craft nodes with each other is an important step of this proposal. This move provides a rich experience that is specific to that location. Buildings indicated with blue are considered as live/work units for artists and visitors.



Figure 74: Proposed View of Sirince Square



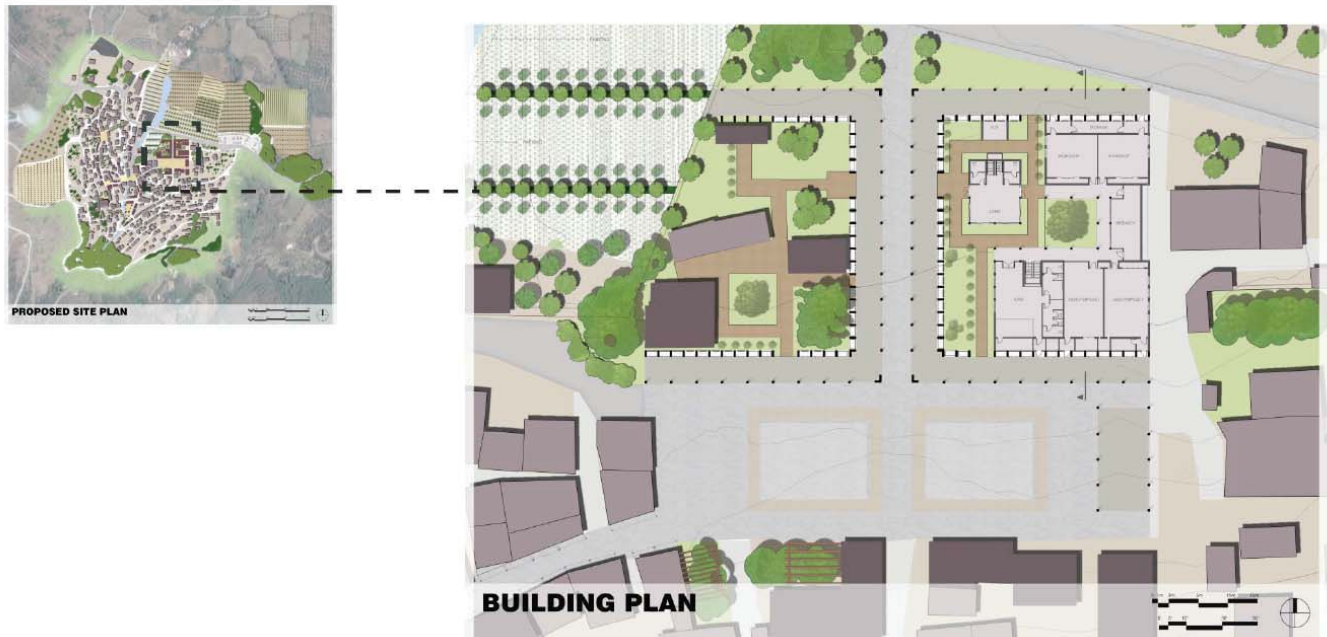
Figure 75: Proposed Village Entrance

## **Program Entrance – Building Scale**

To support proposed program a building formation for the village's entrance is proposed. This building has the programmatic elements of information, café, workshops, one kiln for craft production education, classrooms, workshops, flexible conference areas with movable walls and a research center.

Considering Sirince Village's prominent architectural characteristic and proportions, this part of proposal has been inspired from these positives attributes of the village. Columns are located within eight meter intervals. Ground level uses higher ceiling heights and roof line of the structures respects Sirince village's unique roof formation and materials.

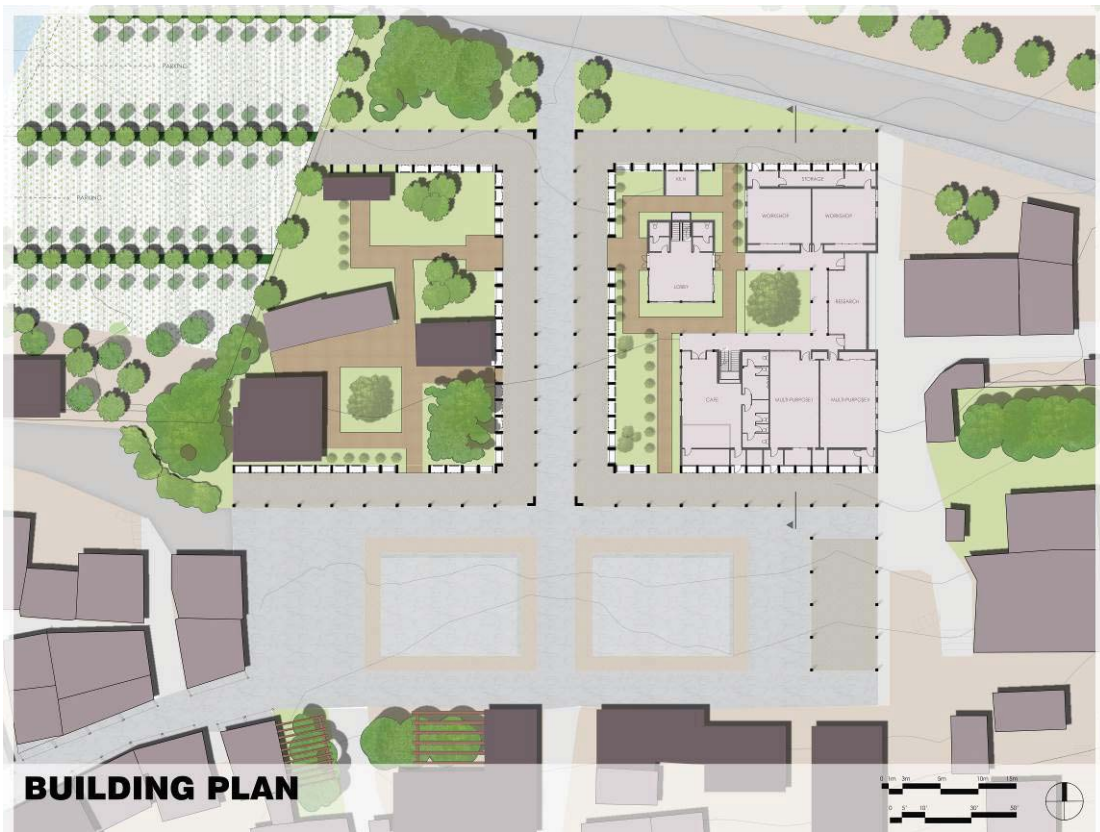
Courtyard building shape was found appropriate for this program. This formation would allow interior exterior relationship that would be desirable for craft focused program. In addition, outdoor areas may be used for craft production, exhibition and interaction. Temperate climate of Sirince allows proposing a building with an open area and with an outside circulation area.



**Figure 76: First Floor Building Plan**

This plan shows proposed first floor plan. Building with lighter poche are existing village buildings and darker poched buildings are proposed building. Proposal helps to define programs and spaces.





**Figure 77: First Floor Plan**



**Figure 78: Second Floor Plan**

Second floor of the building has more fenestration. Open courtyard style circulation is maintained in this level, as well.



Figure 79: Building Views



**Figure 80: Building Section**

Proposal aims to be harmonious with existing context of Sirince village. In this section, relationships of the proposed building and village's context may be observed. Circulation, program and courtyard elements are defined with vertical architectural elements and spatial relationships.

## **Elements**

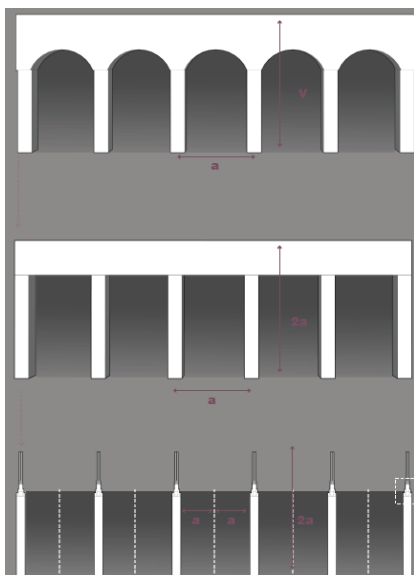
An arcade/colonnade is used around building. This addition has important roles. First, it defines circulation and gives visitors a direction. In addition this element works as an inhabitable wall. There are compartments in this colonnade which may be rented by sellers, locals or visitor to sell their products. By doing so, this proposed programmatic element aimed to fortify village's commerce activities. "Arcades-covered walkways at the edge of buildings, which are partly inside, partly outside- play a vital role in the way that people interact building." (Alexander, et al.581) Columns located at street edge span four meters to identify public scale. Interior columns spans two meter to highlight private scale. These dimensions take their basis from Sirince House's architectural formation and elevations' dimensions.



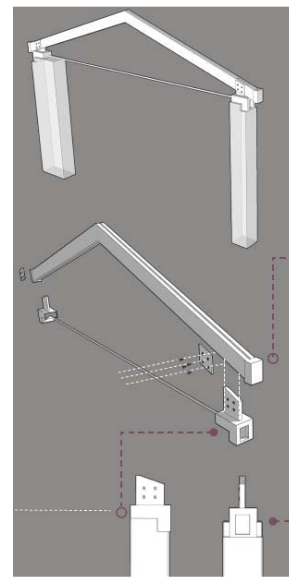


**Figure 81: View Inside of Colonnade and Seller's Stoles**

Wooden sliding doors are used for compartments. These elements are similar with Sirince Village's iconic wood craftsmanship.

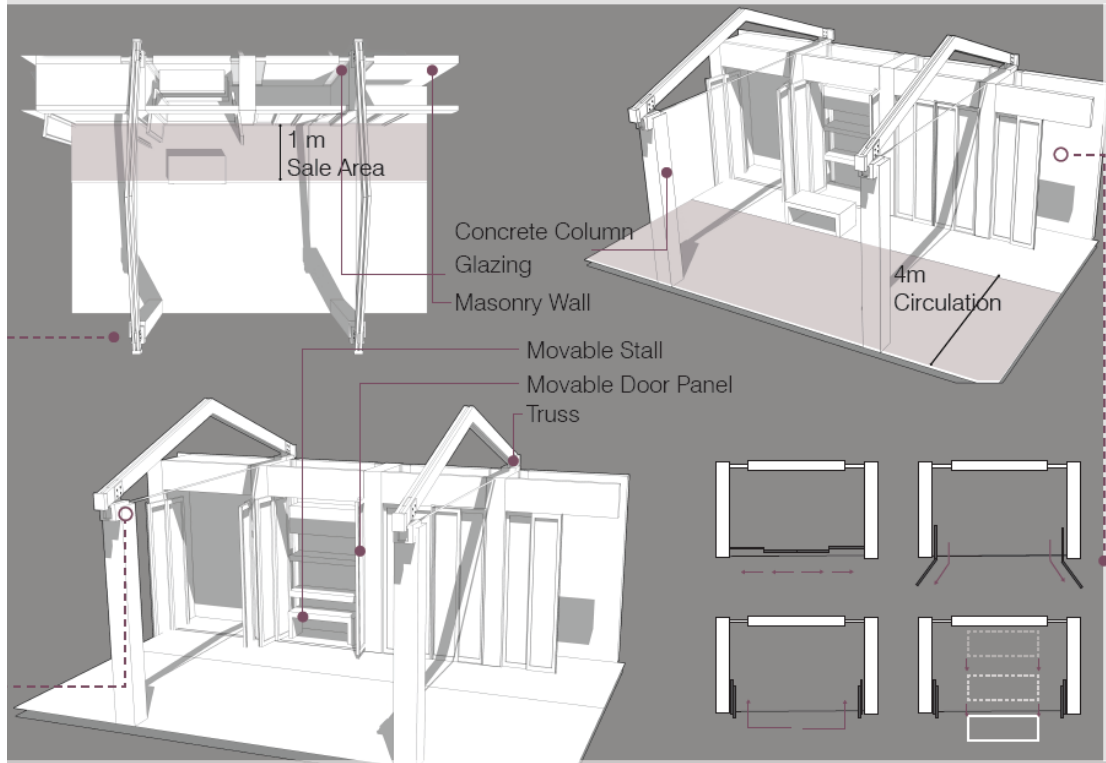


**Figure 83: Column Form**



**Figure 82: Truss Forms**





**Figure 84: Colonnade Module**

Figure 84 shows colonnade's module. Each two meter interval has a selling compartment. Movable/sliding wooden door panels may be arranged according to the seller's desires. This idea was inspired by traditional covered bazaar language but synthesized in a contemporary way.

## **Chapter 5: Conclusion**

### **A Village of Culture**

This proposal includes different scale of interventions which aim to improve Sirince Village's economic, social and cultural development. Sirince Village was chosen as a site due to its proximity to major touristic destinations, its unique architectural formation and its cultural riches. A cultural program which focuses on craft production was appropriate in order to provide cultural sustainability and financial income sources.

Initially this process started as proposing a cultural center for the village. However, analyses and researches underlined that a distributed program would have more opportunities in term of pedestrian experience and tourist interaction. This strategy was also helpful to integrate proposed program with the existing commerce activities (Figure 73). All in all, this intervention was intended to create a “village of culture” where locals may teach and learn about their cultural elements. In addition, local and international visitors may visit and be part of this production experience. Tourists who visit this town may be involved with the actual cultural elements' making process rather than just buying the end product. This is a different quality for this proposal. Understanding culture, economy and tourism as main drivers, this proposal aimed to provide a unique experience that brings opportunities and creates incentives for villagers to be part of their community.

### **Sirince as a Case Study**

This proposal was focused on Sirince Village. Nevertheless, there are many Turkish villages with similar qualities and characteristics. In recent years, Sirince has gained more national and international reputation. Thus, this location has already started to take some advantage of tourism and commerce. However, the main intention of this study is to discover more opportunities and combine them with existing qualities. This strategy may be applied to other Turkish villages to provide economic, cultural and environmental sustainability.

Similar architectural interventions and considerations may add value to existing locations, may help maintain cultural elements, and may improve living conditions. Every village in Turkey has its own unique characteristics and riches. Understanding these important points and being able to use them in order to create opportunities is an essential part of rural development.

In conclusion, Turkish villages are important because of their cultural values, contribution to the national economy and vernacular characteristics. Thus, improving living standards in villages is an important task both for local and national development. In this scope, architectural and urban considerations may result in various scales. These results may have effects on the built realm as well as on the social realm. Therefore, one of the goals of thesis may be considered accomplished if this study provides positive considerations towards rural development and raises further social awareness.

## Bibliography

Akdogan, Kivilcim Nese. Management Plan of Sirince Village. Ministry of Culture and Tourism, General Directorate for Cultural Heritage and Museums. Turkey, 2007. Print.

Alexander, Christopher., Ishikawa, Sara., Silverstein, Murray.,. A Pattern Language : Towns, Buildings, Construction. New York: Oxford University Press, 1977. Print.

Bacon, Edmund N.,. Design of Cities. New York: Viking Press, 1967. Print.

Beker, M. Orhan. SIRINCE IZMIR: Kenstsel Sit Alani Koruma Amacli Imar Plani., October 2002. Print.

Bloszies, Charles., Old Buildings, New Designs : Architectural Transformations. New York: Princeton Architectural Press, 2012. Print.

Burban, Will. "Preserving an Ancient Industry." Human Ecology 25.3 (1997): 3. Print.

Bure, Gilles de., Benyamin, Jasmine., Palmer, Lisa.,. Bernard Tschumi. Basel; Boston: Birkhäuser, 2008. Print.

Bernard Tschumi. Basel; Boston: Birkhäuser, 2008. Print.

Crane, Howard. "Traditonal Poterrt Making in Sardis Region of Western Turkey." Muqarnas 5 (1988): 9. Print.

Crawford, Matthew B. Shop Class as Soulcraft : An Inquiry into the Value of Work. New York: Penguin Press, 2009. Print.

Eldem, Sedat Hakkı.,. Türk Evi : Osmanlı dönemi = Turkish Houses : Ottoman Period. [Istanbul]: Türkiye Anıt, Çevre, Turizm Değerlerini Koruma Vakfı, 1984. Print.

"Environmental Nature Center." Web. 12/20/2013  
<<http://www.savingsbydesign.com/award-winners/2009/environmental-nature-center>>.

Genc, Omur. Ege Bolgesi Ekonomik Ve Sosyal Durum Raporu (Report for Aegean Region's Economic and Social Situation). Türkiye Kalkınma Bankası A.Ş., 2003. Print.

Glassie, Henry.,. Vernacular Architecture. Philadelphia; Bloomington: Material Culture ; Indiana University Press, 2000. Print.



Glassie, Henry. Turkish Traditional Art Today. Bloomington & Indianapolis: Indiana University Press, 1993. Print.

Güçhan, Neriman Şahin, Güliz Bilgin Altınöz, Özlem Karakul, Çiğdem Hacıoğlu, Doğan Zilan Özcan, Emriye Kazaz, Eylem Kazil, Filiz Diri, Serdar Saygi, and Ümit Gökhan Çiçek

"Project report of REST 507 – Planning and Design in Urban Conservation  
“Conservation Project for Şirince/İzmir”

. " Department of Architecture, Graduate Program in Restoration Middle East  
Technical University, FALL 2007-2008.

Halicioğlu, F. Hilal. "Analysis of Vernacular Architecture in Term of Sustainable Design Considerations: The Case of Sirince Village in Western Turkey." *Alam Cipta* 5.2 (2012): 34. Print.

"Hawaii Preparatory Academy Energy Laboratory / Flansburgh Architects." Web. <<http://www.savingsbydesign.com/award-winners/2009/environmental-nature-center>>.

Heath, Kingston Wm., Vernacular Architecture and Regional Design : Cultural Process and Environmental Response. Amsterdam; Boston; London: Architectural Press, 2009. Print.

Jäger, Frank Peter,., Old & New : Design Manual for Revitalizing Existing Buildings. Basel: Birkhäuser, 2010. Print.

Jeroen Poblome. "Comparing Ordinary Craft Production: Textile and Pottery in Roman Asia Minor." *Journal of the Economic and Social History of the Orient* 47.4 (2004): 491. Print.

LPA (Firm), . Green School Primer : Lessons in Sustainability. Mulgrave, Vic.: Images Pub., 2009. Print.

Mellaart, James. "Turkish Kilims." *Anatolian Studies* 30 (1980): 91. Print.

Miller, David E.,., Toward a New Regionalism : Environmental Architecture in the Pacific Northwest. Seattle: University of Washington Press, 2005. Print.

Oter, Zafer. "Turk El Sanatlarının Kultur Turizmi Baglaminda Degerlendirilmesi (Evaluation of Turkish Handcrafts in Terms of Cultural Tourism)." *Milli Folklor* 22.86 (2010): 174. Print.

"Pier Art Centre." Web. <<http://www.pierartscentre.com/>>.

Pierce, Joe E.,. Life in a Turkish Village. New York: Holt, Rinehart and Winston, 1964. Print.

Saglam, Serdar. "Turkiye'De Ic Goc Olgusu Ve Kentlesme (Migration and Urbanisation in Turkey)." *Turkiyat Arastirmalari*.5 (2006)Print.

Sarioglu, Halide. "El Sanatlarini Milli Deger Olarak Algilamak (Comprehending the Handcrafts as a National Value)." *Milli Folklor* 99.6 (2005): 72. Print.

"Sirince'de Mimari Huzur ve Estetik Birarada (Architectural Serenity and Aesthetic Coexists in Sirince)." 2009.Web. 11/1/2013  
<[http://www.yapi.com.tr/haberler/sirince-mimari-estetik-ve-huzur-bir-arada\\_70678.html](http://www.yapi.com.tr/haberler/sirince-mimari-estetik-ve-huzur-bir-arada_70678.html)>.

Spreiregen, Paul D.,. *Urban Design: The Architecture of Towns and Cities*,. New York: McGraw-Hill, 1965. Print.

Stirling, Arthur Paul,. *Turkish Village*. New York: Wiley, 1966. Print.

"Traditional Turkish Art and Craft."Web. 11/5/13  
<<http://www.kultur.gov.tr/EN,35225/traditional-arts-and-crafts.html>>.

Tucker, Hazel,,. *Living with Tourism : Negotiating Identities in a Turkish Village*. London; New York: Routledge, 2003. Print.

Uyar, Serpil. "Restoration Project of Carboga and Yenigun Houses in Sirince, Izmir." *M.S in Restoration METU*, 2004. Print.

Young, S. Y.,. "Hyper-traditions/hip Villages: Urbanite Villagers of Western Anatolia." *TRADITIONAL DWELLINGS AND SETTLEMENTS REVIEW* 18.1 (2006): 93-. Print.