

## **The Importance of Traditional Building Culture for Sustaining City Identity; Bursa/Turkey as a Case**

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### **ABSTRACT**

Historic cities need new forms of intervention, regulation and management of the physical and social fabric upon which their localness and specificity are predicated, both for development and conservation. Sustainability and sustainable development policies are the key factors for planning and development process in historic cities. Consequently, investigating components of urban identity especially in traditional neighbourhoods is a very important necessity, in order to achieve urban sustainability of historic cities.

In the context of this research, traditional housing environments in Bursa are observed and evaluated by means of the physical reflections of a mutual interaction between the architectural heritage of the city and its social structure and dynamism. The stress is put especially on the traditional construction materials and systems and their effects on the city identity.

Bursa is one of the most important Anatolian cities which comprise of the oldest and most authentic examples of monumental and civil architecture and which combines rich tradition, culture, history and nature at the same time. Today, being the fourth biggest city of Turkey, Bursa is economically very dynamic and has been undergoing a rapid industrialization and urbanization processes. It has one of Turkey's highest population increase rate as a result of its being a focus of large inner and outer immigration. This situation threatens historic and cultural heritage, thus identity of the city.

The study consists of four sections including a brief introduction about the importance of historic and cultural heritage for city identity and sustainability. The second section contains a literature analysis including heritage conservation and studies about creating sustainable neighbourhoods, cultivating city image. The third section introduces a case study evaluating traditional housing areas which are important heritage sites of Bursa. The paper lasts with a conclusion offering some proposals for sustaining city image.

**KEYWORDS:** traditional construction materials, sustainability, city image, city identity

### **1 INTRODUCTION**

The city is more than just a physical entity, more than a place where people live and work. As many researchers state, the city is a work of imagination, a metaphor, a symbol and cities are like documents of cultural and historical value, composed by different elements from changing periods and varied political flavours (Short,1996 and Kleveland,1999). In especially historic cities past and present penetrate each other and people are made participants in the whole by the spaces and places of the city.

Having a very important dimension that can be called permanence, historic cities reflect the history of intersection between place, society, culture, and technology, and have acquired meaning over time. Places express who we are, and how we want to be experienced by others. They are important for us because they provide the framework for social life.

Unfortunately, the image of historic cities is affected from urban transformation processes very heavily because of being influenced by population growth and rapid urbanization. The rising demands for more housing and emergence of new housing areas, whether formal or informal, change the character of the cities, especially traditional housing environments. With an increasingly globalised flow of resources, technologies and knowledge, the distinctiveness of particular places assumes greater significance in attracting both financial and human forms of investment. The architectural and cultural heritages of cities together with their historical characteristics become dynamic values which combine local and global.

The built environment, as Kleveland (1999) states, is in fact the most substantial and the most clearly spoken memory for society – it is the clearest manifestation of our culture. What's more it shows how we can protect this history and how we can use it in our own time. Historic cities could introduce themselves to the world arena with their historical and cultural characteristics which reflect their local specificities and differentiations. However, especially historic cities need new forms of intervention, regulation and management of the physical and social fabric upon which their localness and specificity are predicated, both for development and conservation. As Strange (1997) states, sustainability and sustainable development policies are the key factors for planning and development process in historic cities.

In the light of these, the aim of this study is to answer the question that : “ How can we protect the unique image of historic cities and how can we use it in our own time ? “ In the other words, how can we obtain sustainability in historic cities? “ The paper envisions sustainability of historic cities as closely bounded up with the identification of the local and cultural values they own. In this context, traditional housing environments in Bursa are observed and evaluated by means of the physical reflections of a mutual interaction between the architectural heritage of the city and its social structure and dynamism. The stress is put especially on the unique elements of the physical fabric that comprise the image of the city. The structural systems and construction materials are especially examined in order to understand whether they have a real effect on the city identity.

## **2 LITERATURE SURVEY**

Beginning with the explanation of the concept of sustainability - which have to be understood as an action balancing the present with the future, but also with the past - and sustainability of historic cities, will be meaningful for the aim of the study.

Application of the notion of sustainability and sustainable development policies to the planning and management of the development process in historic cities is a relatively new approach in the last twenty years. Tensions between the demands for both development and conservation in historic cities have given rise to a growing recognition that they cannot reproduce themselves without forms of intervention, regulation and management of the physical and social fabric upon which their localness, specificity and economic success is predicated. As Urry (1995) states, in an increasingly competitive global market where spatial and temporal barriers are diminishing, the specificity of place - its character, history, buildings, culture and distinctiveness - becomes more important (Strange,1997,1999). These developments have brought into focus the extent to which sustainable development policies are capable of resolving some of these conflicts.

Beyond its physical necessity the historical city has psychological and social importance for people which gives meaning to their life. They are real indicators of the importance of local and socio-cultural values and psychological meaning of the city, in today's globalizing world. At this point, it is obvious that, to obtain sustainable development of historic cities is a great necessity, in order to help people to orientate their life binding their past with the present and also the future. However this cannot be realized unless sustainability is taken into consideration with its socio-economic and socio-cultural dimensions

together with its ecological dimension. If the aim is to get success, this multidimensional structure of sustainability has to be taken into account with a holistic and integrated approach including human factor.

As Rogers (2011) indicates; “Good architecture has always been partly about change, but it is also about continuity. With hindsight, the architecture of the past always looks appropriate and doesn’t challenge the viewer, but then the past is safe because we are no longer engaged with its particular artistic, social or technological problems even if at the time it was regarded as cutting edge. Returning to cities, the compact, well-connected city encourages a good social mix, walking, cycling and use of public transport. It is the only environmentally sustainable form of urban building. Suburbs use around three times as much energy as compact cities so we need to ‘re-fit’ the suburbs and this starts by building more compact town centres.” These expressions of Sir Richard Rogers, also supports the thoughts that the historic city and its traditional building culture set a precedent for sustainable city and architecture.

There are so many definitions of sustainable city and sustainable architecture dealing with these concepts with variety of approaches. There is no doubt that sustainable architecture challenges new and ingenious architectural design at various levels. As Keitsch (2012) indicates, the main criteria of sustainable architecture can be determined as ; minimizing the negative environmental impact of buildings by enhancing efficiency and moderating the use of materials, energy and development space, developing measures to relate form and adapt the design to the site, the region and the climate and as the last one; establishing a harmonious, long lasting relationship between the inhabitants and their surroundings by addressing the essence of good form-giving (Abidin, et. al,2008). All of these criteria point to the characteristics of traditional Turkish house and the development process of traditional Turkish cities.

The importance of traditional Turkish building culture is a known fact for many years and there are plenty of theoretical and applied studies indicating this importance. However, the raising level of awareness about the vital importance of sustainable design and architecture accelerated the studies undertaken in order to make good use of these special characteristics of our building culture to achieve the targets of sustainable architecture. The study of Yürekli and Yürekli (2005), “The Turkish House, A Concise Re-evaluation”, is a valuable result of their works done for many years in order to understand and re-evaluate the Turkish House, which is efficiently used as an informative book. There are many collaborative research projects undertaken by the universities and local / central governments aiming to document and evaluate the cultural, historical and architectural heritage values of the country. The project developed in order to make the vernacular architecture and housing in rural environment of Balıkesir/Turkey is a successful example of these kind of studies.

Being conscious about the vital importance of the subject for the future of the world and their responsibilities as professional architects and academicians, the authors have been carrying on their studies about the relationship of vernacular and sustainable architecture in the context of various scales from micro to mezzo in architectural and urban design. Some examples of their studies can be cited as Ozturk and Cahantimur (2011), which includes analysis of traditional building cultures, Cahantimur, et.al, (2012), which describes the development process of management plans and Cahantimur (2013), Management Plan for the Citadel of Bursa; Hisar Region. In the scope of this paper, the initial stages of another research project developed for conserving the heritage of Bursa is presented in the following sections.

### **3 CASE STUDY: BURSA**

Bursa is one of the most important Anatolian cities which comprise of the oldest and most authentic examples of our monumental and civil architecture and which combines rich tradition, culture, history and nature at the same time. It is a valuable city shaped by a rich cultural heritage and succeeds to reach our times without losing its importance. In the south of the Eastern Marmara, Bursa has been one of the oldest settlements in Anatolia and the first capital of the Ottoman Empire, due to its geographical location, agricultural convenience of its natural structure and its importance from military point of view. Today, being the fourth biggest city of Turkey, Bursa is economically very dynamic and has been

undergoing a rapid industrialization and urbanization processes. It has one of Turkey's highest population increase rate as a result of its being a focus of large inner and outer immigration. There has been a huge migration from other regions as well as from Balkanise countries, since 1950's. For these reasons, unfortunately, the unique historic identity of Bursa has suffered a lot, however the city is still withstanding the onset of rapid urbanization. Bursa, having an ancient and valuable past, facing urban problems of various aspects on this way of rapid development but promising a great future has very suitable features for case study area of the study, in which, especially, every dimension of the urban sustainability is examined within limits of housing areas. In the light of these, the city of Bursa is chosen as a very suitable case study area for this research aiming to find out the importance of traditional building culture for city identity.

The famous Turkish researcher and academician Tekeli (1999) thinks that; in order to understand the urban transformations experienced by the city and the influences thereof, first of all, the geographical location of the city should be studied. His detailed studies about the urban development process of Bursa highlight that; the fate of Bursa is closely associated with five basic functions and locational specifications of the settlement. These are; 1. the central location of the city at the edge of a fertile plain and in the centre of a rich agricultural hinterland, 2. the proximity of Bursa to a world city –Istanbul, 3. the functions of the city as a long distance trade centre, 4. the function of the city as an industrial production centre, 5. its leisure and therapy functions developed due to the existence of thermal springs. All of these dimensions effected urban housing stock of the city. Before description of the empirical study, a brief explanation about urban housing development process of the city will be more expressive in order to understand the changes in the city identity caused by the rapid urbanization.

### 3.1 Urban Housing in Bursa

At the beginning of the 21th century, the city is occupying a very large space. The expansion in the east-west direction is 30 km and in the north-south direction is 16-17 km. and the population is almost 2 million, in other words the city has reached the metropolitan dimensions. The economic structure of the city is very dynamic and differentiated. It is reflecting the problems of an industrial city, of which macro form has rapidly expanded. Tekeli (1999) explains the materialization of urban housing transformation in Bursa, in two different ways. One is pulling down the existing city patterns and building rapidly new apartment buildings instead. The second one is the expansion of the city borders provided by opening new areas for construction. Both of these two implementations increased the accommodation capacity of the city.

Today, we can mention about five main housing groups in Bursa, different from each other in terms of typology. They can be classified as traditional housing ; apartments, of which construction has started with the modernization movements due to the Republican Period ; squatters, which have been constructed on the forbidden areas in the city periphery by immigrants with their resources and have been developed in time in accordance with their family needs and economical earnings, as a result of the shortcomings in supplying the housing demands because of the internal and external migrations ; social housing blocks which are built with the aim of solving the housing problem as from 1950's as an alternative to squatter settlements ; villas and luxury mass housing blocks which have developed as a result of the increased car ownership and nostalgia for a life with garden and are preferred by high income group in order to leave the stress of urban life. In figure 1, examples from main housing groups in Bursa can be seen.



Figure 1: Examples from main housing groups in Bursa (Cahantimur's archive)

Unfortunately, in spite of the several construction plans prepared and different propositions submitted for the housing problem as from the 1960's, 65% of the housing areas have been established illegally - as is the case with the other big cities-. This situation shows that the planning effected only by market powers is not capable of inspecting the city development and in that sense market fails to solve the important problems of the city (Altaban, 1999). In figure 2, the map showing the boundaries of the metropolitan city in 1998 can be seen.

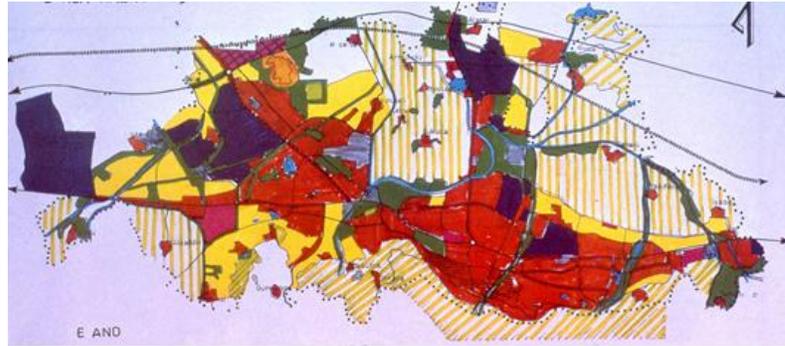


Figure 2: 1998 Bursa Map (Bursa Metropolitan Municipality Archives)

### 3.2 The Case Study

The research is ongoing in and around five different traditional neighbourhoods (Figure 3). All of these neighbourhoods are important settlements both for the history and today's Bursa. Unfortunately all of these traditional neighbourhoods have traces of rapid urbanization. However, they all reflect the historic face of the city with their urban layout and traditional houses. Hisar Region, surrounded by the historic city walls is the first settlement area of Bursa. Muradiye and Yahşibey Regions being very near to each other are the housing areas developed around a very important historic complex; Kulliya of Murad 2<sup>nd</sup>. Tuzpazarı and Reyhan Regions are the neighbourhoods developed around the historic trade center of Bursa which is built outside the historic city walls.

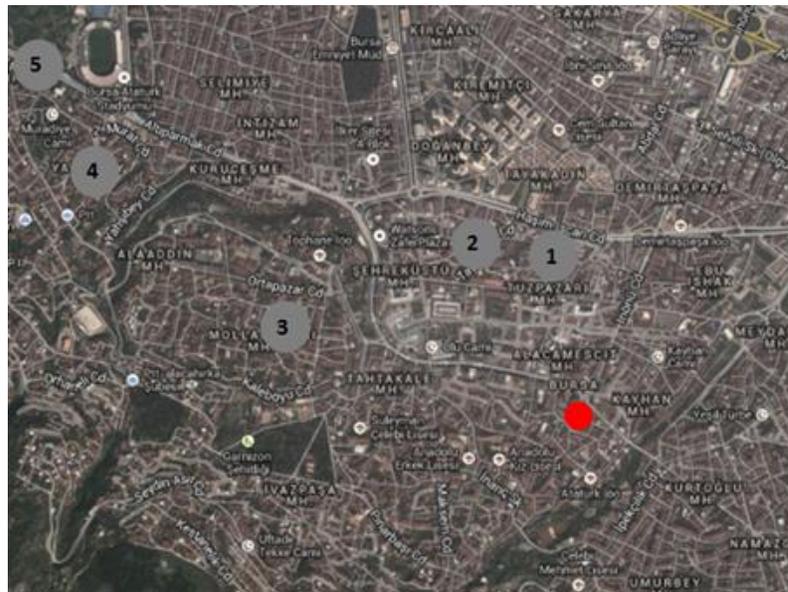


Figure 3: The selected traditional neighbourhoods in Bursa.(adapted from Google Earth)  
 1.Tuzpazarı 2.Reyhan 3.Hisar 4.Yahşibey 5.Muradiye

Hisar Region is selected as the pilot area for the fieldwork. Firstly, data related with physical environment, history and social demography of settlement have been obtained by making observations, physical analysis and examining archival documents. As a second step, relation of residents to the environment has been determined by asking questions of identity, attachment and residential satisfaction with the conducted survey. Residents' evaluation of their house and neighbourhood, the changes they had made in their homes and near environment and the reasons of them are also determined. In working out of data, the statistical program SPSS was used to apply special statistical analysis. Some qualitative structural analysis methods were also used.

The neighbourhood of "Hisar" includes traditional housing pattern preserved to a good level till our days. Surrounded by the old city walls, the neighbourhood is located to the West of the centre on a hill overseeing the city. Unfortunately, a wide motorway has been constructed in the neighbourhood as a part of reconstruction and modernization works to great extent. However, urban fabric of Hisar with its narrow roads and blind alleys and the morphological characteristics of its built environment give it a special identity, very different that of the contemporary settlements (Figure 4)



Figure 4: Views from the narrow streets of Hisar (Cahantimur's archive)

### 3.3 The Results of the Case Study

As a result of archival data analysis, quantitative analysis and observations made in the selected neighbourhood, physical, historical and socio-demographic data have been obtained regarding this area. Housing pattern of Hisar consist mostly of wooden and masonry houses bearing traditional Turkish features. Organic urban layout is a mixture of narrow roads in the scale of human beings or blind alleys in some places, small squares with a small mosque or an awesome oriental plane tree in the centre (Figure 5). This structure contributes to the maintenance of social living. Residents of traditional houses mostly own their dwellings some of who are heirs to the previous owners. The other part is new owners, who have bought their houses which were sold due to lack of funds and restored them to live in. Residents of apartment buildings of the same neighbourhood are mostly tenants and some parts of them are owners. The residents of the neighbourhood are generally small size employers and employees who belong to the middle income class. The area includes a lot of facilities and social opportunities due to its being in a walking distance to the city centre.

The systematization of specific characters of traditional building culture that can be traced in this area are being prepared with the help of typological analysis in which archival documents are searched in detail and new building surveys are made where needed. On the other hand, some scientific experiments are being made in laboratories in order to find out the variety of materials used in the construction of these traditional buildings.

All of these studies are proposed to be done in every five traditional neighbourhoods selected. At the end of these scientific researches, a detailed documentation including physical and spatial characteristics of the traditional houses of Bursa will be obtained. These systematized knowledge will be used when developing proposals about sustaining the city identity through building culture.

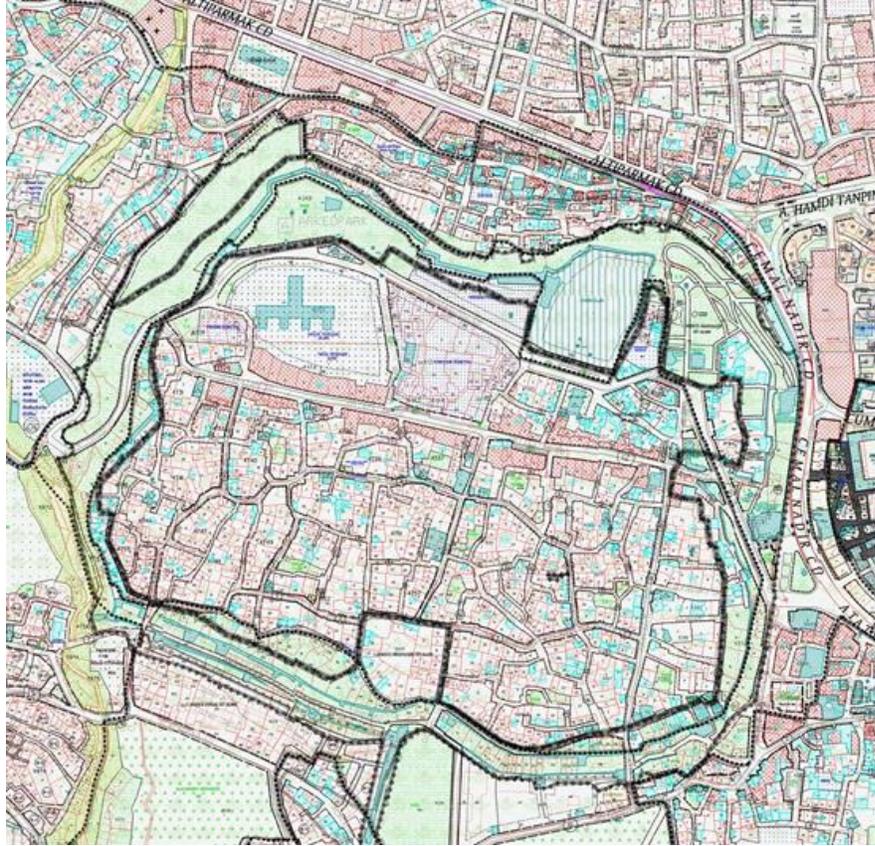


Figure 5: Analysis of Urban Layout Pattern of Hisar (adapted from Osmangazi Municipality archives)

#### **4 CONCLUDING REMARKS**

The research project briefly presented in the scope of this paper is being undertaken by a group of academicians in the Department of Architecture, Uludağ University in Bursa. It is proposed to light the way of studies of local and central governments about achieving sustainability of the city in general. The data obtained and the documentation prepared will strictly identify the unique physical and spatial characteristics of the traditional buildings creating the identity of the city. This identification will be a guide not only for the future implementations about building activities but also building regulations of the historic city.

Thus, the continuity of the identity of Bursa could be achieved by the help of the proposals developed. The main aim is to prevent the imitator approaches in architectural design and applications. Instead to develop a new and modern point of view for the young architects, in order to help them both to be able to protect the unique cultural values and also developing modern architectural designs supporting and enhancing the identity of the city.

#### **5 ACKNOWLEDGEMENTS**

The research project described briefly in this paper is being undertaken with the financial support of Uludağ University Scientific Researches Centre. Centre of Researches of City History and Researches at Uludağ University also supports this project.

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