ABSTRACT

Cultural attractions include museums, art galleries, festivals, ancient structures, historical and architectural monuments, heritage sites, artistic activities and demonstrations as well as religious trips, language characteristics, local and authentic values, olimpiads, clothing style, traditions, and food culture. As being one of the most important components of cultural tourism, the museums in recent years have experienced a change in their functions, increased the number of tourists and provided economic benefits in their regions by creating alternative destinations for tourism. For this reason the museums, the integral part of tourism, receive increasing investments and new museums are constructed with different functions and the presentation of different products to attract more visitors. This study was conducted to evaluate the development of the museums, to spatially analyze the number of museums, their visitor numbers and incomes by province, and to determine the contribution of museums to tourism in Turkey. The number of museums in Turkey obtained from the Ministry of Culture and Tourism, TÜRSAB and TÜİK, the number of artifacts in these museums, the number of visitors to these museums and the subsequent revenues according to the spatial distribution in the provinces have been mapped with the Geographical Information Systems (GIS) and the spatial analysis (Standard Deviation Ellipse, Moran’s I, LISA) of the museum indicators has been carried out and the results evaluated.

* E-mail address: ikervankiran03@gmail.com
† E-mail address: kadirtemurcin@sdu.edu.tr
‡ E-mail address: mustafayakar@sdu.edu.tr
Although museums have long been studied in Turkey with their different characteristics, the studies concerning the use of museums for tourism are quite new. As seen from the number of museums and their visitors, the museums are not being used sufficiently in Turkey. Apart from a very limited number of examples such as Topkapı Palace, Hagia Sophia Museum, Konya Museum, and Anıtkabir, the museums in Turkey are not sufficient in terms of their qualifications and the number of visitors.

**Keywords:** Tourism; Museum; Turkey; Spatial Analysis
Introduction

In 2002 culture was defined as the art, literature, lifestyle, cohabitation, system of values, traditions and beliefs of a community or social group as well as their spiritual, materialistic, intellectual and emotional characteristics by the United Nations Universal Declaration on Cultural Diversity (UNESCO, 2002). According to the World Tourism Organization culture is the aggregate comprised of the ways of life and habits of people. Culture is a concept which is enriched with religion, language, music, dance, architecture, art, crafts, cuisine, costumes, folklore, traditions and local festivals and gains depth with the interaction of a different cultural activity. Therefore there is a symbiotic relationship between culture and tourism. From this point of view culture tourism may be defined as all acts carried out by humans to quench the desire for new knowledge, experience and gains driven by the need to satisfy the quest for change and enhance their cultural levels (Canadian Heritage, 2006). With the increase in the level of education and income level people have started to travel to cultural venues from their places of residence to gain different cultural experiences.

The developments in current communication-transportation tools as well as globalization have fuelled the desire of people to see, learn, know about different cultures which has generated culture tourism (Nuryanti, 1996). Cultural tourism is one of the oldest tourism products, as many of the earliest tourist traveled for the experience of other cultures and cultural attractions. Today Cultural tourism is recognized as one of the broadest tourism product, which encompasses a vast range of attractions and activities and has extensive overlap with other products. Some reports suggest that as many as 70 percent of international tourists today participate in cultural tourism (McKercher and Cros, 2002). Culture tourism is born out of the differences between cultures. The desire of people to see cultures different from their own, the curiosity they have for learning has manifested culture tourism. This type of tourism has reached major dimensions in developed western countries which export large numbers of tourists with a high purchase power (Özgüç, 2007). Culture tourism is a significant alternative type of tourism for countries in terms of ‘being a form of tourism which protects cultural values in addition to generating revenue’ (Öztürk and Yazıcıoğlu, 2002).

However, culture tourism is not limited to cultural heritage and events, local traditions, artifacts, local cuisine and the refreshments culture are also presented to the global tourism industry as niche markets. At this point the marketing of culture tourism and managing it correctly to enhance its global competitive power is extremely important. In recent years culture tourism has been viewed as the rising value of the tourism industry and it undertakes a priority role in the approach to sustainable tourism with the added value generated in the global economy. In terms of sharing cultural heritage, the development of intercultural dialogue and the acceptance of a multcentered cultural understanding, the importance of culture tourism regarding the socio-economic development models of countries and their strategies to achieve international competitive power is increasing day by day (Helvacıoğlu Kuyucu and Bulu, 2007). The growth displayed by culture tourism has many reasons in terms of both demand and supply. The supply factors comprise of an increased interest in culture,
rise of cultural capital, ageing of the population in developed countries, the adoption of cultural consumption styles, enhanced freedom of mobility while the demand factors comprise of increased employment and income in the culture industry, growth in the culture tourism market, increasing number of cultural attraction centers, financing needs of culture, increase in the social importance of different abstract concepts such as originality and cultural image (Clarke, 2003). Therefore investments are increasing in cultural tourism in many countries which have recognized the socio-cultural and socio-economic contribution and planning is made to diversify the supply of tourism by establishing different cultural tourism attractions.

The Travel and Culture Conference held in the White House in 1995 defined cultural tourism as travelling for the purpose of experiencing the art, cultural heritage and local characteristics of the cultural tourism destination and addressed activities such as museums, arts and crafts handicrafts, historical buildings and venues, festivals, dance, music, theater within the scope of culture tourism (Calhoun, 2000).

The cultural resources for tourism are virtually limitless. Remnants and symbols of a place’s cultural heritage have been some of the most significant resources for tourism throughout history. For example, ancient Roman tourist and modern international tourist alike have been fascinated by the Pyramids of Giza, both for the spectacle of the archaeological site and for its mythology. Cultural heritage resources can be specific sites within a place (Old Bridge in Mostar) or encompass entire cities (Valparaiso-Chile). Religious sites, which are often tied to cultural heritage, can also be resources for tourism (Ayasofya Museum-Hagia Sophia, Potala Palace, Barcelona Cathedral). Visual arts are often used as a basis for a destination’s attraction: famous museums (Louvre in Paris, Metropolitan Museum of Art in New York). Therefore, Museums are among the most important elements of culture tourism (Nelson, 2013).

Museum tourism within the concept of culture tourism is important because it generates revenue and because it is a different recreational activity. When the affiliation between tourism and museums is being developed tourism develops and museums get new visitors (Jolliffe and Smith, 2001). A museum is an organization which serves the community and development, is open to the public and studies, collects, protects, shares information and finally displays materials which are witnesses to humanity and its habitat in line with the inspection, training and appreciation without profit as well as independent with continuity’ (International Council of Museums Code of Ethics, 2007). Mankind who is searching among international universalization and cultures is constantly affected by change. For this reason his initiative is to bring together the past and the future with new pursuits. The venues where these initiatives are displayed are museums (Erbay, 2009).

A museum is defined formally by the International Council of Museums (ICOM) as a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment (ICOM, 2007). Although there is not a one-and-only universally accepted definition, museums, in the broadest sense, are
institutions, which “collect, record and present the meaning and value we find in life and in our art, history and science” (Lord and Lord, 2001).

The *ICOM Code of Ethics for Museums* has been prepared by the International Council of Museums. It is the statement of ethics for museums referred to in the ICOM Statutes. The Code reflects principles generally accepted by the international museum community. The ICOM Code represents a minimum standard for museums. It is presented as a series of principles supported by guidelines for desirable professional practice:

• Museums preserve, interpret and promote the natural and cultural inheritance of humanity.
• Museums that maintain collections hold them in trust for the benefit of society and its development.
• Museums hold primary evidence for establishing and furthering knowledge.
• Museums provide opportunities for the appreciation, understanding and management of the natural and cultural heritage.
• Museums hold resources that provide opportunities for other public services and benefits.
• Museums work in close collaboration with the communities from which their collections originate as well as those they serve.
• Museums operate in a legal manner.
• Museums operate in a professional manner (ICOM, 2013).

Historically, museums were often the direct result of travel, established to display the souvenir collections of travellers returning from faraway places (Harrison, 1997). Travel was central to the collecting activities of museums in the 19th and early 20th centuries. Just as travel organises and processes experiences into tourism, the museum assembles and arranges collections in the form of exhibits into heritage experiences (Herbert, 1995). In the 21st century, postmodern conditions have fundamentally reshaped museums from institutions primarily focused on collections, preservation and scholarly research to institutions more focused on visitors and public service (Weil, 2007). In recent decades there has been a profound shift in the role of museums from the main core functions such as collecting, documenting, preserving, and research towards a “visitor-, service-, and marketing-oriented approach”. It is widely argued that the function of museums has shifted from places for storing artefacts to interactive institutions where interaction between visitors and artefacts occurs through the collections (Schubert, 2004).

Responding to the demands and expectations of the public, museums have developed new functions and approaches, and consequently, new departments in their organizational structures in order to establish mutual communication with their visitors, to enhance the museum experience for visitors, and to reach out to wider audiences. New developments include education programs, varied exhibition techniques, marketing tools and techniques, visitor studies, membership and volunteer programs, and diverse visitor facilities. Besides, these new museology approaches gave
rise to a substantial growth in the number of employees in museums and led to the emergence of new museum professions: marketing managers, development officers, and fund-raisers are employed in museums in addition to education officers/educators, designers, conservators, and curators. Museums have now become part of a “total destination”; part of a holiday package that might include two nights at a hotel, a trip through the local countryside, and a visit to the museum (Hooper-Greenhill, 1992).

The concept of the new museology places visitors and visitor-oriented museum services at the core of the present-day museums. Today, visitors have become a crucial component of museums, and consequently various visitor facilities and services have become prominent and have enormous importance. Moreover, it can be added here that through these new approaches, on the one hand, museums of this new era have been commercialized, and on the other hand, museums have moved closer to their audiences. Today’s museums operate in a more commercial way due to the new consumption spaces where visitors consume the presented products through various visitor facilities. A wide range of visitor facilities acting as social gathering venues and services such as souvenir shops, cafes, restaurants, bookstores, education centers, film screening, and so on encourage audiences to spend much more money and time (Bulut, 2010).

**Table 1: The Tourism and Museum relationship**

| Observation 1 | Similarities | Result from travel  
| | | Produce and exhibit culture  
| | | Construct and inventory culture  
| | | Organise and process experiences  
| | | Depend on an audience  
| Observation 2 | Differences | Goal of tourism is generally profit  
| | | Museums are generally not for profit  
| Observation 3 | Interconnections | Tourists visit museums  
| | | Museums present heritage for tourist  
| Observation 4 | Philosophies | Differing ideas of the form museums take  
| | | Different view of the activities museums  
| Observation 5 | Context | Destination context  
| | | Jurisdictional factors  
| | | Economic development  
| | | Resource support  

(Jolliffe and Smith, 2001)

In the present day, museums pursuing both educational and recreational roles have been reconceptualized in terms of the way that they communicate and their relationships with the public. Museums today “are seeking ways to embrace their visitors more closely” and they try to make their collections as accessible as possible (Hooper-Greenhill, 2000; Barker, 1999). One of the institutional participants in heritage tourism is the museum. The role of the museum in relation to tourism is evolving with
the increase in tourism and with the need for museums to attract new audiences (Lord and Lord, 1997). The demand for museums increases with the development of tourism. In an area where museums are used efficiently, well marketed and have become brand names the number of tourists increases and the economic revenue increases, the opportunities for alternative tourism are established. For this reason investment in museum tourism is increasing in many countries and the target is to establish museums which are committed to themes such as science, art, nature, children, toys, astronomy, archeology, history and private museums which cater to all age groups to serve tourism (Kervankiran and Eryılmaz, 2015). Therefore, tourism and museums have a reciprocal influence on one another (Table 1).

The literature reveals a number of similarities between tourism and museums. In particular, common characteristics are apparent when both tourism and museums are viewed from a process-based perspective. Both activities result from travel. Tourism and museums share the characteristic of processing, organising and exhibiting the experiences related to culture and heritage. The differences between tourism and museums are revealed through an examination of their missions, mandates and motives. Tourism as an economic activity usually has profit-making goals. The museum, in contrast, is usually a not-for-profit organisation, and involvement in heritage tourism is not normally the primary purpose of the museum. Both studies illustrate that for tourism, the participation of museums is necessary. They also demonstrate that for museums, participation in heritage tourism has many identifiable benefits. Both the review of museum perspectives of tourism and the studies of museum provision confirm that differing views of the tourism/museum relationship and diverse viewpoints as to the functions of museums influence the participation in heritage tourism (Jolliffe ve Smith, 2001). Due to tourism recognition for the collection displayed at museums increases, museums become alternative destinations in terms of tourism which increases the number of tourists and generates revenue for the regions where they are located (Kervankiran, 2015a). The contribution of tourism to the economy of the country and the special place held by museums in the tourism sector cause the numbers of visitors to grow continuously while they display the rich Turkish history and culture to visitors (Özgören, 2007).

Museums are within the area of interest from the aspect of culture as well as tourism which is why tourism activities carried out in museums are assessed within the scope of cultural tourism. This demonstrates that the input of geographical studies is significant in manifesting the impact of museums in the intersection of cultural geography and the geography of tourism on humans and venues. Geography which is an interdisciplinary science studies museums in terms of both historical and cultural characteristics as well as the spatial, economic and socio-cultural impacts in terms of tourism activities. A spatial analysis has been carried out in this study to determine the place occupied by museums and their development in tourism in Turkey according to the statistics for museums in provinces between the years 1975-2013.
1. The Development of Museology in Turkey

Albeit not in the contemporary sense, the establishment of museums started thousands of years ago. During the XVIII. and XIX. Centuries museums were defined and functioned as establishments which collected, conserved and exhibited various artistic, ethnographic and antique objects. Museums survived with this structure and definitions until the end of the XIX. Century through the era of classical collection museology. As of the beginning of the XX. Century this classical museology approach and trends were abandoned and a transition into modern museology was pioneered with the technology of the XX. century (Erden, 1990).

Museology in Turkey started one hundred and fifty years after Europe with the storage of ancient artifacts in specific venues (Yaraş, 1994: 64). The inception and development of museology in Turkey is established by archeology. This is also the reason for the establishment and growth of archeology museums in Istanbul and Ankara. In the beginning the large number of artifacts collected in these two museums made it necessary to transfer artifacts to storage museums opened in other cities which were subsequently converted to archeology museums. The most important museums in present day Turkish cities are archeology museums (Doğaner, 2013). Initially museology in Turkey was pioneered by foreign experts and a new era was incepted when Osman Hamdi Bey was appointed director of the museum established in the Hagia Irene Church. After the appointment of Osman Hamdi Bey as museum director he commissioned the restoration of the Tiled Kiosk followed by the building of the ‘School of Fine Arts’ as it was known at that time and which is now known as the ‘Ancient Orient Museum’. In order to conserve and store the ancient artifacts the numbers of which were increasing daily, Osman Hamdi Bey commissioned architect Valaury to design and construct a building which is currently known as the Istanbul Archeology Museum. Osman Hamdi Bey who remained in the museum directorate until his demise in 1910 spent much effort to modernize museology in our country (Atasoy, 1984: 1458).

After the proclamation of the Republic Turkish museology continued to operate with a modern breakthrough. Atatürk had a major share in this development because in addition to new museums being established according to his instructions he also prioritized archeological excavations. Atatürk had prioritized museums which reflected our national culture since the beginning of the War of Independence. In the government program which was read at the assembly meeting on the 9th of May 1920 of the National Government established immediately after the opening of the Grand National Assembly of Turkey it was indicated that ‘Our national ancient artifacts shall be collected and conserved without delay’. This was followed by the establishment of the ‘Turkish Ancient Artifacts’ Directorate affiliated with the Ministry of National Education of the newly established government with a staff comprising of a director and a clerk (Yücel, 1999). The history of most of the museums which accommodate our national heritage which paralleled Turkish museology that had reached a modern level on account of Atatürk only go as far back as the founding years of the Republic. With the Council of Minister decision dated the 1st of April 1924 Atatürk ordered that Topkapı Palace be converted into a museum and a part of the palace was opened to
the public in 1927 and the whole palace was opened in 1934 (Özgören, 2007:45-46). After the declaration of the Republic the first building that was designed as a museum building in our country was the Ethnography Museum in Ankara (1925-1930). On the other hand the 1960s were the beginning of a new in Turkey in terms of museology and particularly museum buildings. During this period many new museums were established and some of these museums were built according to the ‘museum projects’ commissioned by the Ministry of National Education. Museum buildings built according to this project are Yalvaç Museum (1965), Alanya Museum (1967), Erzurum Museum (1968), Edirne Museum (1971), Gaziantep Museum (1969), Kayseri Museum (1969), Sinop Museum (1970) and Edirne Museum (1971).

During the first years of both museology as well as the Republic museum collections comprised mainly of archeological, historical, ethnographical, handiworks and Islam arts artifacts and this trend continued until the 1980s (Özkasım and Ögel, 2005). According to article 26 of the Law for the Conservation of Cultural and Natural assets number 5879 published in 1983 the establishment and development of museums for cultural and natural assets is within the task area of the Ministry of Culture and Tourism.

**Figure 1:** Turkey’s Most Visited Museum
During the years 1975-2013 a continuous increasing trend in both the number of museums as well as the number of artifacts in museums has been observed in Turkey. While the number of museums was 89 and the number of artifacts in museums was 1,558,080 in 1975 by 2013 the number of museums had reached 187 and the number of artifacts in museums had reached 3,174,867 (Figure 2). As of 2014 there were 188 museums affiliated with the Ministry of Culture and Tourism in Turkey which contained 3,177,446 artifacts in total. It is evident that coins have the largest share of artifacts according to the current distribution of artifacts in museums in terms of type (59%). The other artifacts are comprised of archeological (24%), ethnographical (9%) artifacts which 8% consist of artifacts such as manuscripts, seals and tablets. Furthermore there are 192 privately owned museums under the supervision of the Ministry (Kervankıran, 2015a). The most frequently visited museums among them are the Hagia Sophia Museum, Topkapi Museum and Mevlana Museum. The revenue rankings from the museums are lead by Hagia Sophia Museum, Topkapi Museum and Denizli Hierapolis Ruins (Figure 1).

With the proclamation of the Republic museology in Turkey gained more significance and in line with the modern understanding the Works were geared toward displaying ancient artifacts in their places of discovery. New museums were established throughout the country and the valuable artifacts of Anatolian civilizations were collected and put on display in museums. These works gained importance in the present day and are sustained more professionally. Museums draw tens of thousands of foreign tourists to our country every year and contribute significantly both to tourism as well as the promotion of Turkey. The most important indicator of this is the...
increase in the number of visitors to museums as well as the increase in museum revenues. The number of visitors to museums in Turkey was 4,746,381 in 1975 the number reached 29,566,961 in 2013. While museum revenues were 27,561,940 TL in 2000 this value increased continuously in the ensuing 14 years to reach 300,039,530 TL in 2013 (Figure 3). The continuous increase in the number of museum visitors and museum revenues indicates that museums make a significant contribution to tourism in Turkey.

2. Purpose and Method

The purpose of this study was to assess the position of museums in tourism in Turkey and establish the spatial analysis of museum indicators. To this end the number of museums obtained from the Ministry of Culture and Tourism, TÜRSAB and TÜİK, the number of artifacts in museums, the number of visitors to museums and museum revenues were assessed with mapping according to spatial distribution for provinces with Geographical Information Systems (GIS) and Spatial Autocorrelation Analysis (Standard Deviation Ellipse, Moran’s I. LISA) method for the determination of spatial clustering. Data for state museums have been evaluated because the data for privately owned museums is incomplete. The data for 1975-2013 have been used for the temporal change of museum indicators according to years while the culture indicator data of the Ministry of Culture and Tourism for 2013 have been used for the spatial clustering analysis according to provinces.

3. Spatial Analysis of the Museums in Turkey

One of the most important elements of tourism is the venue. Therefore it is necessary to carry out a spatial analysis in order to manifest changes, conversion and the impact of a tourism event in a given region. Because Geographical Information Systems (GIS) contain a variety of activities carried out in relation with venues it has started to be widely used in tourism geography studies in recent years. The importance of GIS in the display of tourism expansion areas, in the planning of alternative touristic venues which could support current tourism areas, in the visualization of the changes occurring in tourism from the past to the present, in the recommendation for alternative touristic products, in the establishment of tourism routes, in the generation of inventories and mapping of touristic values relevant to tourism is becoming increasingly evident in the analysis of the spatial affiliations of tourism (Kervankiran, 2013). GIS has been developed in order to enable analysts and initially geographers who have studied venues for centuries to execute these studies, queries, analysis and mapping procedures in a computer environment more correctly, more practically and more rapidly than previously. GIS presents various tools which have been developed for the different objectives of users. With the help of these tools new numerical data are generated in GIS and various queries and analyses can be carried out on existing data. Due to the numerous activities carried out depending on the venue, GIS has become widely used in tourism geography studies during the past years (Kervankiran, 2015b). The distribution of museum numbers, the number of artifacts in museums, the number of museum visitors and museum revenues which are major indicators of
museum tourism according to provinces have been assessed with GIS to analyze the current status of museum tourism in Turkey.

![Figure 4: The Distribution of the Number of Museums and Works in Turkey](image)

This article is released under a Creative Commons - Attribution 3.0 license.
Figure 5: The Distribution of the Number of Visitors to the Museums in Turkey
Museology activities developed after the era of the Republic in Turkey and interest in museum tourism increased and with the continuing investments in museums the numbers kept rising. In 1975 there were 89 museums affiliated with the Minister of Culture and Tourism in Turkey and these museums contained 1,553,080 artifacts. During this year the provinces of Istanbul (5), Ankara (5) and Hatay (5) had the most museums while 28 provinces had only one museum and 19 provinces had none. Especially after 1990 the importance given to museology increased, new developments incurred in the area of museology and more qualified staff were hired by museums. After this date an increase has been observed in both the number of museums as well as the number of artifacts. In 1990 the number of museums was 154 and the number of artifacts was 2,357,335 while the number of museums reached 177 in 2000 and the number of artifacts was 2,691,703 (Figure 4).

As of 2013 there are 188 museums in Turkey with a total of 3,177,446 artifacts. An overview of the spatial distribution of museum numbers according to province at this date it is seen that Istanbul (19), Izmir (10) and Konya (10) have the most museums in Turkey. There are 8 museums in Içel, 8 museums in Muğla, 7 in Antalya, 7 in Bursa, 6 in Ankara, 6 in Aydın and 5 museums in Nevşehir. It seems that provinces other than those have fewer museums. 31 provinces of the 81 provinces in Turkey have only 1 museum and 12 provinces do not have a museum affiliated with the Ministry of Culture and Tourism. These provinces are Ağrı, Artvin, Bingöl, Hakkâri, Muş, Siirt, Tunceli, Kirikkale, Şırnak, Ardahan, Iğdır, Yalova, Karabük and Osmaniye (Figure 4). It is noteworthy that the provinces without museums are mainly provinces which became provinces relatively recently and are centers with low population numbers. An overview of the distribution of the number of artifacts in the museums in Turkey reveals that in this regard the leading provinces are Istanbul, Ankara, İzmir, Muğla, Gaziantep and Muğla and these provinces host over 100,000 artifacts. A study of the positions of the provinces hosting the museums with the most artifacts shows that they are positioned in areas which accommodated ancient civilizations.

Museums transport civilizations and cultures to our present day in addition to comprising the life blood of culture tourism. For this reason museums are the most prestigious and most visited venues throughout the world. During the past 20-30 years significant changes have taken place in the area of museology in the world. In the past museums were venues which collected historical artifacts while today museums function as places where people are informed, entertained, where intercultural interaction takes place and new experiences are presented. This overall change of philosophy taking place in museums throughout the world is gradually having an impact in Turkey. The change incurring in the museums in Turkey is the reason why museums are visited more frequently.

In 1975 the number of visitors to museums in Turkey was 4,746,381, in 1990 the number was 8,473,720, in 2000 there were 6,894,655 visitors and in 2013 the number of visitors was 28,812,021. A continuous increase in the number of visitors to museums has been observed particularly after 2005. An overview of the number of visitors to museums according to provinces for 1975 shows that the museums in Istanbul (1,840,881), İzmir (594,398), Konya (492,290), Ankara (382,339) and Nevşehir (366,633) provinces were the most frequently visited museums. In 2013 the most frequently
visited museums were in Istanbul (8.761.873), İzmir (3.245.616), Antalya (3.091.595), Nevşehir (2.550.721), Konya (1.810.284) and Denizli (1.745.410) provinces (Figure 5). The number of visitors to museums in these provinces is over one million and at the same time these provinces attract the most tourists in Turkey.

An overview of the distribution map of museum revenues according to provinces in Turkey shows that it is similar to the provinces with the most visitors. The province leading in museum revenues is Istanbul, Istanbul is followed by the provinces of İzmir, Denizli, Antalya, Nevşehir, Ankara, Muğla, Konya. There are some provinces which are visited yet they have no museum revenues. These provinces are Adana, Adıyaman, Afyonkarahisar, Bilecik, Bitlis Çankırı, Gümüşhane, Kırklareli, Rize, Sakarya, Tekirdağ, Uşak, Yozgat, Karaman, Bolu and Düzce. Some provinces have no museum visitors revenue although they have museums. Such provinces are Diyarbakır, Erzincan, Kahramanmaraş, Bayburt and Kilis (Figure 6).
An overview of the spatial distribution of both the number of visitors to museums as well as the museum revenues reveals an overall development in terms of tourism in Turkey with venues which attract tourists. In this aspect tourism and museums have a mutual impact on one another. The number of museum visitors increases in areas where tourism has developed, the number of museums increase and alternative tourism venues are generated for tourists in areas where different types of museums are planned and this has a positive contribution to the development of tourism in the relevant region.

The Standard Deviation Ellipse generates results regarding the tissue of spatial distribution and manifests the degree of propagation. The dimensions and shape of the ellipse generate the degree of propagation while the positions of the axis manifest the characteristics of the orientation of the components in terms of the venue (Gürbüz and Karabulut, 2010:58). The Standard Deviation Ellipse has been used for museum variables in order to determine the spatial propagation and tissue of the indicators of museums in Turkey. Out of these variables the number of museums displays an easterly-westerly elongation, in other words it parallels the overall extension of the position of Turkey while a propagation westerly of Anatolia is evident. An overview of the propagation of artifact numbers displays an elongation resembling the museum numbers however as the number of artifacts is high in Istanbul and Gaziantep the elongation is NW-SE. The Standard Deviation Ellipse for museum visitor number is NW-SE yet the elongation is mainly westerly. In terms of museum revenues the Standard
Deviation Ellipse contracts considerably and the ellipse changes into a circle. The main reason for this propagation display is the fact that there is a considerable difference between the museum revenues of Istanbul province and the other provinces (Figure 7).

In order to demonstrate the impact of clustering in specific venues in the tourism sector first it is necessary to monitor where tourism clusters according to years, observe where the clustering is trending and determine the dimensions of the clustering. In this regards effective and powerful methods are available for analyzing the spatial pattern or spatial distribution of tourism (Kervankiran, 2015b). Spatial Data Analysis is a data analysis which explains the interaction of existing data in a venue, its structure and processes with methods that display their affiliations with other spatial events (Bailey and Gatrell, 1995).

Spatial Autocorrelation is a method which analyzes the collection and dissemination levels of those with similar properties in spatial distribution. This analysis known as the Morans I index delivers the correlation of spatial distribution. If the obtained value approaches +1 a positive correlation or a spatial clustering is evident whereas if the value approaches -1 the distribution consists of a negative correlation which includes randomness in the venue. Depending on the results of the Morans I index the dependency level on the venue can be determined for the whole study area when the units in the vicinity of the distribution are included in the process. (Rogerson, 2001; 167).

According to the data obtained from Culture Statistics for 2013 and a review of the Morans I index result for museum indicators in Turkey it has been concluded that the spatial distribution of museum variables do not establish a significant clustering. Out of these indicators, only the Morans I index value of museum numbers is high compared to the others.

LISA (Local Indicators of spatial Association) analysis has been used to determine the status of the spatial autocorrelation of museums and museum tourism indicators in Turkey on a local scale. Accordingly, the clustering trend in terms of provinces in Turkey is observed only with the indicator for museum numbers. In terms of the number of museums the provinces of Istanbul, Bursa, Izmir, Aydın and Muğla display clustering of a high-high value. The reason why the number of museums displays a H-H value in clustering in these provinces is because the number of museums in the other provinces in the vicinity is also high. An overview of the results of the Morans I index results for the number of artifacts in the museums, the number of visitors to museums and the museum revenues indicates that no significant clustering is apparent for these variables. In overview of the LISA (Local Indicators of spatial Association) analysis results of the same variables shows that according to provinces these variables have a H-H value for spatial clustering tendency only in Istanbul province (Figure 8).
Figure 8: Anselin Morans Local I Analysis of the number of Museums and Works and Museum Visitors and Museum Revenue by Province in Turkey (2013)
Conclusion

Museums are organizations which are increasing in number in many countries because they conserve cultural values, contribute to the socio-cultural development of the local population and for their role as alternative tourism venues. Due to its historical past Turkey is a country abounding with cultural values and attractions. Museums play an important part in conserving and promoting these attractions as well as benefiting tourism. However, it is apparent that with the exception of specific provinces the number of museums in the other provinces in our country is insufficient. Because of its position, history, cultural values and because it hosted many civilizations Turkey is a country with multiple values particularly in terms of traditional culture. Due to this characteristic there are numerous values in almost every region in Turkey which deserve to be exhibited in museums and add value to tourism. However, an overview of the number of museums and their visitors indicates that Turkey is not utilizing this potential fully. The quality as well as the number of visitors of museums other than principal museums such as Topkapi Palace Museum, Hagia Sophia Museum, Konya Museum, the Mausoleum are below the expected level.

The number of visitors to museums as well as museum revenues has increased in Turkey particularly after the 2000s. The main reason for this is the increasing importance given to culture tourism within alternative tourism in Turkey. Therefore, the number of visitors to museums and museum revenues in Turkey will continue to increase in the future in parallel with the increasing interest in museums which are among the most important elements of culture tourism.

An overview of the map displaying the number of visitors to museums according to provinces in Turkey shows that the most frequently visited museums are in Istanbul with 8,761,873 visitors. Istanbul is followed by the provinces of Izmir, Antalya, Nevşehir, Konya, Denizli, Ankara and Muğla. An overview of the map displaying the museum revenues in Turkey according to provinces reveals that it is similar to the map showing the provinces with the most visitors. Istanbul province is the leader in museum revenues. An overview of the spatial distribution of both the number of museum visitors as well as the museum revenues indicates that there is an overall development in tourism in Turkey and that there are venues attracting tourists.

In this study the current status of museum tourism in Turkey and the spatial distribution and analysis of museum indicators according to provinces have been assessed. According to data for 2013 the province with the highest number of museums in Turkey was Istanbul. An overview of the spatial distribution of both the number of visitors to museums as well as the museum revenues indicates that there is a general concentration of tourism in developed regions in Turkey. According to the data obtained from the Culture Statistics for 2013, it is concluded that the Moran’s I index result for the museum indicators in Turkey indicates that the spatial distribution of museum variables other than museum numbers does not establish a significant clustering.
References


This article is released under a Creative Commons - Attribution 3.0 license.
AlmaTourism N. 13, 2016: Kervankıran İ., Temurcin K., Yakar M., The Development of Museology in Turkey, a Spatial Analysis of Museums and their Contribution to Tourism in Turkey


alamtourism.unibo.it – ISSN 2036-5195 – DOI 10.6092/issn.2036-5195/6010
This article is released under a Creative Commons - Attribution 3.0 license.


http://www.kultur.gov.tr/ (Erişim Tarihi: 15.03.2015)

http://www.tuik.gov.tr/ (Erişim Tarihi: 15.03.2015)

http://www.tursab.org.tr/ (Erişim Tarihi: 15.03.2015)