Heritage Conservation in River Corridor Cities The Case of Tripoli, Lebanon

Manal Ginzarly, Jacques Teller LEMA, Université de Liège, Urban Environmental Engineering Research Unit, 9 allée de la Découverte, 4000 Liège, Belgique.

Abstract. This article recognizes rivers as cultural heritage landscapes, as an integral component of cities common heritage and an element of collective memory and identity. It is based on the consideration that analysis of the socio-spatial relationship between the river and urban structure at different historical period can further lead to knowledge about the river contribution in forming the identity and sense of place of an urban area. This knowledge can be used to inform urban conservation as well as development practices to support the integral spatial and cultural relation between the city and the river in order to maintain the character of river city. This article takes the historic core in the city of Tripoli, Lebanon as a case study where conservation practices have followed a monument centric approach focusing on the restoration of heritage buildings and sites and neglecting the cultural value of the Abu Ali River flowing through the city. It conducts a multidimensional morphological analysis that is based on archival review and field work to extract the social value of the river and its contribution to the urban morphology of the city.

Key Words: Urban river, Cultural heritage landscape, Morphological analysis, Tripoli, Lebanon

Introduction

Over centuries the relation between cities and water bodies (rivers, lakes, seas, and oceans) has been largely influenced by changes in urban design and planning approaches to cities. Since the history of civilization water bodies were the foci for most urban development because they offer key resources and services, including drinking water, fertile agricultural lands, fishing, power production, and transportation links (Guillerme, 1983; Grimm et al., 2008). Most river corridors not only have important ecological roles within urban landscape, but similarly have key societal, cultural, and economic values (Francis, 2012).

In the late 19th century, early 20th century western cities were in a process of development at a speed that was beyond the capacity of incremental urbanism. Rapid urbanization and intensive industrial activities have largely affected urban form, and means were developed to facilitate movement within cities (Otto et al., 2004). Accordingly, transportation shifted from water to streets and rails, and engineering projects have contributed to extensive changes in rivers' functions and structure. For instance, most urban river-edge lands were filled to accommodate new infrastructures, and many river channels were straightened completely disconnecting them from their floodplains (Pedroli et al., 2002). These developments did not only harm the ecological function of rivers (Everard & Moggridge, 2012) but also disconnected the rivers physically from their urban context and spiritually from the urban life since the river edge became less important as a social and retail space (Otto et al., 2004).

In the early 21st century, ecological studies have grown tremendously and have begun to influence theoretical thinking on the form of cities. Consequently, a radical shift took place to

thinking about cities as biological rather than physical systems (Wu & Hobbs, 2002; Pickett et al., 2004). Rivers are now recognized as important ecological and social components in urban systems.

Within the context of cities with historic urban cores, cultural heritage has primarily focused on the built urban fabric neglecting the rivers that gave reason for their location. In many cities conservation practices have followed a *monument centric* approach focusing on the restoration of heritage buildings and sites and neglecting the cultural value of ecosystems at large, and especially rivers. Moreover, most morphological studies analyse the landscape in terms of streets, plots, blocks, and buildings and do not consider the spatial relation between urban structure and the river corridor. This article recognizes rivers as cultural landscapes, as an integral component of cities common heritage and collective memory and identity. It stresses on the need of integrating river systems into the cultural heritage design of cities where the natural and built environment are perceived as a single entity rather than separate ones. It is hereby considered that the river influences the physical and social patterns of human settlements contributing to form the very specific character of the later (Guillerme, 1983). To elucidate the socio-spatial relationship between cities and rivers, this paper takes the Mamluk core in Tripoli, Lebanon as a case study.

This article is structured as follows. Section one provides details about the heritage value of river corridors. Section 2 illustrates the multi-dimensional morphological method to the analysis of the socio-spatial relationship between the river and the city. Section 3 applies the proposed methodology to the city of Tripoli. Section 4 discusses the outcomes and presents the conclusions of the work and its limitations.

River corridors as cultural heritage landscapes

In 1925, the geographer Carl Sauer introduced the term "cultural geography" into American geography discipline (Price & Lewis, 1993). Sauer (1925) argued that the cultural aspects of the landscape and its material remains are created over a long period by human activity. In other word, a cultural landscape is "fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area is the medium, cultural landscapes the result" (Sauer, 1925, p. 22). River corridors, and especially urbanized river corridors, are paradigmatic examples of such cultural landscapes, especially in those cases where urban settlements developed along the river and contributed to the evolution of its structure. Given the different factors contributing to the development and change of the landscape, Guido (1999) attributed to it different values: environmental value as part of an ecosystem; cultural value as the historic evidence of a site and its transformation; aesthetic value as a visual and representative expression of the relationship forged over the centuries between human beings and their environment; and social value, in that it increasingly reflects human identity. In this context, river corridors have been recognized as having exceptional ecological, cultural, and historic significance in a landscape (Forman, 1995; Francis, 2012).

Different urban planning and design approaches have been applied to restore damaged urban rivers (Marshall, 2004; Otto et al., 2004). It is crucial to mention that such projects do not aim at restoring rivers to their pristine condition, but at providing new scenarios that are suitable to site specification and context. This article proposes a multi-dimensional approach to capture the influence of rivers on urban settlements patterns, the changes that occur through time in the physical structure of the city and the river, and the changing role of the river over time. The aim is to elucidate the existing spatial and cultural relationship between rivers and cities to provide valuable knowledge that could guide future cultural heritage conservation practices centred on river conservation as a key element of urban heritage policies.

Methodology

The core issue of this paper is to elucidate the socio-spatial relationship between the city and the river. To achieve its goals it proposes a multi-dimensional method to the analysis of urban form that does not only target the morphological configuration of urban landscape but also the historical and cultural values attributed to it. This method follows three inquiries: the first is an archival review to analyse the riverside settlement at different historical periods. The second is a review of heritage listings and cultural heritage conservation projects in the historic core to identify experts' understanding of cultural heritage and the relationship of the river system to classified monuments (mosques, khans, public baths, and schools). The third is on-site structured interviews to reveal the community perception of the study area and urban landscape preferences.

The first investigation is a morphological analysis of urban form. Based on the cadastral maps of the city dating back to 1937 the street pattern during the early urban settlement in the historic core in relation to the river corridor is analysed, as well as changes that occurred through time in the physical structure of both urban and natural systems. A party wall map has been outlined for the city. A party wall map is a two dimensional plan map that shows nodes of attraction in the city through drawing only one edge of each building. This method has been applied in different projects to understand urban development pattern through establishing a comprehensive relationship between the alignment of the building fabric and the city's physical features such as street pattern, natural features, and open spaces (Hallaj, 2000).

The second investigation is a review of heritage listings to see how experts perceive the cultural heritage in the city and how they approach it when it comes to conservation policies. Accordingly, we reviewed the UNESCO listing in 1953, the 1995 survey done by the Association for the Preservation of the Archaeological Heritage of Tripoli, the municipality, and local historians, and the 2002 cultural heritage and urban development project in the city. First, for each classification a base map that highlights classified buildings or sites is developed. These maps were analysed in terms of what is classified and what has been disregarded in the designation process.

The third investigation is an on site survey based on a structured questionnaire. The questionnaire contains two sections. The first part is oriented towards the interviewees' mental image to reveal how they perceive the study area, and the second section consists of an openended question about heritage preferences. Fifty persons participated in the questionnaire survey. Interviewees included shoppers, shops owners, and households. The interview was done on the street, in shops, and houses. We conducted the interview during February and March 2014. We then extracted the different elements represented in every image to see commonalities and differences to end up presenting in a schematic way how people perceive the spatial environment at the riverside settlement. Second, we analysed the different positions towards the river revitalization to see if interviewees value the river and the social and cultural meanings attributed to it.

Study area

Situated 85km North of Beirut along the Mediterranean coast, Tripoli is considered as Lebanon's second capital. The city was founded on the Mediterranean seaside during the 14th century BCE. It was not until the Middle age that Tripoli became a city with two poles: the marine city (El-Mina), original site of Tripoli, and the Medina, currently the Mamluk historic core (Gulick, 1967). In 1289 the Mamluks conquered the crusader city that was situated on the peninsula razed it to the ground and built a city at the foot of the crusader citadel and along the Abu Ali River around 3 Km to the west.

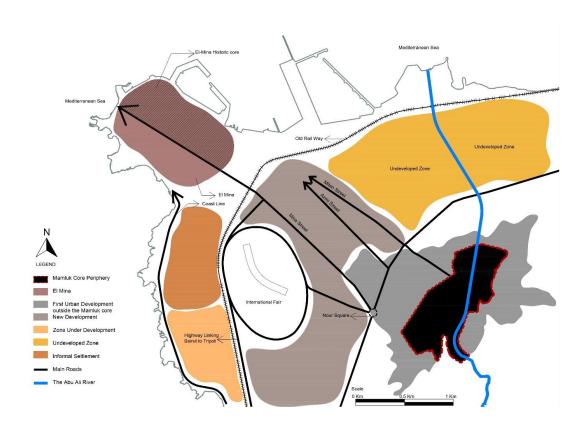


Figure 1. (Tripoli, Lebanon, and different urban zones in the city).

The two poles remained separated by citrus fields till the beginning of the twentieth century. In 1516 the ottoman occupied the city till the beginning of the French mandate in 1918. It was not till the late ottoman period that urban extension outside the city's gates started. Urbanisation started along the roads constructed between El-Mina and Medina in the beginning of the twentieth century during the ottoman period, as well as towards the north and the East on the east bank of the Abu Ali River and to the south on the west bank of the river. By the end of the twentieth century urban sprawl took over most of the agricultural fields (Figure 1). In the second half of the twentieth century the city experienced a spectacular population growth under the influence of new urban developments and rural exodus from neighbouring north regions (Le Thomas, 2009).

Morphological Analysis

The continuous axis that extends from the south-west to the north-east in the city (Figure 2). This axis is the main spine of the city and has been maintained through time. It stretches along the hill where the citadel is situated then continues parallel to the Abu Ali River following the structure of the natural landscape. All east west streets were connected to this spine and two bridges connect the two sides of the river. This grid was in harmony with the organic natural flow of the river corridor, and they both followed the geo-topographical characteristics of the area. During this period the river was at the core of the urban settlement. The water resource was used for domestic as well as agricultural supply for citrus fields on the coast and olive fields in surrounding villages. Riverine zones along the river were used as social spaces for gathering

and interacting with the natural environment and as green corridor that acts as a transitional zone between the city and the river, and the upland on the west bank was saved for the citadel that overlook the entire city.

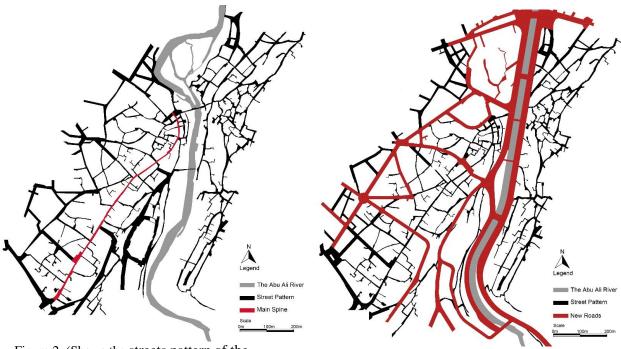


Figure 2. (Shows the streets pattern of the Medieval core in 1937).

Figure 3. (Shows the streets pattern of Medieval core after 1971).

Between 1955 and 1971 different factors contributed to changes in the structure of the river (Figure 3). First, in 1955 the Abu Ali River flooded. By the end of 1968, the downstream river course was straightened to reduce the risk of flooding and an artificial, near rectangular concrete channel was constructed with vertical lateral retaining walls. It was surrounded by 24 m wide avenue at each side. These avenues have been rapidly transformed into major circulation axes. When it comes to the riverfront and the river system, these interventions transformed the river from an ecological corridor to an infrastructural corridor. The floodplain, where the riparian vegetation originally existed, was no more a place for social gathering providing the city with a public amenity, and the river was no more a source for water supply or biodiversity as wetlands and other habitats were dried up. Moreover, in 1971, a master plan was developed for the city. It intervened the historic core by constructing two vehicular arteries to connect the new developments with the core and the new boulevards along the river. In between these arteries, the central spine of the city and the inherited urban pattern maintained their original shape.

The party wall map of the Mamluk core (Figure 4) shows how the urban landscape was built in coherence with the natural landscape. Most buildings are slanted towards the river stressing on the later as the dynamic of urban development. Moreover, it could be noticed how new constructed buildings along the river after its canalization conserved the pattern of urban development through time and respected previous spatial configurations.





Figure 4. (Party wall map of the Mamluk core. This strong structure can clearly be seen as a form of heritage that largely determines a cultural urban landscape. This cultural heritage landscape is intimately related to the river and its influence on street patterns. Even though altered after the transformation of the 1960ies, it keeps structuring the area as a whole).

Heritage listing and cultural heritage preservation

In 1953 the Directorate General of Antiquity (DGA) in Lebanon asked UNESCO to conduct an urban study about the Mamluk core in Tripoli. They delineated the historic core and identified 44 monuments that should be conserved (Figure 5). Historic neighbourhoods on the west bank of the river were not given a heritage value. The delineation of the historic core was limited to the west bank of the river. Moreover, the survey was very punctual and was centered on specific buildings treating them as frozen icons that stand alone in the landscape without looking at different social and spatial relationships between the built and the natural environment. The selection of listed buildings was mainly based on age, function, and architectural characteristics of the buildings. Selected buildings are religious and public buildings. They include the citadel, churches, mosques, Khans, schools, and public baths. The mission recognized the historical significance of residential houses and their role in constituting the specific character of the city but it did not include these in the list. It did not recognize the cultural and historic value of the Abu Ali River and focused mainly on built structures without studying the relation between these and their surrounding landscape.

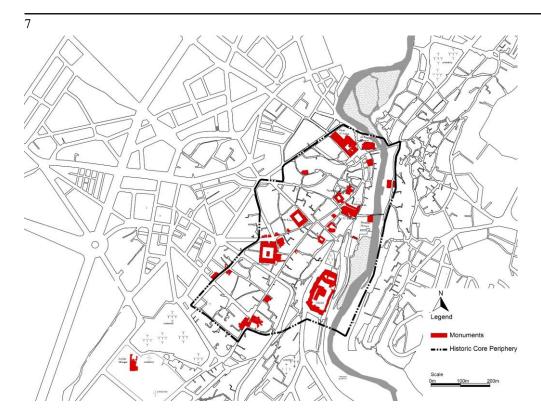


Figure 5. (Shows the periphery of the historic core and 44 monuments that should be conserved based on the report of the mission sent by UNESCO in 1953 to Tripoli).

In 1955 under the surveillance of the Association for the Preservation of the Archaeological Heritage of Tripoli a new heritage survey was conducted. This time the scope of heritage was extended to include sites, comprising cemeteries, gardens, residential blocks, and pedestrian commercial streets. This time the east bank of the river had its portion of listed monuments as well as the early Ottoman developments outside the boundary of the Mamluk Core. Different ottoman buildings and sites were identified as cultural heritage, such as a public garden (Al Manshiyeh), the municipality, and the serail. Even though the east bank was included, the historic historic elements were still concentrated on the west bank of the river, where most of the classified monuments are situated (Figure 6). The recognition of heritage value embedded in the commercial streets in this phase is crucial. In 1996 most of the listed monuments and streets were nationally registered. This review shows how the concept of heritage was still associated to constructions that are treated separately and has never been integrated into their wider urban context that embed different historical, cultural, and social values.

In 2002 The Lebanese Government requested assistance from the World Bank to scale up dispersed urban heritage rehabilitation efforts to a national level by assisting five secondary cities (Tripoli, Byblos, Baalbek, Saida, and Tyre). The project aimed to invest in the cultural heritage of Tripoli to integrate it into the life of the community to achieve local growth (Saba from Al-Harithy, 2005). Although the goals of the project were promising, interventions were restricted to facades and some open spaces, and the construction of a platform above the Abu Ali River to host the informal vegetable market that used to be along the river. The project did not recognize the river as part of the community shared memory and identity. Instead, the construction of the platform came to ignore the significance of the river in the composition and structure of the city.

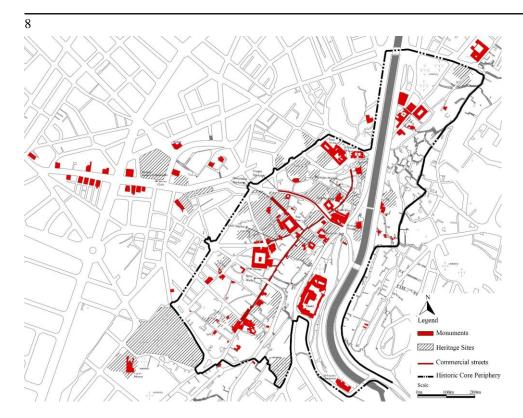


Figure 6. (Shows the periphery of the Historic core and the classified monuments and sites based on the survey done in 1995).

Ouestionnaire

The elements that have been represented in the mental maps are listed from the most to the least repeated: the river, the citadel, the bridges, the stairs, the boulevards along the river, Takiya Mawlawiya, El hadid door (which is one of the doors that specified the delineation of the Mamluk core), Bourtassi Mosque, el Kobbeh, Abu Samra (a new development on the hill on the west bank of the river), edges of buildings and shops along the river, and Daher el Megher. Most interviewees didn't represent all the study area. Instead, they drew a small section of it according to their personal experience and reflections.

The river and the monument buildings along the river were represented in all maps. The stairs that link the east bank of the river to the later were the major landmarks and corridors in the interviewees' mental images. Moreover, 42 of the 50 interviewees have chosen the revitalization of the river instead of the citadel as their priority. In their opinion, the river reflects the identity of the historic core; and its pollution is affecting liveability in the city. Most interviewees also mentioned that their houses overlook the river and its degradation is affecting visual aesthetics. The river appears as a major component of the residents' memory and common identity.

Discussion and Conclusion

This research conducted three different analyses to extract the social value of the river and its contribution to the urban morphology of the city. During the early urban settlement both the natural and built corridors in the city followed the topographical characteristics of the area and the main spine in the core followed the path and the shape of the river to emphasize on the later as the dynamic and heart of urban development. The organic layout of the city was in harmony

with surrounding landscape and natural riverine zones formed a transitional zone between the natural and built landscape. However, after the canalization of the river, the spatial integration between the two sides of the river was lost and the river transformed into an infrastructural corridor that separates the city into two parts. Some buildings along the river were demolished to give space for the river. New constructions respected the structure and orientation of previous buildings that were orthogonal, which somehow highlights the persistent role of the river in the urban morphology of the city.

On the other hand, the review of heritage listing and heritage conservation showed that the relation between the river and the city has never been taken into consideration in conservation policies, and the river has not been recognized as a cultural heritage landscape per se, as an integral component of the city common heritage and collective memory. Policies target monuments and specific sites, and second, they still mark a boundary between the historic centre and its periphery, as if it was disconnected from its surroundings.

The questionnaire showed that even though interviewees represented the city in many different ways, the river was the primary or secondary feature in the mental image of most inhabitants. Moreover, the different details illustrated in the images like the stairs and shops show how elements that are related to the daily life of people and their social practices are the ones that embody more social value and not monuments that stand as frozen icons in the city. When it comes to heritage preferences the river ranked first and the argument was because they can visualize it constantly as they walk through the city and this makes it a part of their daily life. Heritage conservation policies should not only be based on expert judgement but also on a deeper understanding of social and cultural values.

Human settlements are the result of complex interactions between natural, cultural, and social factors over time. This study revealed how river corridors may play a central role in this city-nature relation. Heritage is embedded in this relation and not in specific buildings or sites. Accordingly, conservation practices should be based on studies that clarify the emergence of specific spatial urban organizations and their change over time, as well as to the different values attributed to it. These features are the ones that contribute to the city's specific character and identity.

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