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Sustainable Development of Environment, Historical Places and Community in Bergama, Turkey

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Sustainable Development of Environment, Historical Places and Community in Bergama, Turkey

Wan-Wen Huang Tomoko Kano

Abstract

"Conservation of Cultural Heritage" does not only refer to the protection of physical and historical properties of heritage sites, but also to the improvement of the environment and of the life of local communities impacted by tourism and globalization.

This study attempts to explore the sustainable development and conservation strategies of landscape, heritage sites and local community in Bergama, Turkey. Bergama, known in ancient times as Pergamon, is a historical and cultural settlement located in the northwest of the Aegean region harboring rich Hellenistic, Roman, Byzantine and Ottoman archaeological remains. After the Bergama district was added to the UNESCO's tentative list of World Heritage Sites in 2011, tourism development and globalization have influenced the urban landscape and local communities in the daily life of residents and even in their economic structure. New ideas and strategies for conservation should be considered to allow Bergama to withstand increasing attacks on its environment, local architecture style and cultural identities.

Ideas and development planning of Japanese historical districts and settlements are shared and proposed in this study. It is expected that foreign experiences offer effective methods and different viewpoints to Turkish historical settlements for improving the life of residents and restore a sense of civic pride to their cities.

This research focused on the following four issues: 1) Urban Landscape and City Axis 2) Historical Holy Route 3) Richness and Hybridism of the local community. 4) Citizen Participation. The research concludes with recommendations aim at transforming Bergama into a sustainable city functioning as living heritage, which includes not only the conservation of the visible environment and buildings but also the representation of the invisible environmental context and of the various cultures of the local community.

Finally, this study also provides an opportunity to share, exchange and learn between the Japanese and Turkish experience on conservation methods and sustainable development planning in historical settlements. Conservation issues and solutions in Turkey and abroad cannot be perceived to be identical. Nevertheless, cultural and technical exchanges are expected to grow and help reach the ultimate goal of enabling sustainable forms of urban landscape, historical places and local community way of life in historical settlements.

Keywords: Sustainable Development, Citizen Participation, Urban Landscape, Historical Route, Living Heritage

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Introduction

Learning how to organize sustainable forms of development in historical areas has become a critical issue worldwide. Threatened with uncontrolled development spurred by globalization and tourism, local skylines, landscapes, urban contexts and communities are being destroyed at an alarming rate. Furthermore, the residents' daily life, traditional customs and economic activities have also been impacted (TUNCER, 2002).

Therefore, Bergama is mentioned in this paper as a case study to explore suitable strategies and possibilities for the sustainable development of heritage sites. This study also lays out a whole new vision to explain and define concepts such as "urban landscape", "historic place", "historic route" and "residents' community" by studying and practicing the conservation plans and strategies of Japanese historical settlements. Kyoto is an exemplary model of heritage city and Kamakura is in the process towards World Heritage List. They are selected as practical cases for clear and effective strategies of landscape preservation, traditional house and citizen's participation. It is expected that sharing and communicating with different cultures, ideas and environmental contexts for improving these heritage cities to sustainable living heritage cities.

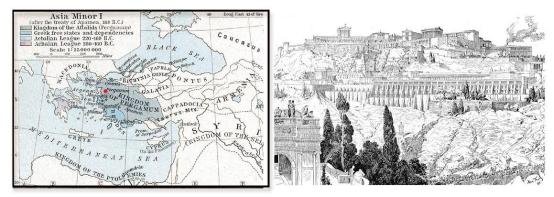
Background & Objects

In the last 10 years, being listed in the UNESCO World Heritage List has been the first target for Bergama Municipality and the local residents for improve economic situation and daily life. We would like to congratulate Bergama city that in the end of June 2014, Bergama was successfully listed as world heritage city, only taken one year and a half for nomination process. In the future, How to preserve the physical heritage (landscapes, historical buildings, traditional dwellings, etc.) and keep the intangible cultural heritage (customs, lifestyle, arts and crafts, etc.) growing will be a decisive issue.

Compared to other similar heritage cities in Turkey, rich archaeological remains, a hidden city axis, the position on a historical route and various traditional dwellings in Bergama city offer better conditions for a case study. The spatial characteristics, historical richness and current situation of Bergama can be described, analyzed and explored (TUNCER, 1993). The objective of this study is to suggest a practical course of action for Bergama's future using conservation strategies and experiences from abroad. Finally, this study envisions Bergama city not only to be listed as a world heritage site, but also its development into a living heritage and sustainable heritage community.

Figure 1. The Kingdom of Pergamon (Colored Olive) Shown at its Greatest Extent in 188 BC. and the Location of Bergama City (Colored Red)/ Credits: URL1

Figure 2. Sketched 19th Century Reconstruction of Ancient Pergamon/Credits: URL2



Environmental & Cultural Treasuries of Bergama

One part of Izmir Province, Bergama is one of the most important cultural and tourism centres of the Aegean area with a rich archeological and historical heritage (Figure 1). The Bergama district includes 114 villages and 5 towns within its administrative system and has a population of 60,000. Since it has been put on the tentative list, Bergama has entered a new stage of progress and transformation and set the goal of adding the city on the World Heritage List.

While its history goes back to the 7th century BC, the city became the capital of Pergamon Kingdom under the rule of Attalid dynasty, Alexander the Great in 323 BC. As the capital of the kingdom between 282-133 BC during the Hellenistic era, Pergamon gave birth to multiple works in the fields of art, literature, medicine, science and architecture. Today, the main sites of the ancient kingdom of Pergamon are located north and west of the modern city of Bergama. Among Bergama's notable ruins are the Acropolis (a fortified hill, Figure 2), the Asklepion (an ancient medical complex) and the Red Basilica (one of the "Seven Churches" of early Christianity). In addition, the Ottoman Period saw the creation of a renewed water system and of commercial and public buildings such as hanse, baths and covered bazaars that enhanced the social life in the city and have been in use up to the present day. The city also features a living archaeological museum. Nowadays, its wealth of ancient ruins continues to attract not only the interest of tourists, but also archaeologists and historians (RADT, 1984).

Figure 3. Topography of Bergama / Credits: Municipality of Bergama

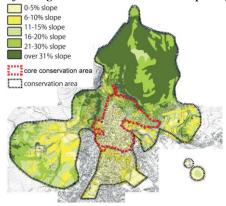


Figure 4. View of Acropolis from Vinran Kapi (The Roman Theatre) / Credits: Authors

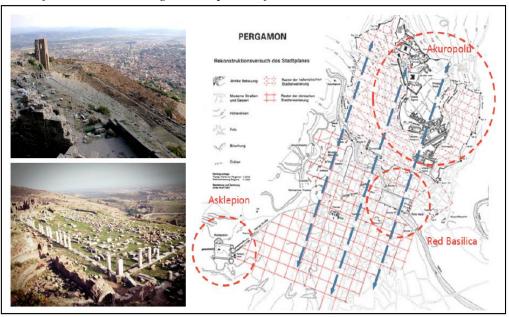


Historical Landscape & Urban Context

The historical conservation area, proposed and planned by the municipality of Bergama, is delimited with a black dotted line in Figure 3. The most important conservation area is delineated by a red dotted line, constitutes the core of our fieldwork investigation as the living downtown of Bergama city.

The conservation area of Bergama is mostly located in the fertile valley of the Caicus River (TUNCER, 1991). The Acropolis (upper city, elevation of about 330 meters, Figure 4) sits high on a steep ridge between two tributaries of the river. Its name Pergamon means "castle" or "high settlement" and its roots can be traced back to the pre-Hellenic Luwian language. Along the steep slope toward the large basin in south, the temple of Athena, the library, the theatre, the agora, the Trajan temple (middle city) and the largest lower city in the Hellenistic world are following, including the Asklepion (built in 4th century BC, in honor of Asklepios, the god of healing) and the Red Basilica (the river Selinus has been flowing under the temple court since the Basilica's creation in the 2nd century AD) (Figure 5).

Figure 5. Cidatel Theatre in Upper Acropolis/ the Middle and Lower Acropolis/ the City Axis of Pergamon (from Settlements to Acropolis)/ Credits: Photos from Authors, Original Map Data from URL5

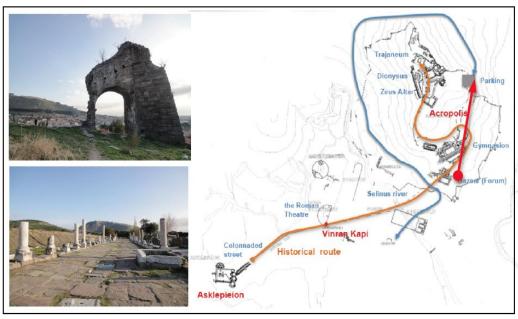


Even though the Acropolis and the Asklepion are located on the top of the northern and southwest quadrants of Bergama respectively, a hidden and ancient road has been connecting the two from the reign of Eumenes (197 B.C.). This connection between these two holy places is a route of sacrifice starting off in the upper city of Acropolis, through the gymnasium and the bazaar of middle and lower city, across the Selinus river to Vinran kapi (the Roman theatre), finally reaching the colonnaded street of Asklepion (RADT, 1984). This historical route was called "Kutsal Yol", meaning "ancient road to the Asklepion" (Figure 6).

From the citadel theatre in the upper city, one can have a panoramic view of Bergama, including the Lower Roman Quarter (residential district, south of the Selinus River). Development and planning of this quarter have begun in Roman imperial period as Greeks' settlements north of the Selinus River, in the form of residential districts or neighborhood units planned in a grid (Figure 5). Although the urban context of modern Bergama city was changed by Islamic culture, people can easily view the Acropolis hilltop from paths, bazaars, open spaces and housetops in traditional settlements. The city axis is formed as a result of the natural landscape and the urban context in traditional residential districts (TUNCER, 2002).

The urban development in the Kingdom of Pergamon aimed at forging a scientific and artistic civilization conform to the natural landscape, as in other Greek poleis. Even now, walking on the main streets of modern Bergama city and following the line of sight can unconsciously led the visitor to the holy place – the Acropolis. The historical city axis is expected to be a basic norm for future urban planning and buildings' height.

Figure 6. Vinran Kapi (The Roman Theatre)/ View of Acropolis to Asklepion / "Kutsal Yol", A Historical Route from Acropolis to Asklepion (Orange Line), An Existing Road form Bergama City Center to Acropolis (Blue Line) and the Cable Car Route (Red Line)/ Credits: Authors



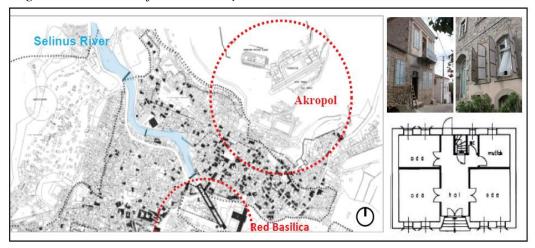
Richness and Hybridism of Living Culture

Another charming characteristic of Bergama is the richness in "Living Culture and Art". Here, Hellenistic remains, Roman monuments, Byzantine and Ottoman public buildings and various house types originating in different cultures form a rich spatial composition of concurrent layers (TUNCER, 1995). Most of the traditional houses have been destroyed or become decrepit with the times. The existing traditional houses are mainly influenced by Ancient Greek culture. The district shown in figure 7, between the Acropolis and the Selinus river, is an antique settlement quarter in Bergama. Some old buildings and traditional houses in this district (marked in black on Figure 7) are considered as valuable living heritage and designated to be preserved by the Bergama municipality. The spatial characteristics of traditional house types in this settlement quarter are described below.

The traditional Turkish house is generally built with a half-timbered system, stone and brick wall. However, modern Turkish houses are designed with the 1st floor on a stone foundation and the 2nd floor with half-timber. Classification of Turkish houses by plan shape depends on the location of the anteroom. Outdoor anteroom (named "Hol" in Turkish) is a space wider than a regular corridor that connects different rooms in the traditional Turkish house. Since the 19th century, traditional Turkish houses in Bergama have been built with an indoor anteroom as a result of the Ottoman Empire and Islamic culture influence. This new hybrid type is named "Bergama-style house" (Bergama Evleri), a testimony to Bergama's multicultural character (\$AHIN, 2000).

The present condition of traditional houses in Bergama is as follows: only 12% is good, 48% is average and 22% is in bad condition and in need of repair and rehabilitation, which is more than preliminary estimates. In short, retaining spatial characteristics of traditional dwellings, while promoting exchange of different cultures, backgrounds and communities, is the main challenge of a future conservation plan for Bergama.

Figure 7. Distribution and Location of Historical Buildings and Traditional Dwellings in Antique Settlement Quarters (Marked in Black)/ Bergama-Style House/ Credits: Photos from Authors, Map Data from Municipality of Bergama, House Plan from Bülent Şahin



Impacts of Urban landscape and Residents' Living by Tourism

In the last five years, tourism development has become the main goal of Bergama city. The greatest negative impact of tourism is the destruction of the urban landscape of the Acropolis, followed by changes in the traditional dwellings and residents' lifestyle.

The importance of the city axis running from the settlement quarter to the Acropolis is highlighted in section 3.1. The cable car and related infrastructure have been operating since April 2011 (Figure 8). The purpose of installing a cable car connecting the lower city to the Acropolis is to prevent impact and damage from tourist buses and cars to the rare and valuable remains present on the historical site. Bringing tourists to the Acropolis by cable car is expected to be safer and more efficient. Deciding priorities between tourism development and city landscape preservation and carefully weighting costs and benefits have been major issues for the future planning of Bergama.

Opinions about the installation of a cable car have divided residents into two camps. Opposing residents emphasize urban landscape preservation and the sacrosanct character of the Acropolis; cable car supporters insist on the commercial benefits brought by this new transportation mode. The attitude of Bergama municipality supposes that modern infrastructure such as a cable car can modernize Bergama and spurs local economic activities. So far, city

officials did not impose any guidelines or measures to preserve the urban landscape and city axis. A balance between the development of culture and economy might be found through regulations, communication and international exchange of know-how and help find a way out of this dilemma (TUNCER, 2002)

According to statistical data from Bergama municipality, around 300,000 tourists visited Bergama in 2008. However, there are only 12 hotels in the city and these can only accommodate about 612 guests in total. In order to have more tourists stay in Bergama for longer periods of time, the number of hotels, restaurants and tourism facilities should be increased. Two traditional houses renovated into hotel pensions in 2011 present fine examples of the reuse of old buildings for accommodation purpose. For future tourism development, the reconstruction and transformation of old buildings or traditional houses into guesthouses, coffee shops, restaurants and stores would be a good way to solve problems of conservation and economy.

Figure 8. Building Z (A Site of Archeological Remains), Cable Car and Related Infrastructures on Acropolis Drew Public's Attention and Discussion on Urban Landscape Preservation. / Credits: Authors







Case Studies of Japanese Historical Settlements

This study outlines some conservation methods of historical routes, city axis and traditional dwellings from good practices in Kamakura and Kyoto. It is expected that these experiences and strategies are able to provide applicable methods, guidance and support to the restoration and future development of Turkish historical settlements for improving dwellers' life and cultivating resident's pride to their city.

Historical Routes and Citizen's Participation in Kamakura, Japan

"Kamakura", neighbor southwest of Tokyo in Japan, is the significant place where the first samurai government was established and created their culture in the late 12th century. It was nominated as "Kamakura, Home of the Samurai" on UNESCO tentative list in 1992. Kamakura consists of the mountain area characterized by defensive topography (enclosed by mountains on three sides with one side open to the sea) that exerted great influence on the samurai's shrines and Buddhist temples built at the mountain foot and valley beds. These historical elements of Kamakura site are two Shinto shrines, twelve Buddhist temples, ten archeological sites of Buddhist temples, five "Kiridoshi" passes, a samurai residence and port.

One of the historical treasures, "Kiridoshi pass", is a route that was created by cutting through the mountain (Figure 9). "Kiridoshi passes" are not only made possible incoming and outgoing transportation into and from Kamakura, but also served as defense strongholds and Samurai residences. There are many archeological remains such as "Yagura" caves surrounding the "Kiridoshi" passes. It can be shown that the "Kiridoshi" passes are historical routes that help people to learn the Samurai's activities and their life during the Kamakura period (1185-1333). It is strongly evaluated by local residents, experts and government, and designated as the Natural Monument.

In Kamakura, the local residents and the government have conducted awareness-rising activities. The Kamakura World Heritage Inscription Promotion Council (established in 2006) plans and organizes various programs and projects with the many participants (citizens, experts, scholars and government authorities) such as "Kamakura, Home of the Samurai" School, workshops, lectures, publications, guide maps and production goods etc.

Figure 9. "Kiridoshi" Passes (Blue Lines) are the Historical Routes in Kamakura. / Credits: Authors, Original Map Data from URL3



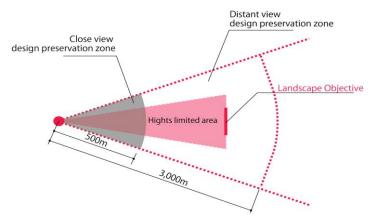


Figure 10. Landscape Policy of Kyoto City / Credits: Authors

Method of Landscape Preservation in Kyoto, Japan

"Historic Monuments of Ancient Kyoto", was registered with World Heritage List in 1994. Kyoto was the imperial capital of Japan, from 8th and 17 centuries. Ancient Kyoto illustrates the development of Japanese traditional culture, such as timber structure buildings and the art of Japanese gardens that has continued and influenced the concept of urban landscape in modern Kyoto city. For preservation of Japanese traditions, following are the significant conservation plan not only for historical buildings but also for natural landscape.

Kyoto City established the Kyoto Landscape Policy (the Vista View Creation Ordinance) at 38 spots in urban area. The rule defines the landscape view from these certain specific spots. The range of 500 meters of circumferences from the spot is provided "Close View Design Preservation Zone", and building height is restricted (Figure 10). And the outside area (vast area containing most Kyoto fault basin) is regulated by "Distant View Design Preservation Zone". The city of Kyoto has regulated several rules such as zoning, high-level usage districts, scenic area, scenic districts and close view design preservation zone, etc.

A shrine "Entsuji" shows the example of the landscape preservation method, which conserves the specific view seen from the precinct. It has the unique Japanese garden, not only the inside of the garden but also the scenery outside is designed in reference to veranda of shrines (Figure 11). For protecting the concept of Japanese garden, the outside area that can be viewed from the veranda also designated as the preservation area. The buildings' heights in this area are obliged 110.2 meters or less. Moreover, the roof form, color and volume are limited in order to protect the city axis from the veranda.

Figure 11. The Rectangular Stone and Moss Garden of Entsuji Temple Were Designed to be seen from the Verandah. There is a Distant View of Mt. Hiei. / Credits: Authors



Figure 12. Modern "Machiya" in Kyoto are Restored for Public Uses such as Tea Houses, Hotels, Shops, Galleries, Museums or Community Centre. / Credits: Authors



Preservation of Traditional House - "Machiya" in Kyoto

In "Kyoto", the traditional timber structure house called "Machiya" for residents of town, have continued to develop since 18th Century (Edo period) to the second half of 19th Century (Meiji Period). In recent years, 45% of houses are "Machiya" in Kyoto urban area and they are rapidly demolished due to the financial issues such as high maintenance cost of old buildings and aging residents.

The typical "Machiya" is a two or three storeys high building with narrow street facade, stretching deep into the city block and generally containing a few small courtyard gardens. These houses located along narrow alley helps to create a strong sense of community. The timber houses along the alley with narrow street frontage traditionally served as the "shop space", and the space behind the shop quarter serves as "living space". The rooms are altered during the city festivals. "Machiya" also provide space for decorations, portable shrines as well as hosting spectators along the parade route of festivals (MUNETA, 2009).

Many NGO organizations had taken actions to conserve and restore "Machiya". As an effort for restoration, various activities are conducted, from field study, education, technical research, repair, reuse of materials and the mediation of owners and users. As a result, "Machiya" is protected from demolition without permission, and owners of the "Machiya" are offered a sum of stipend from city government for conserving "Machiya". The other organizations try to find the new usage purpose of "Machiya". Now "Machiya" are used not only as private residences, but also public uses as coffee shops, hotels, shops, galleries or museums (Figure 12).

Toward a Sustainable Development City

In this part, sustainable development strategies for the life of residents and tourism in Bergama are proposed. These conservation plans and strategies for landscape, historical Places and local communities are inspired by conservation methods in Japanese historical settlements or cities. The following proposals are suggested to transform Bergama into a sustainable city, where there is not only a dialogue between the municipal government and residents and the participation of the local community into the planning strategy for the city, but cultural exchange and cooperation with oversea partners. It is expected that these foreign experiences can supply effective methods and different viewpoints to Turkish historical settlements to improve the life of residents and restore a sense of civic pride in their city.

Conservation Strategies of Traditional Settlements & Dwellings

The characteristics of historical settlements and traditional dwellings in Bergama are ones of diversity and hybridism, displayed in a complicated urban context and various house types (Figure 13). Differences between houses of different cultures and residents are generally shown by style and façade decoration rather than spatial layout, construction or material. Therefore, conservation regulations of traditional houses should ensure that original façades of traditional houses be kept. Nevertheless, renovation of interior spaces, change in layout or function and differences in inner material, structure, equipment and hygienic conditions will be allowed. New-built buildings in historical settlements must strictly conform to façade design standards to maintain a harmonious appearance of the streets and old quarters (TUNCER, 1995). For the sustainable development of Bergama as a "Living Heritage" or "Heritage Community", administrative departments and related organizations should focus more on sustaining local living culture and traditional dwellings in the future.

Figure 13. Various Traditional Dwellings Show the Richness of Living Culture and Art in Bergama/Reconstruction of Old Building or Traditional House into Guesthouses, Coffee Shop or Restaurant will be a Way to Solve Problems of Conservation and Local Economy/Credits: Authors







Rewrite of Urban Landscape and Historical Route

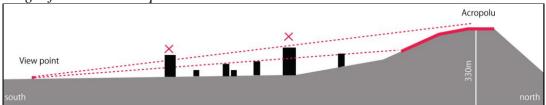
The quality of sacredness and infrangibility of the Acropolis in Bergama is undeniable. Conservation measures such as landscape preservation, restriction and prohibition of new construction in historical heritage site are vital and yet to be established. All new-built buildings, tourism facilities and transportation constructions must be kept away from the ancient district and conform to design standards and regulations. Location, form and volume of cable car and related infrastructure have violated the harmony of the original urban landscape and the spirit of the ancient road from the Acropolis to the Asklepion.

For now, the access ways to Acropolis should be reviewed and improved. Three suggestions are proposed below to replace the cable car in this study: 1) visiting the Acropolis and the Asklepion by walking or riding a mule or a donkey along the historical route (orange line in figure 6). 2) approaching the Acropolis from the city center by feeder bus or light rail train on the existing road system (blue line in Figure 6). 3) reaching the Acropolis from a new direction from the north or west side.

Restatement of City Axis

Acropolis was constructed in ancient Pergamon during the reign of Eumenes II. Urban planning and design of the Greek poleis in the Hellenistic age focused on the Acropolis as a holy place or a city center; public buildings and private houses were built along the hillside and extended to the seaside. A city axis had been created between the fortified hill (upper city, Acropolis) and the settlements in the southern basin, similar in form to other Hellenistic cities. Even today, when walking on the main streets of modern Bergama city, the line of sights unconsciously leads to the Acropolis. The city axis must be emphasized to restate the identity and orientation of the city. Besides a recognition of the direction and representation of the city plan in the Hellenistic era, this city axis can serve as a reference for future urban planning or to regulate the volume and height of new buildings in Bergama city (Figure 14).

Figure 14. The City Axis is expected to be an Important Reference for Urban Planning Guidelines of Bergama City, Determining Volume and Building Height for New Development/ Credits: Authors



Citizen Education, Participation and Heritage Community

Local government and related authorities play a major role in the education of citizen and in the promotion of residents to participate with experts and scholars in preservation efforts. A new living "Heritage Community" of Bergama can also serve as intermediary between residents and tourists. Understanding of natural resources, local features, history and even of their own dwellings is of vital importance in the education of local citizen. Knowing the origin and culture of their city will promote self-identity, sense of civic pride and wellbeing among the residents. Citizen will take pride in their traditional customs, arts and crafts and living environment. Another mission of citizen education is passing on traditional handcraft and art to the next generation. Parchment making and carpet weaving are both important traditional crafts in Bergama, although masters with good skill and ability are now rare. Establishment of a training school and of a studio for artists and designers is an urgent task.

In the future, workmanship and artistry will bring economic benefits through tourism. As it enters a phase of community planning and design, the local government needs to hold meetings, councils, workshops, events and festivals with residents (including elders, the heads or leaders of various neighborhoods) and experts (such as urban planners, artists, scholars) to fully involve citizen in the decision making process. Finally, a "Heritage Community" can be established on the basis of common understanding and relationship between residents and tourists. The concept of heritage community aims to build a sense of appreciation and respect through the understanding of cultural values and historical significance of local residents and of the city, both for physical and cultural heritage. This will help ensure adequate protection of local heritage and living culture while reaping benefits from tourism development, thus maximizing the positive effects and minimizing the negative impacts of tourism on the city development.

Exchange and Cooperation with Oversea Partner Cities

Besides cooperation and support of domestic fellowships and groups, creating international interactive opportunities for learning or exchanging information will also benefit the people. Examples include academic exchanges between researchers and students in different fields (such as History, Geography, Geology, Archaeology, Architecture, Art, Urban Planning and

Landscape Design etc) to share and understand the natural resources, history and cultural context of Bergama, the organization of international activities such as symposia, workshops, exhibits, music concerts and town twinning will bring positive influences and shorten time and costs to reach the goal of a sustainable development city. Moreover, these activities will help give a positive image of Bergama and publicize its efforts abroad.

Conclusion: Learning from the Land and the People

Bergama is currently in the midst of a transformation, from an ancient Greek kingdom to a modern tourism city. Tourism developments and the masses of tourists will influence its culture, economy, communities and urban landscape. To avoid negative impact of tourism and global in Bergama, we suggest that the future development and conservation plan to focus on five aspect, the "Environment", "Community", "Activities & Events", "New-Built" and "International Cultural Exchange".

- 1) Natural & Built Environment Conservation: Imposing regulations on preservation of natural and cultural landscape, including archeological site, historical building, urban landscape, city axis, and historical route.
- 2) Heritage Community: Conserving the variety of traditional dwellings accompanies with new functions for residents and public. Organize and hold various cultural events to encourage public participation, to increase awareness of shared history and local traditions of the land, to reinstate identity of the community and civic pride.
- 3) Art and Cultural Event: Foster parchment making and carpet weaving being Bergama's authentic traditional handicraft. The Municipality of Bergama with locals to improve the merchandizing of traditional handicraft brings local economic profit. In conjunction with traditional festivals, organize various seasonal events such as music festivals, sports events, parades, art festivals and competitions, and so on. These new art and cultural events will make the heritage city livelier and thriving.
- 4) Guidelines on New-Built: Building control policies and buffer zone to be determined. Any new-built and infrastructure is to confine to guidelines on bulk and height control, land use control and assessment on the impact to the surrounding area. Assessments should be taken out on existing infrastructure for cable car, building Z, the near completion projects such as the renovation of Red Basilica (Open-Air Museum) and the new Bergama Museum as well.
- 5) International Cultural Exchange: Establish twin towns or partner cities to strengthen cooperation and collaboration with other

heritage city or cities that is also applying for being listed as world heritage city. To promote a comfortable and sustainable living environment by conducting international conferences, symposium, cultural or arts workshops, offering opportunities for people of different culture, profession, nation and generation to share and exchange opinions and experience.

Managing of a sustainable city is not merely a policy making process by the management authorities or professions, sequential development of new industry and construction should base on the idea of "respecting wisdom of the land and the people". With the objective to improve standard of living, all participants should also avoid excessive tourism activities to have negative impacts on the daily life of the local residents. Finally, proposals suggested in the study are expected to provide a way to foster sustainable development for the city of Bergama as a living heritage community.

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