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The University of Osaka

Doctoral Dissertation

**Values of the Historic Urban Form of
Skopje's Old Bazaar
Based on Analysis of the Ottoman Urban Strategy**

オスマン帝国の都市戦略分析に基づくスコピエ・オールド・バザールの
都市形態における歴史的価値

Krstikj Aleksandra

*December • 2013
Graduate School of Engineering
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Acknowledgments

I would like to dedicate this study to my uncle Aleksandar Kondev. It was him who first sparked my interest in the history of my hometown Skopje, where our family has lived and worked for generations. His stories, together with time spent in my grandfather's shop in the Old Bazaar, formed my strong personal connection with the place.

During my university years at Faculty of Architecture-Skopje, I got interested in our Macedonian architectural and urban heritage owing to the inspiring lectures of my Professor Jasmina Hadzieva. Later, with her support, I made the first steps in the research of Skopje's Bazaar urban environment and prepared my bachelor thesis.

Several years after, the remarkable opportunity to do research and study in Japan renewed my professional interest in Skopje's Bazaar. With amazing dedication and kindness, my Professor Hyuga Susumu from the Kyoto Institute of Technology made possible four field surveys in Skopje's Bazaar with the graduate students from his laboratory. It was during these surveys that the field data was obtained. I owe him my deepest gratitude for his professional and personal devotion.

However, all my interest and gathered data would have resulted in just a collection of records if it was not for the gracious guidance and help from Professor Koura Hisako from Osaka University. Her astonishing clearance of thought and continuous support helped me put all of the work in focus. She indeed taught me what it means to be a researcher with honest and genuine approach to the profession. I am very grateful to have her as my supervisor.

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Krstikj Aleksandra, December 2013

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Abstract

The modernization of 20th century, which brought about the “loss of place”, resulted in chaotic urban landscapes and incomprehensible urban form. The main research question of this study was: what kind of values of the historic urban form must be preserved while rebuilding. If we can define the values of the historic form then the type of modern developments that can sustain the historic context can be clarified. However, while the evaluation of historic architectural styles has already been established, the evaluation of the historic urban form has rarely been performed. In this study, a new approach is proposed based on analysis of the values of the original planning strategy. As case study, the historic center of Skopje - an Ottoman Bazaar developed in the 15th and 16th century, was chosen. A strategy for urban conservation of Skopje’s Bazaar has not been developed yet. Therefore in order to support development of planning guidelines that can manage rebuilding and sustain the historical urban form of Skopje’s Bazaar, the specific question that this thesis dealt with was: what are the values of the historic urban form of Skopje’s Bazaar based on the original Ottoman urban strategy that developed the Bazaar’s structure and form?

The research question was considered from three topics of the value concept:

1. Significance of place – purpose of public facility and primary road in the Ottoman urban strategy;
2. Pattern of building forms – typology and transformation of shops;
3. Urban order – traditional systematic relationships between street, lot and building.

The data for the research was gathered from document analysis (previous research and historical maps) and field surveys (10.2009, 09.2010, 09.2011, 03.2012 and 03.2013).

1. *Significance of place* – Public facility was the main instrument to promote urbanization in the conquered cities in two ways: 1) To form an urban center by founding the Main Mosque and the Bedesten; and 2) To promote urban development by founding community complexes in the city's outskirts. In Skopje, Boykov (2011) identified the first Mosque built by Yiğit Paşa in 1414 and Skopje's Bedesten as the centers of Ottoman Skopje. Moreover, he identified the Ishak Bey Mosque (1439), Sultan Murat Mosque (1436) and Isa Bey Mosque (1475) as the outskirt complexes built to promote urban growth in the 15th century. My analyses of the increase in population in Skopje from 1392 until the end of 17th century, indicated second expansion through the 16th century. I identified three big Mosque complexes built in the outskirts of the city in the 16th century: Burmalı Mosque (1495), Yaya Paşa Mosque (1504) and Dükkanlık Mosque (1549) to promote urban growth. I used the location of main facilities to search for roads that had the meaning of regional network through the city. I identified the entrances of the regional network – City gates and by connecting them with the locations of main Ottoman facilities, I identified the primary road network in Ottoman Skopje. The primary road segment inside the Bazaar has the meaning of Main Bazaar Street. Finally, I analyzed the alterations of the original planning structure done thru the Bazaar's Reconstruction in 1970ties: building of Museum of Macedonia which cut off the north primary network and obscured the meaning of Center where the Bedesten is located; construction of auto road that cut off the Main Bazaar Street and isolated the south area of the Bazaar from the historic center; and relocation of r. Serava that brought loss of recognition for the natural edge and waterfront character.

Based on my analyses of the significance of place in the Ottoman urban strategy I concluded:

The location significance was evaluated from three aspects: I) Main Center—Paşa Yiğit Mosque and the Bedesten signify the origin of the Ottoman city. Preservation of the location concept of these two facilities, in terms of place making, is crucial for recognizing the center of the historic city; II) Bazaar components—Ottoman facilities in the Bazaar carry the Ottoman concept that formed the Bazaar as urban center; III) Periphery point of urbanization—the locations of 15th and 16th century complexes signify the periphery of Ottoman urbanization thus the location of the Bazaar in Skopje and the region can be understood. The historic road network is indivisible from the layout of Ottoman facilities thus, its conservation is vital for conserving the planning structure of the Bazaar. The location of main Ottoman facilities and primary roads form the original planning structure of the Bazaar. Thus, even though some of the original buildings were lost, the significance of the place is important value of the historic urban form.

2. *The pattern of building form* – The pattern of shops in the vernacular context was analyzed through field surveys and previous research. Previous research categorized three basic types of shops - 1 floor (15th -17th century), 1 floor+mezzanine (19th century) and 2 floors units (end of 19th - beginning of 20th century). Our field surveys identified two variations of the 1 floor shop type, one

variation of the 1 floor+mezzanine shop type and one variation 2 floors shop type. Based on comparative analyses of the spatial form and design elements of the subtypes with the established types, the transformation process of the shop design was clarified. It is still open for discussion but the built period of the subtypes was estimated based on the transformation of spatial form and design elements. Survey of recently rebuilt shops revealed that today historicism is used in shop rebuilding.

Based on my analyses of the pattern of shop design I concluded: 1) Four subtypes in the framework of the three established types of vernacular shops. This manner of design produces similarities in scale and appearance of the shops thus creates a coherent streetscape and urban setting; 2) Each subtypes is reinterpretation of a previous model but adapted according to the needs and resources of its time. This implies that while the basic shop typology was conserved through time, the shop elements used contemporary design in the rebuilding. Thus, the pattern of building form is significant since it gives meaning to the scale and form of the Bazaar's urban tissue. In order to conserve the Skopje's Bazaar historic urban form, the preservation of the pattern of building form represented in the three main types is essential. Consequently, the pattern of shops is important values of Skopje's Old Bazaar historic urban form. However, this does not imply that the architecture of the individual shop elements needs to be traditional. The meaning of the shop vernacular and is to implement new technological advances in the design of elements in the types.

3. *Urban order* –According to the chronology of Ottoman facilities, the process of initiation of block structures in the Bazaar was identified during 1392-1550. Based on the examination of the 1929 map, I concluded 2 other models of facility blocks from the one presented in previous research. Therefore, my analyses further clarified the typology of Skopje's Bazaar blocks. The width and length of each block in the Bazaar was estimated based on our field survey and the 1929 map, thus the average scale of each block type can be understood. My analysis of blocks alteration from 1929-1999-2011, based on historic maps and our own field surveys, clarified that the shape and size of Bazaar's blocks was preserved. However, in some blocks the type of block was altered due to the loss of the Ottoman facility building or shop rearrangements. Even though the modernization altered the urban structure of Skopje's central area, in the context of the Bazaar, the Main Bazaar Street still influence the lot/building arrangements in the blocks.

Based on my analyses of the block pattern I concluded: 1. Three types of facility blocks and three types of shop blocks; 2. The approximate scale of block types was estimated; 3. The pattern of blocks in the Bazaar is conserved although some alterations of block type occurred as a result of the loss of the Ottoman facility; 4. The analysis of the spatial structure of blocks indicates the presence of historic order in the way the urban elements are put together to form spatial structure of blocks. This urban order is formed by the consistent street—lot—building relationships applied throughout the Skopje's Bazaar. The relationships are derived from the main attributes and function of primary

road, public facility and shop in the original Ottoman urban concept. Thus the urban order is inherited value of the Skopje's Bazaar historic urban form.

Furthermore, the transformation of the position of the historic center in modernization and the alteration of Bazaar's historic planning structure were discussed by comparatively analyzing modern planning schemes of the 20th century. The change of the urban center's concept and following modern developments transformed the meaning of the Bazaar in the city from: city center where the Main Mosque is located (1392-1912) — common area that lost the meaning of urban center (1914) — historic center that is integrated in city center (1964) — historic center that is isolated, physically and functionally, from the city center by modern developments (today). While the Bazaar's location remained constant, the position of the Bazaar in the city transformed from city center to edge of the city center. However, even though Skopje's Bazaar is today recognized as edge of the city center and its traditional planning structure is impaired, the values of the historic urban form can be clarified by careful examination of the Ottoman urban strategy.

The values of the historic urban form clarified in this study of Skopje's Bazaar, can serve as a base for future design guidelines that can conserve the urban form of the historic center while creating opportunity for new development and rebuilding. For example, a modern development that will have: 1. consideration for its location in the context of historic place significance; 2. will preserve the scale and building patterns inherited to the urban tissue and 3. will abide to the historic urban ordering of the ground plan, possible have the potential to conserve and even enhance the value of historic urban form, regardless of its architectural style. Thus, the compliance to the values inherited in the historic urban form, does not necessarily demand the compliance to the historic design style of object buildings in order to conserve the historic urban form. The historic urban form can be conserved in rebuilding and renovation of structures under the conditions that the values, derived from the original urban strategy, are conserved. The value based planning approach resulting from the values of the historic form clarified through this research, can be an essential tool for preserving the historic and cultural resources in the form of historic planning structure. This approach has the capability to manage Skopje's Bazaar sustainable future, where developments within the context of preserving the values of the historic urban form can be planned. In this way, the Bazaar's unique form that had survived from the 15th century can be conserved while allowing modern developments to address the current needs of the community.

1. Introduction

1.1. Research ground

Today, as we face complex socio-economic problems such as resources depletion and dissolving of local identities caused by globalization, the conservation, careful planning and redevelopment of our built environment is an issue of outmost importance. In particular, the sustainable conservation of historic urban centers is becoming significant since these centers contain a great deal of building and infrastructure investments as well as historical and cultural resources acquired through the centuries^{1),2),3),4)}. In most cases, historic centers are a container and direct expression of culture, local traditions as well as military, economic and religious achievements therefore, their conservation has a significant economic and socio-cultural impact on the community's wellbeing^{1),2),3),4)}.

Urban conservation refers to a planning approach for sustainable management of urban areas. In comparison to urban preservation, urban conservation is a planning approach that includes both preservation of important cultural assets and new developments that can improve the living and working conditions. However, the contemporary interventions should be designed according to carefully planned guidelines that ensure the sustainability of the historic, cultural and natural resources. In historic centers, urban conservation ensures the preservation of monuments and valuable cultural assets as well as new developments that sustain the spatial, functional and design related values of the historic urban form.

Although the idea of conservation of historic centers has received substantial approval in developed countries, it is still in early phases when developing countries are concerned. Steinberg (1996) argues that in developing countries this idea still haven't gained substantial political support, it is left to few trained professionals or external advisors, it is more based on prohibitory then constructive measures and is rarely effectively enforced³⁾.

On the other hand, the pressure for modernization and redevelopment of historic centers in developing countries is especially high³⁾. However, the modernization is often perceived as contradictory to conservation because new developments often are intrusive to the traditional structure and urban fabric³⁾. This can lead to stalemate in the historic centers' redevelopment with strict prohibition of any modern construction³⁾. Thus, the question that initiated the beginning of this work was: what kind of new development in the active historic center can sustain the historical context and respond to the increasing pressure for modernization, especially in developing countries. Historical context refers to the principles and/or manners of city building that generate the historic urban form and setting.

The *Vienna Memorandum* that was adopted by the International Conference "World Heritage and Contemporary Architecture-Managing the Historic Urban Landscape" in 2005, acknowledged the challenge of the contemporary architecture to respond to modern needs for growth and technological improvements while respecting the inherited townscape and landscape setting⁵⁾. The Memorandum suggest that: "A deep understanding of the history, culture and architecture of place, as opposed to object buildings only, is crucial to the development of a conservation framework..."⁵⁾ As a base for structural interventions in the historic areas to be sensitive to the cultural-historic context, a "comprehensive survey and analysis of the historic urban landscape as a way to express values and significance" is required⁵⁾. On the other hand, it is emphasized that all forms of pseudo-historical design should be avoided because "...they constitute a denial of both the historical and the contemporary alike".⁵⁾

Therefore, in order to support urban conservation and facilitate the integration of modern developments sensitive to the cultural-historic context in the active historic centers, in this research a new approach is proposed for analyzing the historic urban form from the viewpoint of value of the historic urban form rather than only style or material of individual object buildings. Historic urban form refers to the physical form of the historic area and it includes the urban structure, spatial organization, the form of the street network, layout and shape of blocks, the distribution and shape of buildings and visual relationships.

While the orthodox analysis of the historic urban form relays mainly on evaluation of the preserved architecture style or material authenticity of individual buildings^{2),6)}, the proposed

approach in this study is concerned with evaluation of the historic urban form from a viewpoint of preserved planning concept. It is believed that the original urban strategy preserved in the urban structure of a historic area can indicate the significance and value of the historic urban form. In this research, urban strategy refers to the method of utilization of the layout of public facilities, through large-scale and long-range planning, to ensure the development of cities according to a specific urban concept. Thus, the significance of historic places can be assessed by clarifying the planning intentions of the original urban strategy. Even though that significance can be obscured today, the careful examination of the original urban strategy can retrieve the place meaning and clarify the value of the urban form.

Even though both the orthodox and the new approach for analyzing the urban form of historic areas perform comprehensive historical analysis of how the built form was developed as well as field surveys, they ultimately arrive at different evaluation results that suggest different conservation strategies. For example, while the orthodox approach endorse the preservation of existing individual or group of buildings, the new approach prioritize the preservation of the planning concept and historic urban form.

Although the new proposed approach does not exclude the value of historical buildings and traditional construction techniques, it can lead to conservation guidelines that can accept some modern development or alteration of the building structures under the condition that the values of the original planning concept are preserved. This value based planning approach could be able to sustain the historic urban form and the conviviality of the active historic center. This is crucial point for the sustainability of active historic centers, especially those in developing countries under increasing pressure for modernization and redevelopment.

1.2 Research question & aim

In this research, we worked on a case study: Skopje's Old Bazaar, a historic center of the capital of Republic of Macedonia. The historic center of Skopje is an Ottoman Bazaar, created during the 15th and 16th century, and still is active commercial and cultural area today.

The word "Bazaar" originates from the Persian word "bâzâr" which has the meaning of Market²³⁾. However, the Bazaar was not only a Market but also an urban center where the most important Ottoman public buildings were located. According to the Ottoman urban concept, there was a strict separation of residential and commercial areas in the Ottoman cities therefore the urban center-Bazaar contained commercial buildings as well as religious, educational and welfare facilities while the houses were grouped in separate residential neighborhoods outside the Bazaar. In Republic of Macedonia, 24 traditional bazaars developed during the Ottoman era exist as historic urban centers⁷⁾ but, until now only Skopje's Old Bazaar was clearly demarcated and designated a Cultural Heritage of Significant Importance by the Macedonian Ministry of Culture in 2008⁸⁾.

The clear demarcation of the borders of Skopje's Bazaar historical district, demarcation of its contact zones and the designation of Skopje's Bazaar as "Cultural Heritage of Significant Importance" by the Ministry of Culture in 2008⁸⁾ were based on the recommendations from the National Institution Conservation Center Skopje (Fig. 1). The Revalorization Report of Skopje's Bazaar (2006) prepared by the N.I.-Conservation Center Skopje⁷⁾ demarcated the Bazaar's area of 115,814.71m², 54,386.05m² (47%) of which is buildings and the rest is streets and open space²¹⁾.

The Revalorization Report also proposed a combined regime of block and monument protection (Fig. 2), based on the analysis of the buildings from aspect of architectural value of individual objects⁷⁾. In this Report, authenticity refers to preserved original building material, technique and architectural style thus it has been established that all the blocks in the Bazaar have been changed by some interventions in the past that resulted in their partial authenticity today⁷⁾. However, an explanation of the values of the urban form and place meaning according to the Ottoman urban strategy is not included the Revalorization Report.

From the regime for protection, it can be understood that the blocks and buildings under the first category cannot be altered or rebuilt. Only three blocks in the Bazaar are proposed to be subjected under the first degree protection regime, due to the fact that they contain monuments of highest importance (blocks around church St. Spas, Mustafa Paşa Mosque and Kurşumli Han)⁷⁾. The second and third category allow some modern development under specific terms however, those conditions are not clearly stated. From my personal investigation and interviews with the Director and Chief architect of the N.I.-Conservation Center Skopje, it became clear that any new



Fig. 1 Borders of the historic district Skopje's Old Bazaar and its contact zones today (adapted by the author on photo from N.I. Conservation center-Skopje)

development has to be approved from the Conservation Center Skopje before building. The conditions for a certain design to be approved are not clear. It is left to the responsible architects at the National Institution Conservation Center Skopje, to make the decision based on their experience and professional judgment. Therefore, the proposed regime for protection in the Revalorization

First degree protection	Second degree protection	Third degree protection (for contact zones)
Protection, maintenance and usage of the object buildings in its original form. Methods recommended are conservation, anastylosis, recomposition and preventive measures.	Protection of the object buildings in its present state. Methods recommended are interior adaptations, revitalization, new urban and architectural design under specified terms.	Adapting of the architectural expression in terms of volume and building height.

Fig. 2 Regime of block and monument protection proposed in the Revalorization Report by the National Institution-Conservation Center Skopje⁷⁾

Report act as a guideline concept but there is no legal regulations or published comprehensive Building Code that regulates alterations and rebuilding in Skopje's Bazaar. Even though the area received the status of Cultural Heritage of Significant Importance, a comprehensive strategy for urban conservation hasn't been developed yet. Meanwhile, the location and layout of Skopje's Bazaar, as a historic center developed by the Ottoman urban strategy have been losing their values due to modern urban planning and new developments that have ignored the Ottoman urban concept.

As the pressure for rebuilding and new developments is increasing, the threat to the still preserved historical and cultural resources is becoming apparent. In order to preserve the historic urban form and the meaning of place, planning guidelines that can manage rebuilding and new developments without compromising the values of the historic urban form are necessary. In order to support development of a planning strategy that can sustain the historic urban form and integrate modern development in Skopje's Old Bazaar, in this research we proposed a value based approach of conserving active historic areas. The main idea behind this approach is that places are much more than just material construct. Planning strategies also generate a layer of meanings which depend on the socio-cultural background and intentions of the planners. In the case of the Ottomans, the urban strategy utilized the layout of Ottoman public facilities to ensure the development of the city according to the Ottoman urban concept based on the religious Islamic law. Thus, the examination of the Ottoman urban strategy can clarify the values of the historic urban form. The values of the historic urban form can serve as guidelines in future sustainable conservation of the historic center.

The main research question of this study was: what kind of values of the historic urban form must be preserved while rebuilding the historic urban areas. If we can define the values of the historic urban form then the type of modern developments, both general-from the planning aspect and particular-from aspect of individual rebuilding by the owners, that can sustain the historic context can be clarified. However, identifying the values of the historic urban form in an active area that is in the midst of a growing city can be a difficult task. The historical values are often blurred by the cumulative legacy of consecutive urban strategies with very different sets of values. For example, the case study of this research – Skopje's Old Bazaar area was formed by the Ottoman urban strategy

during the 15th and 16th century as a commercial and social center of the city^{7),9),10)}. Until early 20th century, the area's urban form remained mostly unchanged^{7),9)}. However, after the Ottomans retreated from Skopje in 1912, new urban concepts were imposed on Skopje in several occasions¹¹⁾ through modern urban plans. These new urban concepts had different cultural backgrounds thus their idea of place meaning differ considerably from the Ottoman's. These new layers of place meaning introduced by the planning authorities during the 20th century, obscured and diminished the values of the historic urban form of Skopje. Today, even though the original planning structure of Skopje's Bazaar is mostly preserved, the values of the historic urban form cannot be easily understood.

Therefore in order to support development of planning guidelines that can manage rebuilding and sustain the historical urban form of Skopje's Bazaar, the specific question that this thesis dealt with was: what are the values of the historic urban form of Skopje's Bazaar based on the original Ottoman urban strategy that developed the Bazaar's structure and form?

The aim is to identify the values of the historic form in order to support a value based conservation approach that can manage future alterations and rebuilding in Skopje's historic center. The assessment criterion is based on the meaning of place and spatial relations of structures derived from the original Ottoman urban strategy.

The historic urban form of Skopje's Bazaar was analyzed through three main topics of the value concept:

1. Significance of place – purpose of public facility and primary road in the Ottoman urban strategy;
2. Pattern of building forms – typology of facility and shops;
3. Urban order – traditional systematic relationships between street, lot and building.

These topics were intended to clarify the interior structure of the historic area based on the original planning concept. Even though the topic "Pattern of building form" might seem more related to the architectural evaluation of building style, in this research the typology of shops is considered from aspect of the collective attributes that produce the size and scale of the urban tissue. The intention is to evaluate the typology of designs that can take the value of collection and contribute to the strengthening of the urban form character or the "self-realization of the place"⁴⁵⁾. This will allow the historic area to continue its evolution and not be a frozen monument devoid of real life.

1.3. Research Methodology

The methodology for this research is based on document analysis and field surveys.

The document analyses included:

- previous research, to understand the Ottoman urban concept and strategy behind the development of Skopje's Bazaar urban form; and
- historical documents - old maps of Skopje, to analyze the form and size of Skopje's Old Bazaar urban structure and its alterations through the years.

Moreover, field surveys were conducted to gather data about the current condition of the area's structures.

At the end of this chapter, frequently used terms in this study were defined.

1.3.1. Previous research

Firstly, previous research on urban form of cities in the Muslim world and traditional Bazaar development was analyzed through the work of Stern and Hourani (1970)^{11),12)}, André (1984)¹³⁾, Hakim (1988)¹⁴⁾ and Ben-Hamouche (2009)¹⁵⁾. Stern and Hourani wrote and edited a collection of valuable papers regarding the formation and function of the Islamic city, as a part of comprehensive study on Islamic history. On the other hand, André, Hakim and Ben-Hamouche made significant contribution to the understanding of Arabic cities' form.

Even though the case study of this research deals with the city form designed by the specific Ottoman cultural context, the urban concepts of both Arab and Ottoman cities are derived from the same guidelines of the Islamic religious law - *Sharia*. This common background contributes to certain similarities in the urban form, especially visible if the urban patterns of Ottoman cities are compared with the study of Hakim (1988)¹⁴⁾ on the Old Medina in Tunisia.

The study by Inalçik and Quataert (1994)¹⁷⁾ is important to understand the economic and social history of the Ottoman Empire while Minkov (2004)¹⁶⁾ discusses the conversion to Islam in the Balkans after the Ottoman conquest. However, the study by Kaleši (1972)¹⁸⁾ on the oldest *waqf* documents found in Yugoslavia written in Arabic is invaluable to understand the installing of the Ottoman Empire in the Balkan region. In the context of Macedonia, the work of Šopova (1955)¹⁹⁾ on translating, editing and commenting of many documents from the Istanbul archives regarding Skopje's urban history is valuable. The significant research by Gorgiev (1997)²⁰⁾, based on the data from the Ottoman Census Books of Skopje found in the Archive of Macedonia (*Tapu Defterleri*), reconstruct the demographic changes from 1392 until the end of 17th century.

To understand better the Ottoman construction system and the approach of forming bazaars in the Ottoman Empire, based on the concept of public endowment - *waqf*, the comprehensive study by Cezar (1983)²³⁾ was used. Regarding the establishment and structure of *waqfs* in Macedonia the work of Sokoloski (1977)²¹⁾ and Šerif (2008)²²⁾ is noteworthy. Further, Boykov (2011)¹⁰⁾ clarifies the consistent Ottoman urban strategy— *Ottomanization*, applied in the conquered Balkan cities of Edirne, Plovdiv and Skopje during 15th century. His research is invaluable to understand the reshaping and the origin of Ottoman Skopje following its conquer in 1392.

Details about the construction and architectural features of Ottoman public facilities in Skopje are presented in the work of Elezović (1925-1952)^{24),25),26),27),28),29)} and Bogoević (1998)³⁰⁾. While Elezović presents the historical facts and architectural features of Ottoman monuments in Skopje that he studied since 1925, Bogoević study compiles her comprehensive analysis during the second half of 20th century of the history, legends, architectural features as well as alterations of the existing and demolished Ottoman monuments in Skopje.

The study by Kojić (1976)³¹⁾ analyzes the traditional structure of several old Balkan cities in the borders of Yugoslavia. However, the main historical studies regarding the development of Skopje and its Old Bazaar published in R. Macedonia include the research by Professor Čipan (1967)³²⁾ published by the Institute for Urbanism and Architecture-Skopje and Arsovski (1988)³³⁾ published by the Committee for Urbanism-Skopje. While the study by Čipan concentrates mainly on the development of the Old Bazaar in the context of the Ottoman city Skopje, the study by Arsovski is broader and gives overview of the Skopje city development from 5200 BC until the 19th century.

Arsovski also includes information regarding the reconstruction of Skopje following the 1963 earthquake based on the detailed urban study of Skopje by the Institute of Urbanism and Architecture (1963)³⁴⁾. Details about the international support and UN involvement in the Reconstruction of Skopje in the late 1960ties was found in the UN Development Programme “*Skopje resurgent*”³⁵⁾ published in 1970.

However, more detailed guidelines regarding the Program for the Reconstruction of Skopje’s Old Bazaar and Fortress after the devastation of 1963 can be found in another study by professor Čipan (1967)³⁶⁾ also published by the Institute for Urbanism and Architecture-Skopje. Information about the urban project that altered the original planning structure of Skopje’s Bazaar as well as architectural design of new buildings planned during the Reconstruction was published by Arsovski and the Institute for Communal Housing Skopje (1971)³⁷⁾.

To understand the main urban-architectural features of Skopje’s Bazaar as well as their alterations due to modernization, the studies by Tokarev (1986)³⁸⁾, Tokarev, Hadžieva-Aleksievska

and Ničota (1998)³⁹⁾, Mateska (2011)⁹⁾ and the Revalorization Report of Skopje's Bazaar (2006)⁷⁾ done by the N.I.—Conservation Center Skopje were analyzed. While the first study by Tokarev (1986) is Doctoral Thesis that focus on the architectural-urban problems in the revitalization of historic centers in Macedonia, the second study by Tokarev, Hadžieva-Aleksievska and Ničota (1998) is more detailed analysis of the architectural heritage of Skopje's Old Bazaar with guidelines for its revitalization.

Mateska's study⁹⁾ clarifies the typology and function of all Ottoman Bazaars in the structure of Macedonian cities, including but not focusing in particular on Skopje's Bazaar. The Revalorization Report by the N.I.—Conservation Center Skopje⁷⁾ contains a great deal of historical data regarding the Skopje's Bazaar development as well as survey records of the current condition of blocks and monuments.

The Report's main purpose was to validate the need for legal conservation of Skopje's Bazaar as Cultural Heritage therefore also includes a proposal for the borders of the conservation area and regime for protection of blocks and monuments. This Report served as a base for enacting the Law for Preservation of Skopje's Bazaar 2008⁸⁾ as Cultural Heritage of Significant Importance by the Ministry of Culture of Republic of Macedonia.

Finally previous research regarding the modern urban planning of Skopje during the 20th century was analyzed through the books of Arsovski (1971)³⁷⁾, (1988)³³⁾.

1.3.2. Historical documents

From the historical data, we analyzed maps by Hall (1828)⁴⁰⁾ and Evans (1883)⁴¹⁾ of the Skopje's region, a map of Skopje from 1887/95 and photographs of Skopje from the early 20th century (Archive of Macedonia). The 1887/95 map was found in an article by Urošević published by the Macedonian Academy of Science and Arts's "Contributions IV-2", 1973⁴²⁾. Urošević on the other hand, found the 1887/95 map as appendix in a book titled "*Detailbeschreibung des Sandžaks Plevlje und des Vilajets Kosovo*" printed in Vienna 1899⁴²⁾.

The urban plans for Skopje, produced during the 20th century were also analyzed. We used the copy of the First Master Plan for Skopje, produced by the architect Mihajlović in 1929 from the book "*Old-Skopje*" by Arsovski, (1988)³³⁾. From the same book, the Master plan from 1948 and 1964 were also analyzed. The book also contains some information regarding the competition for the redevelopment of the Skopje's central area funded by the UN in 1964 although a separate report was published by the UN in 1970³⁵⁾.

The analysis of the 1887/95 map was used to locate the Ottoman facilities built in Skopje during the 15th and 16th century and the street network. By combining the results of the previous analysis on *Ottomanization* strategy and *waqf* endowments in Skopje with the topology of the facilities extracted from the map, we concluded the significance of place and primary road network derived from the original planning concept. The chronology of founding *waqf* endowments in Skopje's Bazaar was combined with the Bazaar's topology extracted from the map to clarify the incremental process of Bazaar's development during 15th and 16th century.

Moreover, the modern urban plans of Skopje were analyzed to understand the transformation of the position of the Bazaar in the city center and the alterations of the authentic spatial structure by modernization. The impact of modernization on the position of Old Bazaar in the city center was analyzed through comparative discussion on consecutive urban planning schemes for the central area. However, for more detailed information about the Reconstruction of the Skopje's Bazaar area after the 1963 earthquake by the Institute of Urbanism Skopje, another book from Arsovski was used "*Old Skopje's Bazaar*" (1971)³⁷⁾.

The analysis of the strategy of Institute of Urbanism³⁷⁾ together with the urban restructuring of Skopje by the modern urban plans³³⁾ was used to clarify the alteration of the historic planning structure of Skopje's Bazaar imposed by modernization.

1.3.3. Field surveys

Field surveys were conducted in: 10.2009, 09.2010, 09.2011, 03.2012 and 03.2013. The aim of the field surveys was to gather data on the typology of shops and blocks in the Bazaar.

The first three surveys were carried out with the members of the Laboratory of Japanese Architecture (Prof. Hyuga Susumu) in Kyoto Institute of Technology. The work consisted of observation, photography, sketching and physical measurement of the built form.

The field surveys gathered data on:

- distribution and main form of vernacular units – shops in the Bazaar (596);
- detailed measurements of 10 vernacular units, that were chosen according to previous research and observation studies, to examine form, structure, spatial composition and design attributes including some measurements;
- 72 vernacular units as components of 11 typical streetscapes, to analyze the form, volume and design variations of façade elements.
- Six Bazaar blocks, where plot and building arrangements as well as measurements of the block volume were recorded.

The last two surveys carried out by the author, concentrated on finding historical data and some observational study on the block structures of Skopje's Bazaar. A copy of a map of Skopje from 1929 was obtained from the Archive of Macedonia-Skopje. The map was produced by the experts in the *Cadastral Municipality Office-Skopje* to facilitate a creation of a new Master Plan by architect Mihajlović in 1929. The map has clearly marked street, lot and building patterns in Skopje as well as some other information. Another cadastral map of Skopje's bazaar from 1999 was obtained from the National Institution Conservation Center Skopje. Observational study with some measurements was also carried out during these two surveys by the author alone, to clarify some recent alterations of the block structures.

From the survey data a typological analysis of the vernacular shops in the Bazaar was carried out. The basic typology that is defined in previous research of the Bazaar (Mateska 2011⁹), Revalorization survey 2006⁷) was upgraded with additional data on subtypes found through the surveys. Moreover, my analysis of the alterations of design elements used in each type/subtype model combined with the chronology of the basic type models from previous research, indicated a possible process of transformation of the shop model through centuries. These results clarify the pattern of building form in the Bazaar as a value of the historic form.

For more detailed analyses of the street, lot and building pattern of the Bazaar, the 1929 map of Skopje was used. From the analysis the block typology of the Skopje's Bazaar was clarified. Further I compared our survey records of the six blocks in the Bazaar, done in September 2011, with the same block structures from the 1929 map and the cadastral map from 1999, in order to clarify the alterations of the blocks during this period. Moreover my analysis of the street-lot-building relations on the map, combined with the previous analysis of the pattern of building form indicated the presence of systematic urban order of the ground plan that is value of the urban form.

Thus, through my analysis of the historical maps, previous research and extensive field surveys, the values of the Skopje's Bazaar historic urban form were clarified through the significance of place in the Ottoman urban strategy, the pattern of building forms and the traditional urban order of street-lot-building relationships that create the spatial structure of blocks.

1.3.4. Term definition

The terms that have specific meanings in this study are defined as follows:

Bazaar: The word “Bazaar” originates from the Persian word “bâzâr” which has the meaning of Market²³). However, in this research, the term “Bazaar” refers to the historic urban center created by the Ottoman urban strategy. Thus, the Bazaar was not only a Market but also an urban center where the most important Ottoman public buildings were located. According to the Ottoman urban concept, there was a strict separation of residential and commercial areas in the Ottoman cities therefore the urban center-Bazaar contained commercial buildings as well as religious, educational and welfare facilities while the houses were grouped in separate residential neighborhoods outside the Bazaar.

In Macedonian language, the historic urban center developed by the Ottomans is called “чаршија” – “çaršija”, an adaptation of the Turkish word “çarşı”²³). A distinction should be made between the English term “Bazaar” used in this study and the term “Pazar” used in Macedonian and Turkish language. “Pazar” refers to an open air market or just a place where things are sold²³) and can be organized daily, weekly or monthly, in urbanized or not urbanized areas and usually along roads, on crossroads or near important complexes like monasteries, fortresses or castles⁹). Thus, “Pazar” does not have the meaning of a historic urban center in Macedonian and Turkish language.

Waqf: The term “waqf” refers to the Ottoman institution that was used by powerful officials and wealthy individuals for donating their property to serve public benefit. In this study, the concept of *waqf* was analyzed to understand the founding and function of Ottoman public buildings that were implanted as permanent or static elements in the urban fabric, exempt from changes and subdivision for centuries and dedicated to serving public benefit.

Often, these *waqf* endowments were no single buildings but groups or complexes of buildings that functioned as social welfare centers^{10),(18),(21),(23)}. The founder of *waqf* was obliged to allocate other property or income for financial support in a case of an endowment that did not yield income (Mosque, school, public kitchen ext.) while endowments in a form of public buildings that yielded income, like Han, Hamam or Bedesten, supported themselves and even some of the other public buildings^{10),(18),(21),(23)}.

Ottoman Facility: In this research, the term “Ottoman facilities” refers to public buildings in the Ottoman city that were endowed with the *waqf* institution. The type of public buildings referred to as Ottoman facilities in this research include:

- **Mosque:** Place of worship for the followers of Islam.
- **Bedesten:** In the Ottoman Empire, a “Bedesten” or “Bezzazistan” was a special

commercial building for cloth trade. The word comes from *bez* meaning cotton or linen fabric and the Persian *-istan* suffix meaning place. The Bedesten and the shops in its vicinity constitute the central section of the Ottoman Bazaar²³⁾.

- **Han:** Inn, from the Persian word “hân”. Hans were also utilized as trading places thus are considered commercial buildings²³⁾.
- **Hamam:** Bath house, from the Arabic word “hammam” and “havuz” meaning pond, pool²³⁾.

Ottoman urban concept: In this research, “Ottoman urban concept” refers to the Ottoman idea of aspired city’s structure and form. What kind of values and meanings an urban idea would project in the built area depend on the socio-cultural background of the authorities, their planning intentions and available resources. In the case of the Ottomans, the urban concept was based on the Islamic religious law— *Sharia*^{23),14)}.

Ottoman urban strategy: “Ottoman urban strategy” refers to the method of utilization of the layout of public facilities, through large-scale and long-range planning, to ensure the development of cities according to the Ottoman urban concept based on the religious Islamic law. This method was used in many cities in the Balkans conquered by the Ottomans in order to restructure and develop them as Ottoman Islamic cities. In the study by Boykov (2011)¹⁰⁾, the term “*Ottomanization*” was used to describe the consistent Ottoman urban strategy applied in Edirne, Plovdiv and Skopje after their conquering by the Ottoman Empire.

Primary road: “Primary road” is a historic major road in the urban network that was connected to the regional highways. The most important Ottoman facilities are located along the primary roads in the historic city.

Vernacular unit: “Vernacular unit” is a shop in the Bazaar built by the owner himself. One vernacular unit - shop can occupy one whole building or a part of a larger building. Buildings containing several vernacular units in the Bazaar are common.

The shops, serve the individual needs of the owner thus they can be frequently rebuilt or changed. Therefore the shops, as opposed to the Ottoman facilities created by the concept of *waqf*, are dynamic elements of the Ottoman urban system. In Turkish language, the Arabic word “*dükkân*” is used for the small vernacular units-shops²³⁾. In Macedonian, the same word “*дуќан*”-“*dućan*” is also used²³⁾.

Urban form: “Urban form” is the physical form of an urban area that includes the urban structure, spatial organization, the form of the street network, layout and shape of blocks, the distribution and shape of buildings and visual relationships. In this study of Skopje’s Bazaar, “historic urban form” is used to refer to the urban form of the historic area.

Urban conservation: “Urban conservation” refers to a planning approach for sustainable management of urban areas. In comparison to “urban preservation”, urban conservation includes both preservation of important cultural assets and modern developments to improve the living and working conditions. However, the contemporary interventions should be designed according to carefully planned guidelines that ensure the sustainability of the historic, cultural and natural resources. In historic areas, urban conservation ensures the preservation of monuments and valuable cultural assets as well as new developments that sustain the spatial, functional and design related values of the historic urban form.

Historic context: “Historic context” are the principles and/or manners of city building that generate the historic urban form and setting. The historic context is place specific and conserved through generations.

Urban center: “Urban center” is the administrative, commercial and cultural hub of an urbanized area. In this study of Skopje’s Bazaar, “historic urban center” is used to refer to the urban center of the historic city.

Block: “Block” refers to the smallest section of the city surrounded by streets. The number of land lots to which the block is subdivided and the degree to which the block area is built-up can vary from block to block.

1.4. Significance of the Study

Until today, many historical facts and architectural features of buildings in Skopje's Bazaar have been clarified through previous research. However, these researches tackled singular events or partial phenomena without attempt to clarify the intentions of the planning concept that gives meaning to the places and structures in the area.

For example, the study of Bogoević (1998)³⁰⁾ use historical records, archeological evidence and design evaluation to describe the monuments of the Ottoman era in Skopje without clarifying the significance of these facilities in the Ottoman urban strategy. In the same manner, the Revalorization Report done by the Conservation Center Skopje (2006)⁷⁾ contains a lot of data on history and current condition of constructions but lacks a comprehensive clarification of the structure of the area according to the Ottoman urban concept.

This obviously presents difficulty for conservation of the Skopje's Bazaar, especially when new developments are concerned. If the meaning of places and the relationships of urban elements are not well understood, then it is very difficult to conceive any development that can sustain and enhance the inherited qualities of historic urban form.

As Bacon (1967)⁴³⁾ argued, in order to produce "good" urban design, an awareness of the total environment is needed: "Each new design should reflect the concept of the whole city and revoke the significance and meanings of historic ideas that had been implanted before while allowing a glimpse of the evolving forms to come. In this way a vitality of the city-building tradition can be preserved where the form of the whole environment and separate acts can be brought into relationship over considerable span of time".

However, until now clear analysis of Skopje's Bazaar historic concept has not been done thus a sustainable urban planning strategy for area's conservation is difficult to conceive.

Even though the continuous changes of the socio-economic development in the form of structural interventions in the historic urban form have been acknowledged by UNESCO through the *Vienna Memorandum*⁵⁾, the specific methodology is still not clear.

The originality of this research is in proposing a new approach for analyzing the urban form of Skopje's Bazaar as a living historic area, from aspect of value and significance, that can serve as a base for future design guidelines to manage sustainable integration of modern developments in the historic context.

For example, in this research the analysis of the systematic Ottoman urban strategy for reshaping the conquered cities and the analysis of the location of main Ottoman facilities and primary roads in Skopje, indicated the significance of place in Skopje. The place significance

derived from the original planning concept clarifies the urban structure in terms of: Main center, Bazaar's structure and periphery points of urbanization, and represents a value of the urban form. Future alteration or rebuilding can use these results to propose a design that can sustain the place significance which will in turn enhance the value of the historic urban form.

Therefore, the main significance of this research is in assessing a new method for evaluating the historic urban form from aspect of significance in the original urban concept to indicate design guidelines for new development in historic centers that can sustain and even enhance the historic form. Furthermore, the significance of this study for Skopje's historic center is in providing a fuller understanding of the values of the Skopje's Bazaar historic form that can inform future conservation and planning approaches of the area. The importance of the results of this study lies in creating the conditions for:

1. developing a conservation approach based on the inherited values of the historic area that can preserve the historic planning structure and
2. developing meaningful guidelines for future development with respect towards the historic context.

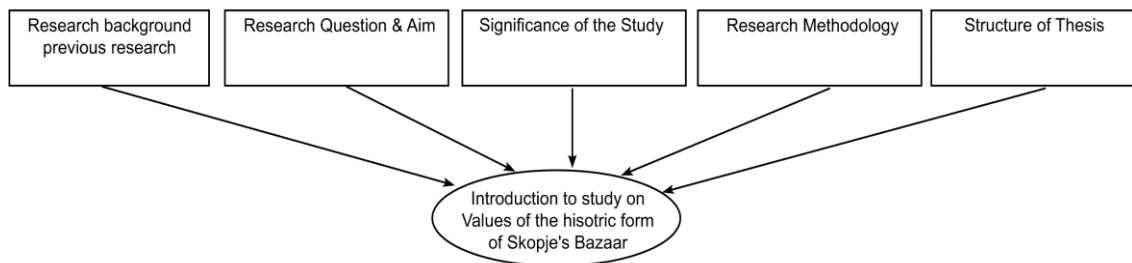
It was estimated that the new approach has the potential to identify values in the urban form based on the original planning concept. A planning strategy based on the values of the historic form clarified through this research can be an essential tool for preserving the historic and cultural resources in the form of historic planning structure. This value based approach has the capability to manage Skopje's Bazaar sustainable future, where developments within the context of preserving the values of the historic urban form can be planned. In this way, the Bazaar's unique form that had survived from the 15th century can be conserved and integrated with the future modern development.

1.5. Structure of Thesis

The body of the thesis is comprised by 5 chapters.

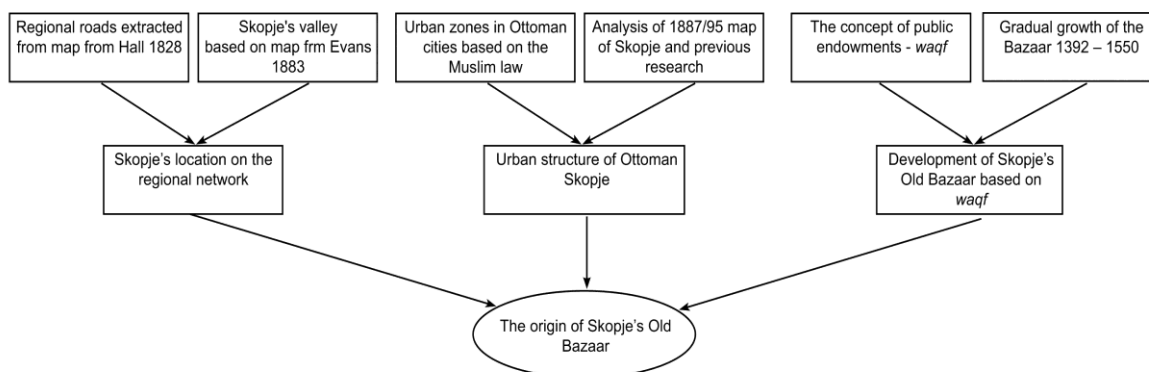
Chapter 1 Introduction

In the first chapter, the background of the research theme as well as the main and specific research question were clarified. The significance of the study was discussed in the implications of this research for the future of the Bazaar. Moreover, the resource of data collection and the method of the analysis were also explained.



Chapter 2 The origin of Skopje's Old Bazaar

In this chapter, Skopje's location on the regional network and the history of the development of Skopje's Old Bazaar is clarified. The function of the Ottoman institution of *waqf* in founding public facilities in the historic city is discussed since it sheds light on the gradual development of the Bazaar during 15th and 16th century. This discussion is based on analysis of historical records and previous research.

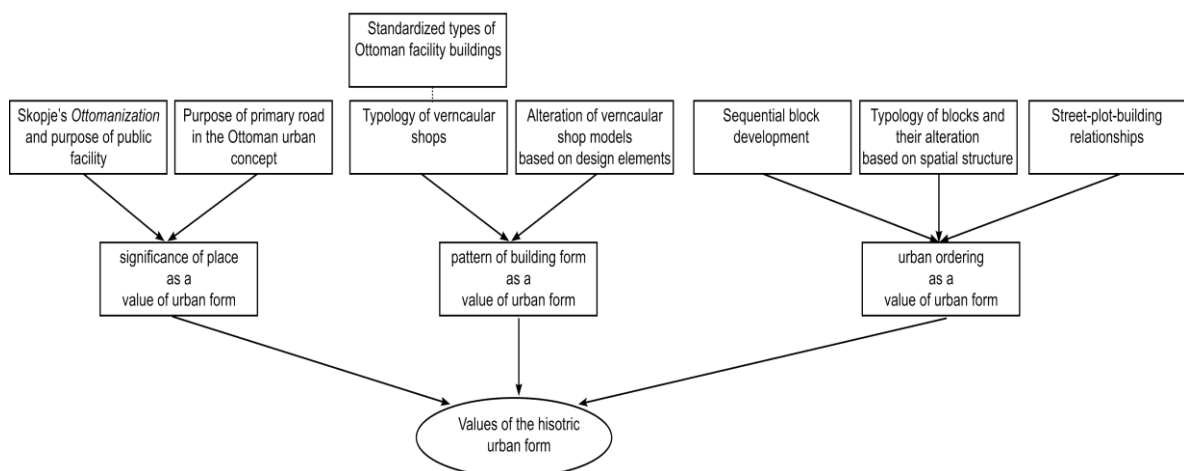


In this chapter, the specific research question of the value of Skopje's Bazaar historic urban form is addressed.

First, the significance of place in the historic city is discussed through analysis of the purpose of public facility and primary road in the Ottoman urban strategy. Based on the research of Skopje's *Ottomanization* process, the significance of historic place is identified. As a result, the value of the place significance in the historic urban form was discussed.

Secondly, the pattern of building form is analyzed. The pattern of urban form deals with the typology of constructions in the historic center. The constructions are divided on Ottoman facilities and vernacular shops. Only an overview of the typology of Ottoman facilities is provided because those buildings have already been analyzed in more detail by previous research. Our field survey data was used to clarify the pattern of shop design that has not been covered sufficiently in previous literature. In fact, authentic typologies and subtypes of shop design were discussed. Moreover, recent transformations based on our survey records were analyzed to clarify the modern trend in shop transformations. The value of the pattern of building form in the historic urban form was discussed.

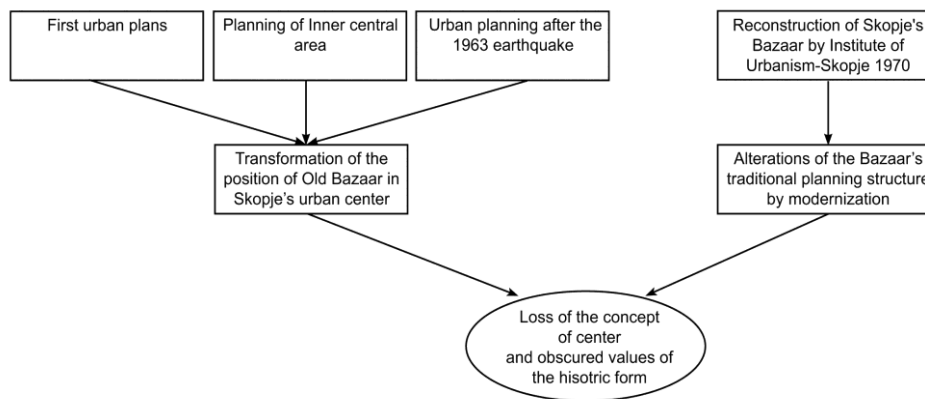
Thirdly, the traditional urban order of the ground plan as is discussed. The base for this discussion is a typological analysis of the spatial structure of blocks, based on the 1929 map of Skopje. Moreover, the alterations of block structure during the period from 1929 until 2011 became clear analyzing our survey records. From the previous analysis, the systematic relationships between the elements of the urban system – street, lot and building were identified and the value of the traditional urban order in the context of Skopje's Bazaar was clarified. The value of the traditional urban ordering in the historic urban form was discussed.



Chapter 4

Loss of the concept of center and Skopje's Bazaar modernization

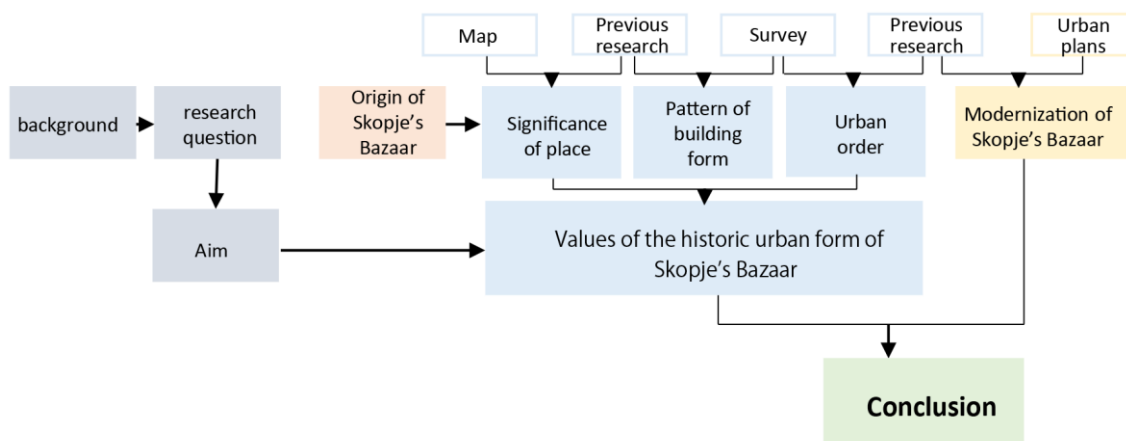
This chapter deals with the impact of modernization of the 20th century on the inherited values of Skopje's bazaar historic urban form. The transformation of the position of the historic center in modernization and the alteration of Bazaar's historic planning structure were discussed by comparatively analyzing modern planning schemes of the 20th century. Modern developments during the Reconstruction Project after Skopje's earthquake were also analyzed to understand the physical alterations of the historic built form that resulted in obscuring or diminishing of its value.



Chapter 5

Conclusion

In this chapter the conclusion of the value analysis of the significance of place, pattern of building form and urban order for the conservation of the historic urban form is presented. The inherent values of the spatial structure formed by the Ottoman urban strategy are summarized. This study can serve as base for future planning approach based on the value of place.



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2. The origin of Skopje's Old Bazaar

Chapter 2 deals with the history of Skopje's Old Bazaar development. Firstly, Skopje's valley (2.1.1) and Skopje's location in the region (2.1.2.) are analyzed based on previous research and historic maps (Hall,1828⁶⁾; Evans,1883⁷⁾). The analysis clarifies the historical meaning of Skopje's location as important intersection on the regional network between Central/East Europe and the Middle East as well as being an urban hub for the local villages. Moreover, the analysis indicates the directions where regional highways entered the city area which will be used later to identify the Gates of the historic town.

Secondly, the urban structure of Ottoman Skopje is discussed based on previous research and Skopje's map of 1887/95³⁾ (2.2.). The three main urban zones of Ottoman Skopje, clarified in previous research and consistent with general methodology of land use in the Ottoman urban concept were marked on the 1887/95 map of Skopje. Further, we discussed the possible traces of pre-Ottoman Skopje in the Bazaar's layout based on the data from the 1929 map of Skopje and previous research.

Thirdly, we analyzed the development of Skopje's Old Bazaar based on the public endowments-*waqf* in the Ottoman urban concept and strategy (2.3.). Previous research was used to clarify the significance of *waqf* in the Ottoman concept of developing Bazaar's as urban centers (2.3.1.). Then, historical facts and previous research regarding *waqf* foundation in Skopje were used to illustrate the process of gradual development of Skopje's Bazaar (2.3.2).

Through these three steps, the origin of Skopje's Bazaar, derived from the Ottoman urban concept of city development applied on Skopje during 15th and 16th century, was clarified.

2.1. Skopje's location on the regional network

In this chapter, the geophysical setting of the city Skopje and its location on the regional network is discussed. We analyzed previous research and historical maps to clarify the meaning of Skopje's location with reference to the main regional highways.

2.1.1. Skopje's valley

The city of Skopje, capital of Republic of Macedonia, is located in Skopje's valley in the northern part of the Republic (Skopje-WGS 42°0'N, 21°26'E; Fig. 3). Skopje's valley, 245m above sea level, is elongated river plane, enclosed by the mountain Vodno (peak Krstovar-1066m) on the south, mountain Suva Gora (peak Kodra Taurli-1857m) on the south west and mountain Skopska Crna Gora (peak Ramno-1561m) on the north¹⁾.

This landscape has been formed in a series of geological occurrences during the lake period in Middle Miocene¹⁾. The land mainly consists of alluvial sediments caused by the main rivers' deposits that varies from 1 to 20m in thickness⁴⁾. The fertile land in the valley is a product of the irrigation of five rivers, with river Vardar being the biggest collector flowing from northwest to the southeast (Skopje is located at the upper course of river Vardar which flows into the Aegean Sea)^{1),4)}. The other four rivers are Treska and Lepenec coming from the west side, Serava in the center of the valley coming from the north mountain Skopska Crna Gora (now buried in underground channel and its course reverted), and Pčinja flowing in the south lower part of the valley¹⁾. (Fig. 3)



Fig. 3 Skopje valley and the Skopje city region today
photo from <http://www.weather-forecast.com/locations/Skopje>

According to a Köppen climate classification, Skopje valley has a humid subtropical climate (Cfa) near to a boundary of warm summer continental climate (Dfb) resulting in hot summers and cold winters, with average yearly temperature of 13.5°C. The dominant winds in the valley are from the north and northwest, following the riverbed of Vardar to the southeast¹⁾.

2.1.2. Skopje on the regional highway network

Skopje's valley has been inhabited since ancient times^{2),4)}. In the Roman Empire, main highways connected Rome with Constantinople. One of the most important roads *Via Egnatia*, that connected Rome to Constantinople across the Adriatic Sea, passed through the southern parts of today Republic of Macedonia (Ohrid-Bitola)⁵⁾. In this context Skopje's valley had a periphery position.

However, the situation drastically changed after 1392 when Skopje was conquered and renamed Üsküb by the Ottomans⁵⁾. Since then, Skopje served an important military and political role as a base for further conquests of the North and Central Balkan⁴⁾. These new circumstances gave strategic significance to Skopje and its location in the region¹⁾.

On the map from Hall (1828)⁶⁾ we traced the regional transit network passing through Skopje, already firmly established by the 19th century (Fig. 4). It became clear that Skopje was a traffic link between Central/East Europe (2), (3) and Thessalonika (1) on the Aegean Sea, from where the Middle East was accessed. The road Skopje—Thessalonika was along Vardar's riverbed. Moreover, another road connected Skopje to Ohrid (4) from where the Adriatic Sea on the west was accessed through the historic road *Via Egnatia*.

Another route of more local importance connected Skopje as urban center with its hinterland, the villages in Skopska Crna Gora on the north (5) and Vodno Mountain on the south (6). This route was in SW-NE direction and its vital link was the Stone Bridge on river Vardar.

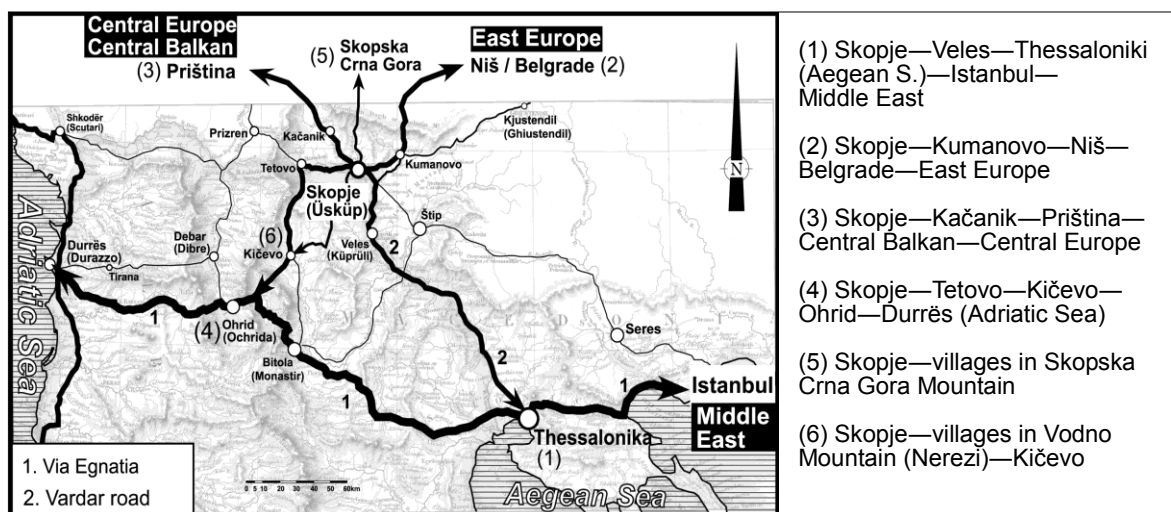


Fig. 4 Skopje's location in the regional network – based on Hall 1828⁵⁾

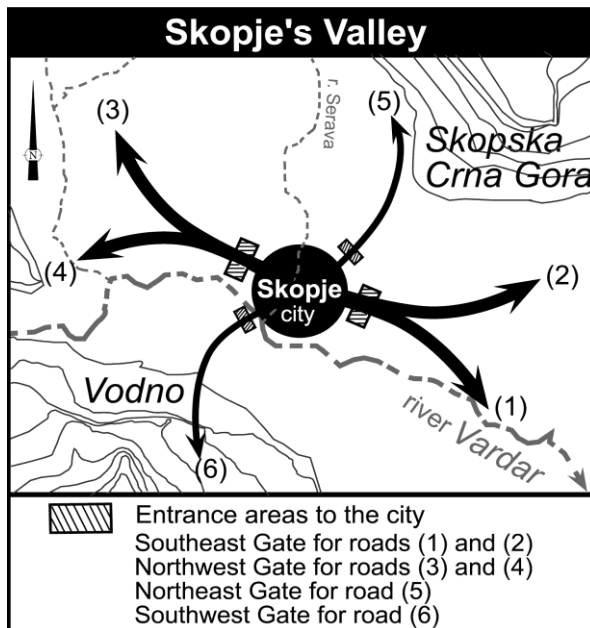


Fig. 5 Skopje's valley – based on Evans 1883

On Fig. 5 we traced the direction of the regional network through Ottoman Skopje based on the map from Evans (1883)⁷. It became clear that the main NW-SE regional highway passed through the city along the Vardar riverbed. We mapped the entrances of the regional roads in the city zone which are called hereafter **Gates**.

We can clarify the main significance of Skopje's location in being important intersection on the regional network between Central/East Europe and the Middle East as well as being an urban hub for the local villages.

2.2. Urban structure of Ottoman Skopje

This chapter analyzed previous research and historic maps from 1887/95 and 1929 in order to clarify the urban structure of Ottoman Skopje.

According to Stern (1970), the urban structure of cities in the Muslim world differs from western European ones as a result of absence of professional or corporate organizations and municipal institutions in the Islamic societies⁸⁾. Thus the non-existence of a square surrounded by municipal buildings is strongly connected with centralized state and low autonomy of the city⁸⁾. Hourani (1970) defined the Bazaar with the Main Mosque as a *central urban complex* in the Muslim city, surrounded by residential quarters⁹⁾.

After the Ottomans conquered Skopje in 1392, the city was gradually developed and restructured according to the basic principles and guidelines of the Ottoman urban concept that derived from the Islamic religious law— *Sharia*¹⁰⁾ (Fig. 6).



Fig. 6 Skopje in engraving by Jacobus Harevin 1594¹⁾

In conformity with these basic principles, Ottoman Skopje had three urban zones (Fig. 6):

- a Fortress located on the south end of the Fortress Hill,
- Bazaar with the Main Mosque on the eastern slope of Fortress Hill,
- residential neighborhoods surrounding the urban center^{1),2),4)}.

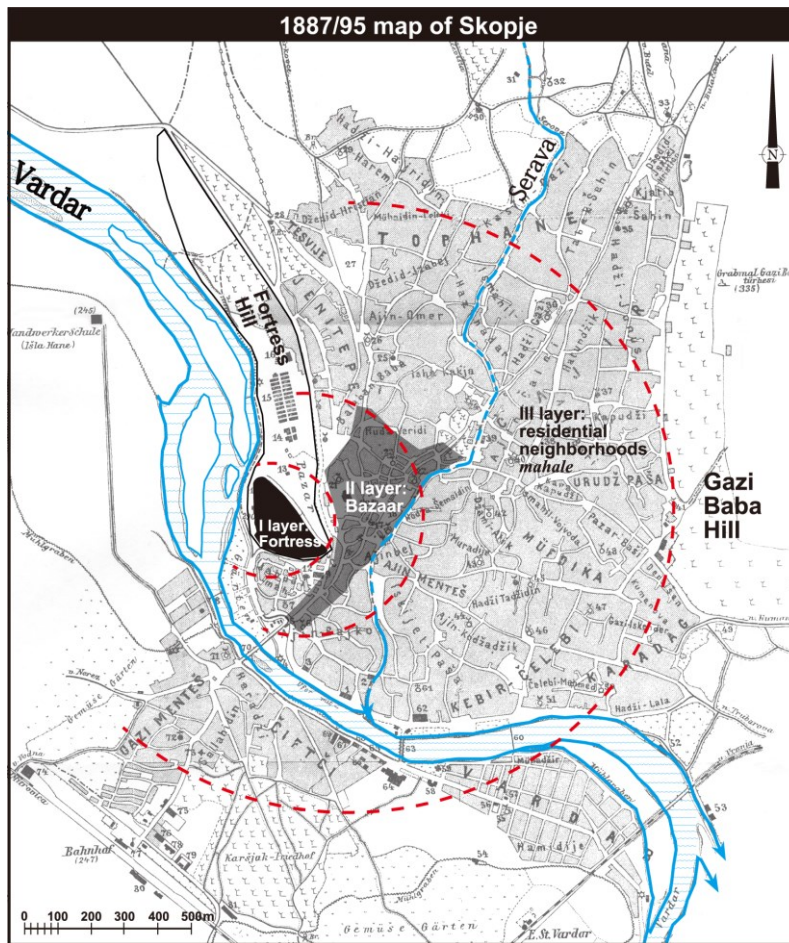


Fig. 7 Urban structure of Ottoman Skopje
-adapted by the author on the 1887/95 map

The residential neighborhoods (*mahalle*) were settled by people from the same ethnicity and each had a small center with praying place, a bakery and a public bath²).

In the *mahalle*, the privacy of family life was respected while the commercial activities as provision of food, import of raw materials and trade culminated in the noisy streets of the Bazaar⁵).

We mapped the location of the Bazaar and adjacent Fortress on the 1887/95 map - Fig. 7.

The urbanized area on the 1887/95 map is ~260 hectares with only small area (~45 hectares) on the right bank of river Vardar, mostly as a result of the first railway station built in 1874³). Observing the topographical markings, it became obvious that Skopje was developed between two relief folds, the Fortress Hill on the west and Gazi Baba Hill on the east, with river Serava flowing in between.

The geography of the terrain made the Fortress Hill a perfect defense point, unapproachable from the southwest steep side and gently opening to the eastern valley. Previous research suggests that the east border of early medieval Skopje was river Serava^{1),4}) however, in 1887/95 the city already spread on the northeast engulfing the Serava canal in the middle of the city. The allocation of public facilities determined the Bazaar's elongated shape in SW-NE direction with the Fortress (west), r. Vardar (south) and r. Serava (east) as its boundaries.

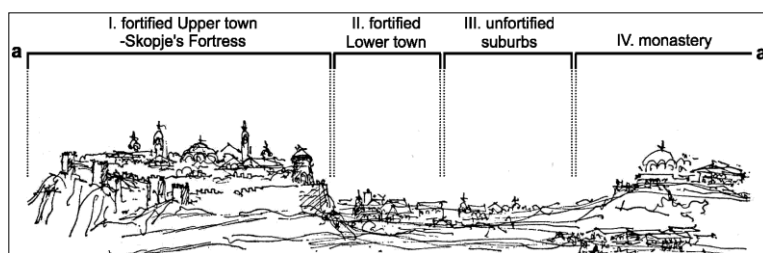


Fig. 8 Urban structure of pre-Ottoman Skopje — adapted by the author on a sketch by Arsovski³⁾

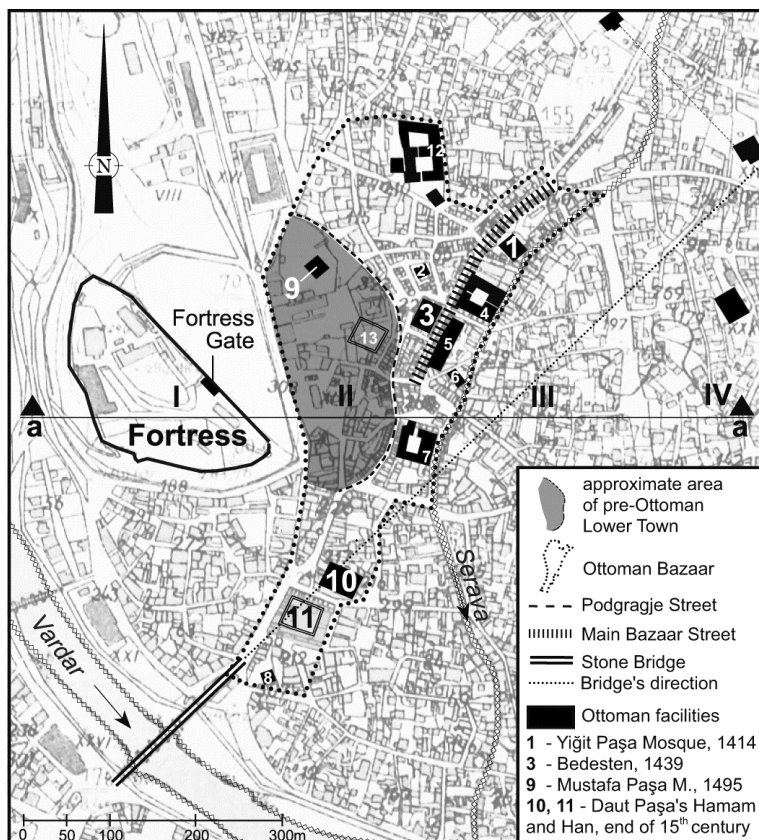


Fig. 9 Distribution of Ottoman facilities in Skopje's Bazaar — adapted by the author on 1929 map

Pre-Ottoman or early medieval city of Skopje was a city ruled by the Byzantine, Bulgarian and Serbian Empire^{1),2),5)}. Records about the city structure from those periods are very scarce however historians agreed that the city must have had three main urban zones (Fig. 8-aa): strongly fortified Upper Town – the Skopje's Fortress (I), fortified Lower Town on the east slope of the fortress hill (II), and unfortified city suburbs in the river Serava valley (III)^{1),2),4),11)}. On the small hill east of the river Serava, a monastery complex was located outside the city boundaries^{1),2),4),11)}.

There is a lack of archeological and historical data that can clearly indicate the urban form of the Lower Town and its wall before the Ottomans. However, it is quite sure that the existing Lower Town influenced the decision of sites for the first Ottoman facilities that identified the urban center since the

consistent Ottoman strategy was not to destroy the conquered settlement in the beginning but to gradually dismantle and restructure it¹²⁾.

According to Cezar (p.31, 1983)¹²⁾, in the conquered cities of the Balkans, the Ottoman Bazaar took over a previous market place or was developed in a suitable close by area. Since the area of the conquered cities was usually insufficient for new development, the Bazaar was often placed outside the fortification walls but in its immediate vicinity (Edirne)¹²⁾. In Skopje, the Ottomans started developing the Bazaar from the first Mosque Yigit Paşa in 1414^{23),10)} (Fig. 9/1). The first Ottoman facilities were founded in the valley of river Serava, where the former suburbs were located^{1),2)} (Fig. 9/1-7). Since the Bedesten's site

(Fig. 9/3) is closest to the Fortress Hill's slope we can assume this location as an edge of the pre-Ottoman Lower Town. Thus, the unique curving line of street Podgragje (Fig. 9) could be close to the outline of Lower Town's fortification wall. The Lower Town's area finally started to develop 100 years after the Ottoman conquest, with the building of Mustafa Paşa's Mosque in 1495³⁾ (Fig. 9-9).

The direction of the Stone Bridge, built in the early stage of Ottoman rule (Sultan Murad II: 1421-1451)¹⁹⁾, is also interesting since it seems to be oriented not towards the Main Bazaar Street's segment already formed at that time by the first Ottoman facilities (Fig. 9/1,2,3,4) but into Daut Paşa's buildings from the late 15th century (Fig. 9/10,11). This seems to suggest that the connection to the existing regional highway network was the most significant factor in deciding the Bridge's location and direction in early times. As the Main Bazaar Street continued to develop in the following years, the locations of Daut Paşa's buildings could have been used to reorient the traffic from the Bridge's old route towards the Main Bazaar Street. However, more archeological and historical research is needed to clarify in detail how this redevelopment proceeded.

2.3. Development of Skopje's Old Bazaar based on public facilities

This chapter analyzed the significance of the Ottoman public facilities, which were founded through the institution of *waqf*, in the urban development of Skopje's Bazaar. Further, the chronology of construction and layout of Ottoman public buildings in Skopje was analyzed in more detail in order to clarify the incremental development of Skopje's Old Bazaar.

2.3.1. The Ottoman institution of *waqf*

Skopje's Bazaar was gradually developed by the traditional Ottoman construction system that is based on a Muslim concept of *waqf* endowments realized by powerful Ottoman individuals or officials¹²⁾. The endowment—*waqf* is a property that is “frozen”, exempt from changes and subdivision for centuries, and dedicated to serve public benefit¹²⁾. The Ottoman public buildings founded with the *waqf* institution were implanted permanent or static elements in the urban fabric and often not single buildings but groups or complexes of buildings that functioned as social welfare centers¹⁰⁾. The founder allocated other property for financial support of the facility in a case of a building that did not yield income (Mosque, school, public kitchen ext.)^{12), 16)}. Public facilities like Han, Hamam or Bedesten that yielded income supported themselves and even some of the other public facilities^{12), 16)}. Soon after a public facility was founded in the Bazaar, around its walls small shops were spontaneously generated often using the facility's facade as their rear wall^{2), 12)}. These shops on the other hand were subject to dynamic changes, rebuilding and subdivision to adjust to the needs of the owners, thus they can be considered spontaneous, self-organizing elements of the traditional urban design system¹⁷⁾. Regarding the Bazaars, André (1984)¹⁸⁾ defines the remarkable growth of the commercial centers under the Ottoman Empire, carried out by succession of pashas in the context of *waqf*, as: “...systematic process within a general plan of development...”. The general Ottoman strategy of Bazaar development can be seen as a process of:

1. Establishing a Main Friday Mosque;
2. Establishing a Bedesten, a special commercial building that constitutes the central section of the Ottoman Bazaar; there is no exception in locating the Bedesten, crucial for international trade, in vicinity of the Main Mosque thus forming the urban center;
3. Developing a Main Bazaar Street aligned by shops. This street usually took over the main street of the city where the Main Mosque and the Bedesten were located. Other public facilities continued to be implanted along the Main Street to support Bazaar's growth;
4. Developing secondary Bazaar streets by conversion of residential into commercial sectors. The gradual conversion was made by emergence of densely built small shops along the block's front. The congregation of shops formed the bazaar's blocks¹⁸⁾.

2.3.2. Gradual growth of Skopje's Bazaar 1392 - 1550

We analyzed Skopje's Old Bazaar development according to the chronology and layout of Ottoman public buildings founded through the *waqf* institution. The method of the analysis was based on historical records and previous research of Skopje's history.

The history of Skopje's Old Bazaar can be viewed in three main periods (Fig. 10). The first period (1P) is considered to be the period of Bazaar's physical and commercial development starting from the Ottoman occupation of Skopje in 1392 until the great fire set by the Austrian Army in 1689^{2),4)}. The second period (2P) is the period of the *Tanzimat* reforms that tried to modernize the Ottoman Empire. It is considered that the reforms facilitated Bazaar's revival since the new privileges given to the Christian population boosted up the economic growth^{2),4)}. The third period (3P) is the time of western European influences on the Ottoman Empire following the *Tanzimat* reforms^{2),4)}. The western European influences were especially visible in the architectural style of the new public facilities and in the urban restructuring of the city with the first urban plans produced after the Ottoman retrieval from Skopje (1912)¹¹⁾.

During the First period (1P), the sequence from 1392 till 1550 is the time when most of the Ottoman *waqf* endowments in Skopje's Bazaar were built^{2),4)}. We divided this sequence in five phases. The first three phases I, II and III are defined according to the periods of activities of notable rulers in Skopje, Yiğit Paşa (1392-1414), Ishak Bey (1414-1439) and Isa Bey (1439-1475)¹⁹⁾. Each of these nobles endowed many important *waqf* facilities in Skopje during their rule¹⁶⁾. The phase IV is the time when the city gradually spread towards the right bank of river Vardar²⁾. This growth was also facilitated by

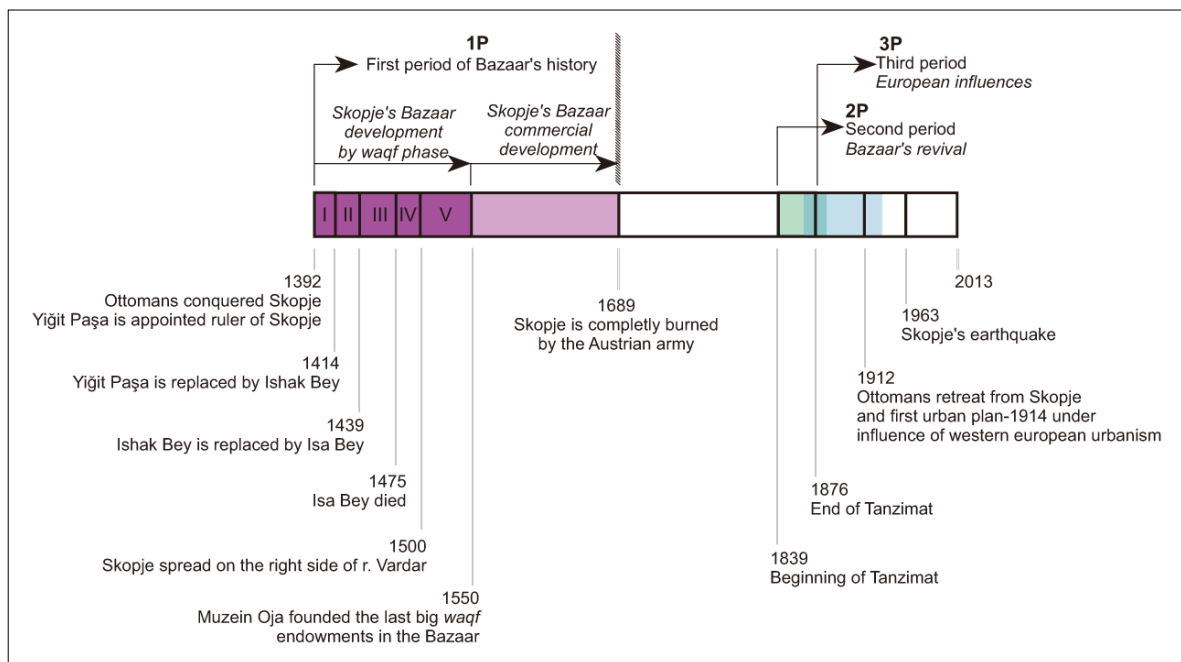


Fig. 10 Diagram of Skopje's Bazaar history

construction of *waqf* endowments, most notably the Burmalı Mosque on the right bank of Vardar in immediate vicinity of the Stone Bridge¹⁹. The V phase is the time when Muzein Oja built many *waqf* endowments in Skopje, including the complex of Kurşumli Han, Çurçiler Hamam and Kazandziler Mosque that are the last big Ottoman facilities built in the Bazaar¹⁹.

We analyzed the gradual physical development of the Bazaar's area according to the layout of big *waqf* endowments in each phase.

The first mosque built in Skopje by Yiğit Paşa (Fig. 11 – 1) no later than 1414¹⁹ marks the beginning of Skopje's *Ottomanization*¹⁰. Although none of the structures of this Mosque complex remain today (except the two graves of Yiğit Paşa and Medah Baba)¹⁹, the historical significance of this location is in its being the first communal center of the Ottoman city. The income of Yiğit Paşa's 38 shops, one shop for cattle heads and one watermill were allocated for the support of this complex¹⁶. In the same phase and close to Yiğit Paşa's Mosque, another mosque named Arasta was built¹⁹. Its name clearly suggests that a Bazaar was already forming around the first communal mosque since the term "*arasta*" in the Ottoman Empire signified a commercial building or row of shops whose income is allocated to *waqf* support¹².

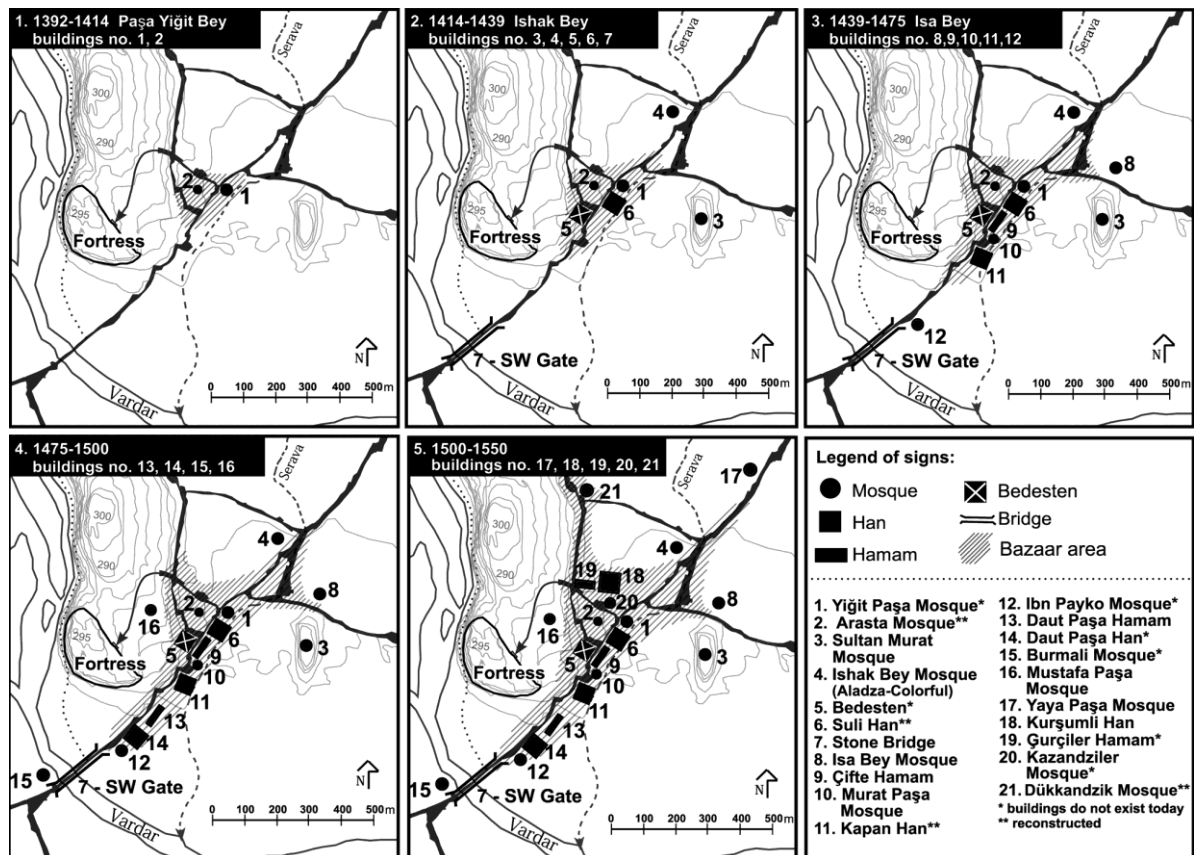


Fig. 11 Diagram of Skopje's Bazaar gradual development from 1392 to 1550 by *waqf* endowments

During 1414-1439 (Fig. 11 – 2), Yiğit Paşa's heir Ishak Bey, built the most important commercial building in the Bazaar¹⁹⁾, the Bedesten which original typology closely resembled the Serez Bedesten¹²⁾. The construction of the Bedesten situated Skopje among the most important trading cities in the Ottoman Empire²⁾. Today the original Bedesten do not exist though in precisely the same site another building was built¹⁸⁾. Ishak Bey also founded Suli Han in the Bazaar and a complex including Ishak Bey Mosque¹⁹⁾. In 1481, Ishak Bey's waqf had 133 shops, from which 37 were allocated for the support of Ishak Bey's complex¹⁶⁾. In 1436, under the patronage of Sultan Murat II (1421-1451), a Sultan's Mosque was founded and today this Mosque is the oldest existing Ottoman monument in Skopje^{10),19)}. Sultan Murat II also supported the work on the Stone Bridge^{2),19)}.

Ishak Bey's son, Gazi Isa Bey continued the tradition of establishing important *waqfs* and during 1439-1475 (Fig. 11 – 3) founded Isa Bey Mosque complex¹⁹⁾. To support the growth of the Bazaar, he founded the Çifte Hamam and Kapan Han¹⁹⁾. The Ishak Bey's *waqf* income in 1453/4 came from Çifte Hamam and 68 shops¹⁶⁾. The number of shops increased to 145 in 1481¹⁶⁾. Other facilities founded in this phase include Murat Paşa and Ibn Payko Mosques¹⁹⁾.

In the consecutive phases 1475-1500 (Fig. 11 – 4) and 1500-1550 (Fig. 11 – 5), the growth of the city continued and important mosques that marked the new city boundaries were built: Burmalı Mosque to the south and right bank of Vardar, Yaya Paşa Mosque on the northeast and Dükkandzik Mosque on the northwest¹⁹⁾. The founder of Dükkandzik Mosque—Muzein Oja is believed to have built the last three big public facilities in the Bazaar, the complex of Kurşumlu Han, Çurçiler Hamam and Kazandziler Mosque¹⁹⁾.

From this analysis we can conclude that the urban structure of the Bazaar is a product of the Ottoman urban strategy based on the layout of public buildings endowed with the *waqf* institution. The Bazaar was formed gradually through *waqf* buildings during the first 150 years of the Ottoman rule in Skopje. It consisted of two Main Centers (Paşa Yiğit Mosque and Bedesten) as the origin of the Ottoman Skopje's urban center and other facilities located mainly along the Main Bazaar Street.

However, the 1689 fire set by the retreating Austrian army caused a lot of damage to the city^{1),2),11)}.²⁰⁾ Although the main urban structure of the Bazaar formed by the streets and public facilities remained unchanged, the burned shops and the unfavorable economy during the 17th and 18th century greatly impaired the socio-economic circumstances in the Bazaar^{2),20)}. It was not until the *Tanzimat* reforms of the 19th century that the Bazaar would revive its economy and shops would be rebuild^{1),2)}.

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3. Values of the Historic Urban Form of Skopje's Bazaar

Chapter 3 contains the main analysis of the significance of place, pattern of building forms and urban order in Skopje's Old Bazaar in order to identify values of the historic urban form derived from the Ottoman urban strategy. Historic urban form refers to the physical form of Skopje's Bazaar historic area developed by the Ottoman urban strategy during 15th and 16th century and it includes the urban structure, spatial organization, the form of the street network, layout and shape of blocks, the distribution and shape of buildings and visual relationships.

The Skopje's Bazaar historic urban form was analyzed through the three main topics of the value concept:

3.1. Significance of place – In this research, the place significance in Skopje's Bazaar is studied by analyzing the Ottoman urban strategy. Ottoman urban strategy refers to the method of utilization of the layout of public facilities, through large-scale and long-range planning, to ensure the development of cities according to the Ottoman urban concept based on the religious Islamic law. This method was used in many cities in the Balkans conquered by the Ottomans in order to restructure and develop them as Ottoman Islamic cities. In the study by Boykov (2011)¹⁰⁾, the term "*Ottomanization*" was used to describe the consistent Ottoman urban strategy applied in Edirne, Plovdiv and Skopje after their conquering by the Ottoman Empire.

In this chapter the purpose of public facility (3.1.1) and primary road (3.1.2.) in the Ottoman urban strategy was analyzed through previous research and Skopje's map from 1887/95. Further, the Reconstruction after the 1963 earthquake was analyzed to identify the impact of modern developments on the historic planning structure and the significance of facility location and primary road (3.1.3.). The significance of place as a value of the urban form was obtained (3.1.4.)

3.2. Pattern of building forms – Pattern of building form refers to the typology of building structures. In this research, short overview of the typology of Ottoman facilities in Skopje's Bazaar is provided (3.2.1.) while the main analysis concentrates on the morphology of vernacular units-shops (3.2.2.) since there is not enough previous research to define the typology of these structures. In the morphology of vernacular units- shops we analyzed the shops typology (3.2.2.1.) and the alteration of shop types (3.2.2.2.). The data for this analysis was based on our own survey data. The pattern of building forms as a value of historic urban form was obtained (3.2.3.)

3.3. Urban order –In this research, the term “urban order” is the organization of the ground plan and the arrangement of street, lot and building in an area. The urban order is a direct product of the inherent relationships of urban elements in the original urban concept. In this chapter the spatial structure of blocks and the urban ordering of the ground plan was analyzed. First an analysis of the sequential development of blocks in Skopje's Bazaar, based on the chronological development of *waqf* endowments, was performed (3.3.1.). Further, a typological analysis of the block was done based on previous research, a historic map from 1929 and our own survey records (3.3.2.). A discussion on possible block evolution (3.3.2.1) and the alteration on block structure during 1929-1999-2011(3.3.2.2.) was also included. Finally, the systematic street-lot-building relations (3.3.3.) that form the urban order in the Bazaar were identified as value of the form (3.3.4.).

3.1. Significance of place based on the Ottoman urban strategy

Today the location and layout of public facilities and road network in the Bazaar, developed by the Ottoman urban strategy, have been losing their authentic purpose due to the modern development that ignored the Ottoman concept.

Therefore, the aim of this chapter is to identify the original significance of places in the urban structure of the Bazaar by analyzing the Ottoman strategy in utilizing the layout and function of main public facilities and primary roads.

Previous research of the Bazaar mainly concentrated on: historical facts regarding the construction of Ottoman public facilities and their architectural features (Sokoloski 1977¹), Bogoević 1998²), the modern development in the Bazaar following Skopje's earthquake (Institute for Urbanism and Architecture—Skopje, 1967³) or the typology of shops (Krstikj, Hyuga, Koura 2012⁴). The study by Boykov (2011)⁵ clarifies the consistent Ottoman urban strategy—*Ottomanization*, applied in the conquered Balkan cities, including Skopje, during 15th century. Concurrently, Mateska's study (2011)⁶ analyzes the typology and function of all traditional Bazaars in the structure of Macedonian cities without focusing in particular on Skopje's Bazaar. In 2006, the N.I.—Conservation Center Skopje executed a Revalorization survey of Skopje's Bazaar⁷ that served as a base for demarcation and designation of the Bazaar as a Cultural Heritage of Significant Importance by the Macedonian Ministry of Culture in 2008¹⁷). Although the Revalorization Report presents large quantity of historical facts and survey records regarding the surviving monuments, it lacks a consistent explanation of the value and significance of place in the Bazaar's urban structure⁷). Therefore, our study focuses on clarifying the significance of place in the particular case of Skopje's Bazaar, based on the authentic function of facility's location and primary road.

The method of this study was based on document analysis. The documents consisted of previous research and historical data. Previous research was analyzed to establish the Ottoman urban strategy (Cezar 1983⁸), Boykov 2011⁵), year of built and location of facilities (Sokoloski 1977¹), Bogoević 1998²), social circumstances (Gorgiev 1997⁹) and urban planning of the Bazaar after the 1963 earthquake (Institute for Urbanism and Architecture—Skopje, 1967³). From the historical data we used a map of Skopje from 1887/95 and photographs of Skopje from the early 20th century. The 1887/95 map was found in an article by Urošević published by the Macedonian Academy of Science and Arts's "Contributions IV-2", 1973¹⁰). Urošević on the other hand, found the 1887/95 map as appendix in a book titled "*Detailbeschreibung des Sandžaks Plevlje und des Vilajets Kosovo*" printed in Vienna 1899¹⁰).

Careful consideration of the Ottoman concept and understanding of the authentic significance of locations can serve as guideline for integration of future favorable developments in the conservation of Skopje's Bazaar.

3.1.1. Skopje's *Ottomanization* and purpose of public facility

The Ottomans used an urban strategy for developing and restructuring their conquered cities—*Ottomanization*⁵⁾. The strategy was a method of utilization of the layout of public facilities, through large-scale and long-range planning, to ensure the development of cities according to the Ottoman urban concept based on the religious Islamic law. **Thus, the public facility is the main instrument to promote urbanization and redevelopment in the Ottoman urban strategy.** The Ottoman urban strategy was based on two main planning intentions:

1. Developing an urban central zone —Bazaar by placing a Main communal Friday Mosque in the center of the conquered city;
2. Facilitating urban growth of residential neighborhoods by placing community centers-complexes in the outskirts of the city. These complexes included a Mosque, public kitchen, religious school, hospital and other facilities ⁵⁾.

In Skopje, the *Ottomanization* started in the 15th century⁵⁾. The Main communal Mosque built in Skopje was identified by Boykov as the first mosque built by the conqueror Paşa Yiğit Bey (Photo 1—A, Fig. 12) in 1414⁵⁾. Thus the Mosque Paşa Yiğit was the symbol of city's center in Ottoman Skopje. In the Bazaar that started to develop around the Main Mosque, Paşa Yiğit's successor Ishak Bey built the Bedesten (Photo 1—B, Fig. 12) in 1439, as a hub of all commercial activities^{1),2),3),5)}. Therefore, these two public facilities signify the origin of the Ottoman city and hereafter we refer to them as **Main Centers** of Ottoman Skopje.



Photo 1 View from Fortress Hill towards the Bazaar
(adapted by the author on photo from N.I. Conservation Center Skopje)

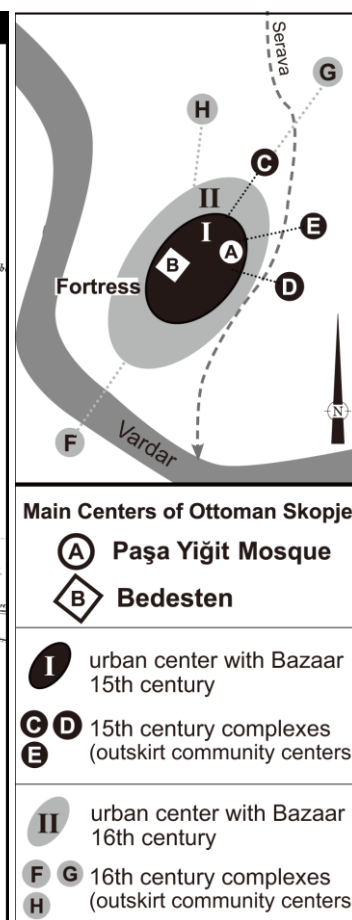
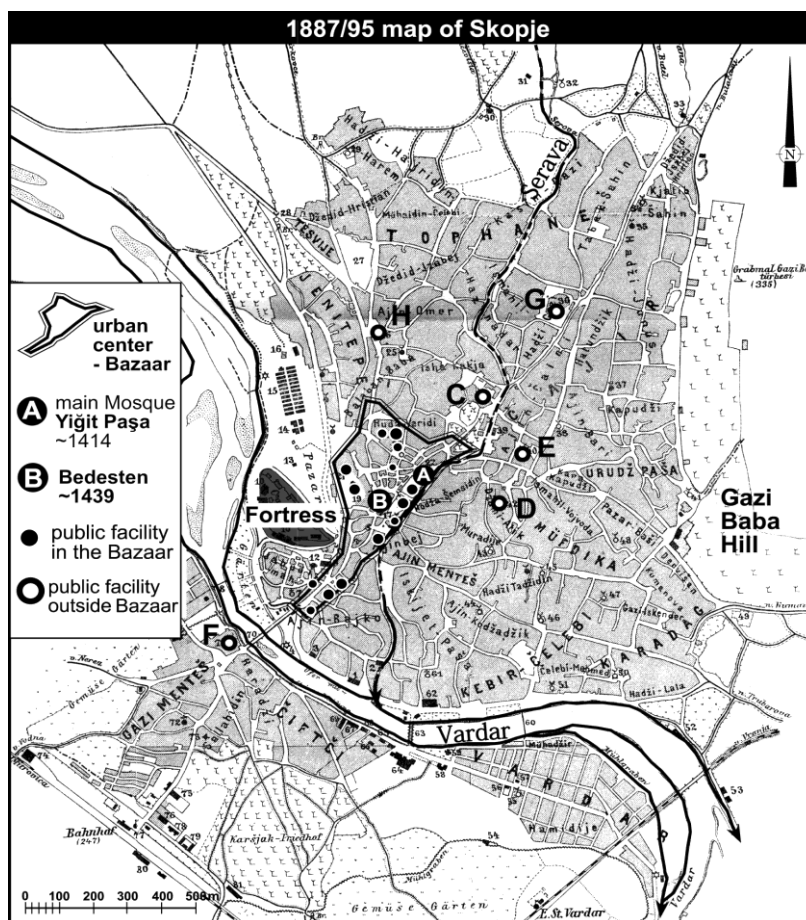


Fig. 12 Skopje in 1887/95 - adapted by the author on the 1887/95 map

Fig. 13 Diagram of city's growth

Boykov identified Ishak Bey (Fig. 12—C, y.1439) and Gazi Isa Bey Mosque (Fig. 12—E, y.1475) as the first two complexes built on the city's outskirts with intention to facilitate urban growth⁵⁾. Moreover, Sultan Murat II built a mosque complex (Fig. 12—D, y.1438) on a small hill overlooking the Bazaar that officially recognized Skopje as important Ottoman city⁸⁾. Thus, these three locations signify the periphery of the city in the 15th century.

The intensive building activities in the 15th century coincide with the growth of number of inhabitants. Gorgiev's research (1998) on the demographical changes in Skopje after the Ottoman conquest¹¹⁾, based on the Census books *Tapu defterleri*⁹⁾, was used to prepare a table showing the number of neighborhoods, households and inhabitants in Skopje in 1452/3, 1467/8, 1544 and 1568/9 (Table 1). However, Gorgiev informs that the number of households is not exact but fairly accurate because of the Ottoman practice not to include citizens with special status and the ruling feudal families in the Census books⁹⁾. From the table I discerned the steady growth of Skopje's population from 1452 to 1544, which supports Boykov's claim that location of C, E and D complexes were aimed at facilitating Skopje's growth and hereafter we will refer to them as **15th century complexes**.

Table 1 Neighborhoods and households in Ottoman Skopje based on Gorgiev⁹⁾

	y. 1452/3	y. 1467/8	y. 1544	y. 1568/9	1660	y. 1875
Christian neighborhoods	8	12	14	10	—	—
Muslim neighborhoods	23	33	53	57	—	—
neighborhoods in total	31	45	67	67	70(?)	51*
Christian households	339	363	224	547	—	—
Muslim households	516	666	1,067	1,485	—	—
Jewish households	—	—	32	53	—	—
Chatolic households	—	—	8	30	—	—
number of inhabitants	~4,275	~5,145	~6,655	~10,575	~60,000(?)	~29,480

* number of neighborhoods was analyzed by the authors according to the inscriptions on the 1887/95 plan

Moreover, since the population again rose rapidly from 1544 to 1568, I confirmed that the city growth started with the *Ottomanization* in the 15th century continued and intensified during the 16th century. Therefore, I searched for public facilities that were built outside the Bazaar during the 16th century that could have promoted the development. Important facilities that were built in early 16th century were: Burmali (Fig. 12—F, y.1495), Yaya Paşa (Fig. 12—G, y.1504) and Dükkânçik (Fig. 12—H, y.1549) Mosque²⁾. I determined that these outskirt communal facilities most probably had the meaning of **16th century complexes** after the 15th century complexes were engulfed in the new neighborhoods. The purpose of the 16th century complexes was to facilitate further urban development. This is supported by several historic records that describe Skopje in 1660 as a big city with 60 000 inhabitants (Table 1). Gorgiev warns that these records are probably exaggerated. However, they affirm the city's rapid growth from mid 16th to mid 17th century⁹⁾.

We concluded that the urban strategy by Ottoman officials in developing the city Skopje, using the *waqf* concept of public endowments during the 15th and 16th century, resulted in gradual growth of the city and its Bazaar (Fig. 13). In the 15th century, the urban center was formed by the Main Mosque (Fig. 13-A) and the Bedesten (Fig. 13-B) while the 15th century complexes on the outskirts boosted the gradual urban growth (Fig.13-C, D, E). In the 16th century, the urban center expanded owing to the intensive construction of facility endowments in the Bazaar (chapter 2.3.2. and Fig. 10) and the second group of outskirt complexes was built (Fig. 13-H, G, F) to further city growth. Therefore, the location of Main Mosque Paşa Yiğit and the Bedesten signify the origin of the Ottoman city, the location of facility complexes of Ishak Bey, Isa Bey and Sultan Murat Mosque signify the periphery point of urbanization in the 15th century while the locations of Burmali, Yaya Paşa and Dükkânçik Mosque signify the second progression group of periphery point of urbanization in the 16th century.

However, Skopje's growth was abruptly stopped by the 1689 fire set by the retreating Austrian army in the Great Turkish War (1683-1699) which caused great damages and reduced significantly the urban structure and population^{1),2),3)6)}. The city gradually recovered and according to the inscriptions on the 1887/95 map by the end of the 19th century Skopje had around 51 neighborhoods including the first orthogonal planned neighborhood on the right bank of Vardar.

3.1.2. Purpose of primary road in the Ottoman urban concept

According to Hakim (1988) in traditional Arabic-Islamic cities the hierarchy of the road network is composed of: primary, secondary and tertiary roads¹¹⁾. The purpose of primary road is the continuation of the regional highway that enters through the city Gate and forms the backbone of the city¹¹⁾. All major public facilities are located along the primary roads and the final destinations are the Main Mosque, the Bedesten and the Fortress¹¹⁾.

In our analysis the term “primary road” is used in the context defined by Hakim for Skopje’s road network in 1887/95 map. Urošević (1973) discussed the 1887/95 map with interest in its content and exact period of production¹⁰⁾. We used the map to identify which roads in Ottoman Skopje had the meaning of regional network highways. Even though the regional network existed before the Ottomans, its precise form through the city Skopje is not known. However, with the founding of Ottoman facilities these roads were clearly defined because important facilities were always placed on the major road network. Therefore I used the City gates of the regional network in the urbanized area and the location of main Ottoman facilities identified in the previous chapter (3.1.1) to identify the primary road network in Ottoman Skopje.

First we identified the precise location of Skopje’s City Gates (Fig. 14). We use the term City Gates for the entrance of the regional roads in the city area that were constrained by topographical conditions. The topography of the terrain allows open entrance to the city only from the northern plain while the traffic from the other three sides is forced through narrow natural passages.

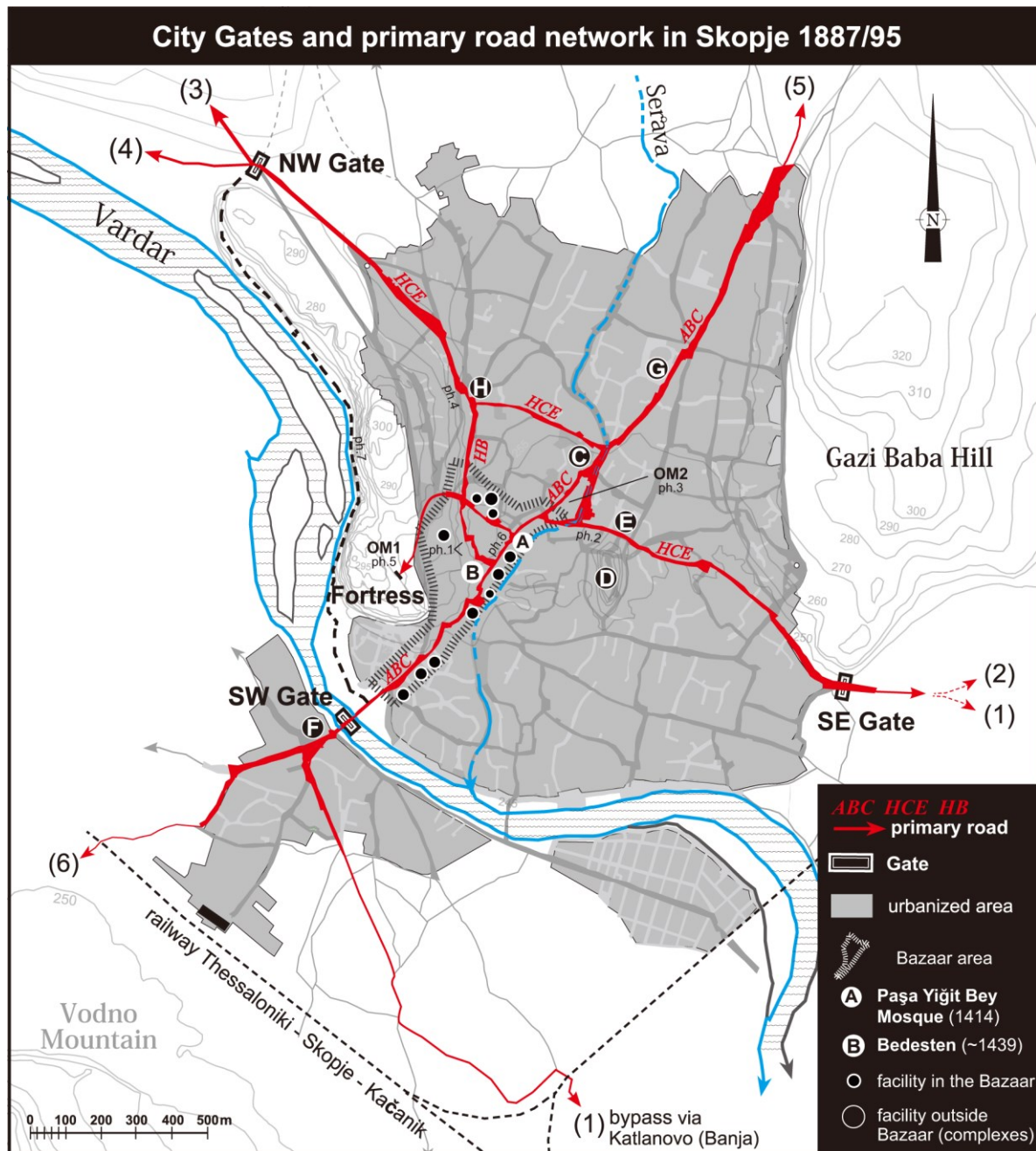
The passage formed by the northwest slope of the Fortress Hill and the hill adjacent to it on the north side is named in this study NW Gate (Fig. 14- NW Gate). Historically, this place was called *Tetovska Trošarina* meaning Toll Gate for traders coming from Tetovo city on the west (4). The Stone Bridge, as the only entrance over river Vardar, was named SW Gate (Fig. 14- SW Gate). The strategic positioning of the Fortress Wall and the direction of its defensive posts and towers suggest a clear intention of guarding the Bridge as important city entrance. The southeast passage to the old city is between the Gazi Baba Hill and river Vardar. For its precise location we used a historical name of a place below the Hill called *Kumanovska Trošarina* meaning Toll Gate for traders coming from Kumanovo city (2) (Fig. 14-SE gate). On the northeast, a Gate was not marked but the contour of the city itself is considered a NE Gate. We assume that in early Ottoman time a NE Gate could have been a passage over river Serava as natural border.

Secondly we marked the location of two big Open Markets in the city: one in front of the Fortress Gate — Fig. 14, OM1 (Photo 5) and another — Fig. 14, OM2 (Photo 3) on the plain between Ishak (C) and Gazi Isa Bey (E) Mosques. From previous research we know that big open markets like these were always located on the important regional roads^{6),12)}.

Thirdly we marked the location of the Main Centers - Paša Yiğit Mosque and Bedesten as arrival points of primary significance for the city (Fig. 14 – A, B). The First and Second period outskirts complexes were also considered vital traversal locations (Fig. 14 – facilities outside the Bazaar).

To identify which roads had a meaning of primary, we searched for roads that connect the location of the city Gates, open markets and the main Ottoman public facilities:

1. From the Stone Bridge (SW Gate) where Burmalı Mosque (F) is located, a road continues to the locations of Bedesten (B), Paša Yiğit (A), Ishak Bey (C) and Yaya Paša (G) Mosques and provides exit



to the villages in Skopska Crna Gora. This SW-NE road was identified as primary road **ABC** (Fig. 14);

2. From the NW Gate, a road continues to Dükkânçik (H), Ishak Bey (C) and Isa Bey (E) Mosques and exits at the SE Gate. This road bypasses the Bazaar and the urban center from the north. To identify this road the location of Dükkânçik (H) Mosque was vital. It was named primary road **HCE**. **ABC** and **HCE** primary roads intersect at Ishak Bey Mosque (C), where OM2 is located (Fig. 14);

3. From Dükkânçik Mosque (H) there is a road that provides direct access to the Center where Bedesten is located. Therefore, this road, named in this study HB primary road, is vital link between the Bazaar and the regional network. From **HB** an access to the Fortress (west) and the Main Mosque Paşa Yiğit (A-east) is also provided (Fig. 14).

Therefore, we identified the primary road network of Ottoman Skopje that functioned as link between the regional network and the main public facilities. To support this analysis, we used photos taken near main public facilities from end of 19th and beginning of 20th century. The photos are old postcards found in the Archives of Macedonia. All photographs show wide streets lined with shops and bustling open markets that confirm the frequent use of roads near the main public facilities. Photo 6 was taken in 1913 on the ABC primary road between the Main Centers Bedesten and Paşa Yiğit Mosque¹³). Along this road majority of Bazaar's facilities are placed thus this road had a meaning of **Main Bazaar Street**. Here the term "street" is used to name a segment of the primary road inside the city's urbanized area together with the adjacent lots and buildings. Today the Main Bazaar Street is known as *Pokriena Čaršija* (Covered bazaar) which is a reference to the time when the street was roofed by wooden planks (Photo 6).



Photo 2 Road towards the SE Gate



Photo 3 Northeast open market OM2

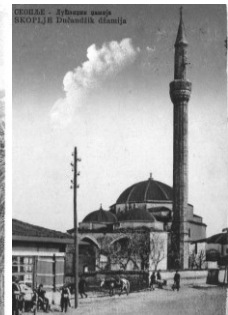


Photo 4 Dükkandzik

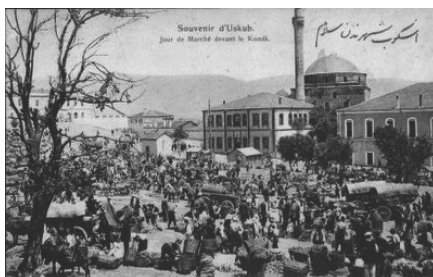


Photo 5 Fortress open market OM1



Photo 6 Main Bazaar Street

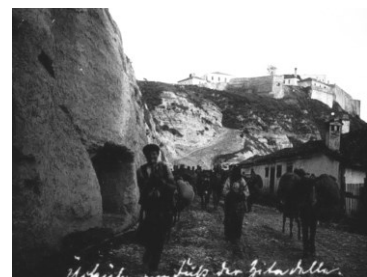


Photo 7 Road under Fortress

3.1.3. Alteration of Bazaar's structure by modern development

During the 20th century, the Balkan Wars, the two World Wars as well as the earthquake of 1963, severely damaged the historic buildings^{2),3),6)}. Moreover, the Reconstruction Project of Skopje's Central area after the 1963 earthquake brought about destruction to the spatial context of the Ottoman urban concept. The major developments in the Bazaar area, done by the Institute for Urbanism and Architecture - Skopje (1967-70)³⁾ included:

1. Construction of the new Museum of Macedonia (Fig. 15 – M) located on the primary road that connects the Bedesten (Fig. 15 – 5) to Dükkânçik Mosque (Fig. 15 – 21) and NW Gate. Thus the primary road network was cut off and the entrance to the Main Center, where Bedesten is located, was obscured.

2. Construction of a major auto road (Fig. 15 – Road B) across the south area of the Bazaar. This road cut off the Main Bazaar Street (a segment of SW-NE primary road ABC) that connects the Bazaar with the Stone Bridge (Fig 15 – 7). Bazaar's south area, where Daut Paşa Hamam (Fig. 15 – 13) is located, is now physically separated from the rest of the Bazaar.

3. Relocating of river Serava in 1968 (Fig. 15 - Serava). This promoted redevelopment at the periphery of the Bazaar and resulted in loss of recognition for the authentic edge as well as the waterfront character.

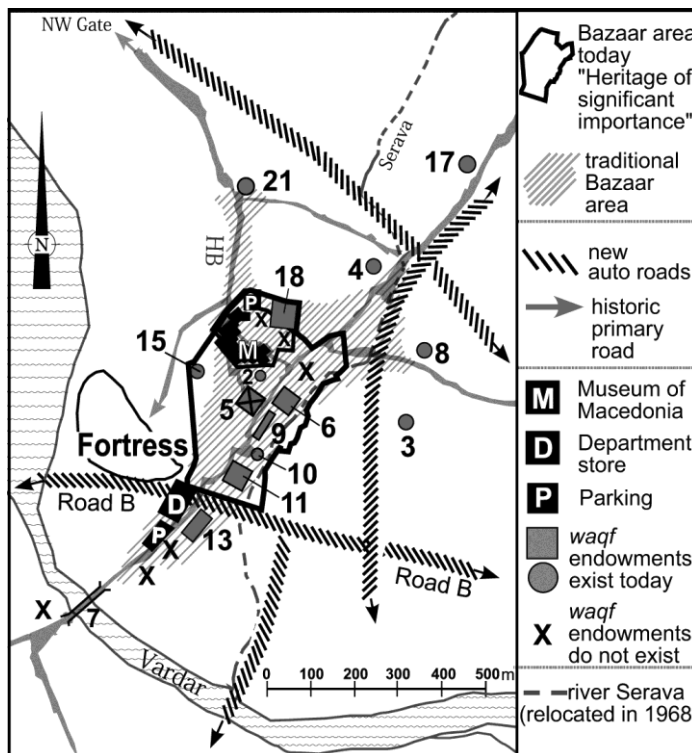


Fig. 15 Altering of Bazaar's urban structure after the 1963 earthquake

Even though the Reconstruction Project altered the authentic urban structure of the Bazaar, the location and layout of facilities and primary roads still carry the meaning of place developed by the Ottoman urban strategy. For example, the significance of the Bedesten location as Main Center is still preserved although the authentic building is lost and the entry from the north side is obscured. The Stone Bridge still have the significance of South Gate to the Bazaar. The original significance of location of public facility and primary road can be recognized by careful examination of the Ottoman urban strategy in the present layout of the Bazaar.

3.1.4. Significance of place as a value of historic urban form

According to the previous examination of Ottoman urban strategy, public facilities and roads in the present Bazaar preserve the significance of their location and layout. Although in some places the original buildings were lost, the location possibly preserves the significance of the Ottoman concept.

The locations of Ottoman facilities signify the Ottoman urban strategy in forming city center and city development. The location significance is evaluated from 3 aspects: I) Main Center, II) Bazaar components and III) periphery point of urbanization, according to the Ottoman planning intentions.

I) Main Center: Paşa Yiğit Mosque (1) and the Bedesten (5) signify the Main Center and the origin of the Ottoman city. Although the original buildings were lost, preservation of the location concept of Paşa Yiğit Mosque and Bedesten in terms of place making is crucial for recognizing the center of the historic city (Table 2).

II) Bazaar components: Main Ottoman facilities in the Bazaar were: Arasta mosque (2), Suli Han (6), Çifte Hamam (9), Kapan Han (11), Ibn Payko Mosque (12), Daut Paşa Hamam (13), Daut Paşa Han (14), Mustafa Paşa Mosque (15), Kurşumli Han (18), Gürçiler Hamam (19) and Kazançiler Mosque (20). The locations of these facilities carry the Ottoman concept that formed the Bazaar as urban center. Even though some of them have been destroyed or altered due to repairs and rebuilding, their layout and original functions are significant to understand the Ottoman urban structure of Bazaar (Table 2).

III) Periphery point of urbanization: 15th century outskirt complexes: Sultan Murad II Mosque (3), Ishak Bey Mosque (4) and Gazi Isa Bey Mosque (8), and 16th century complexes: Burmalı Mosque (16), Yaya Paşa Mosque (17) and Dükkançik Mosque (21), signify the periphery of Ottoman urbanization in two progression periods. Their visibility from the Bazaar's area provides orientation and thus the location of the Bazaar in Ottoman Skopje is understood (Table 2). Even though today Burmalı Mosque does not exist and other facilities have been altered or rebuilt, the preservation of the location concept is valuable to conserve the significance of the Bazaar's location in the city and the meaning of the Ottoman urban concept in the development of the historic city.

The historic road network in the Bazaar is indivisible from the layout of Ottoman public facilities and its obstruction, as in the case with the modern built Museum of Macedonia, destroys the original urban structure of the area. Thus, the conservation of historic roads is vital for conserving the historic urban form of the Bazaar. In the context of Skopje's Bazaar, the most significant segment of the

primary road network is the Main Bazaar Street-*Pokriena Čaršija* along which most of Bazaar's facilities are oriented.

Therefore, the Ottoman public facilities and historic roads preserve the significance of their location and layout. The primary road network and the location of Ottoman facilities are significant since they give meaning to the urban structure of the area. In order to conserve the historic urban form of the Bazaar, the conservation of the primary road network, especially the segment of Main Bazaar Street, and the place significance of ottoman facilities is essential. Consequently, the significance of place derived from the Ottoman urban strategy is important value of Skopje's Old Bazaar historic urban form. Our evaluation of place significance can be used as a base for future planning guidelines to conserve Old Bazaar's urban structure and form.

Table 2 Main Ottoman public facilities built from 1392 to 1550 and evaluation of facility location

	built year	exist today	orig. location	location now	kept orig. function	authenticity*	value**
1. Paša Yiğit Bey Mosque	1414	X	■	■	-	-	I
2. Arasta Mosque	~1414	●	■	■	●	△ RO; RR	II
3. Sultan Murad II Mosque	1436	●	□	□	●	△ RO; RE	III
4. Ishak Bey Mosque	~1439	●	□	□	●	▲	III
5. Bedesten	~1439	●	■	■	X (mixed use)	△ RO; RE	I
6. Suli Han	~1439	●	■	■	X (culture)	▲ RO; RE	II
7. Stone Bridge	1421-1451	●	□	□	●	▲	III
8. Gazi Isa Bey Mosque	~1475	●	□	□	●	▲	III
9. Çifte Hamam	~1475	●	■	■	X (culture)	▲ RR	II
10. Murat Paşa Mosque	~1475	●	■	■	●	△ RO; RR	II
11. Kapan Han	~1475	●	■	■	X (mixed use)	▲ RO RE	II
12. İbn Payko Mosque	~1475	X	□	□	-	-	II
13. Daut Paşa Hamam	late 15th c.	●	■	□	X (culture)	▲	II
14. Daut Paşa Han	late 15th c.	X	■	□	-	-	II
15. Mustafa Paşa Mosque	1492	●	■	■	●	▲	II
16. Burmalı Mosque	1495	X	□	□	-	-	III
17. Yaya Paşa Mosque	1504	●	□	□	●	▲	III
18. Kurşumli Han	~1549	●	■	■	X (culture)	▲ RE	II
19. Gurçiler Hamam	~1549	R	■	■	-	- (R)	II
20. Kazançiler Mosque	~1549	X	■	■	-	-	II
21. Dükkançik Mosque	~1549	●	□	□	●	△ RR	III

Historical information as year of built and original location was taken from Бороевиќ (1998) 9; *authenticity valorization for Bazaar's monuments is from N.I.- Conservation Centre Skopje (2006) 15 and for monuments outside the Bazaar from Бороевиќ (1998) 9; **author's evaluation of location significance (chap.7)
 ●- Yes; X- No; R- ruins; ■- in Bazaar area; □- out of Bazaar; ▲- preserved; △- partly preserved; RO - interventions in late Ottoman era (18th-19th cen.);
 RE - interventions in 1964-70 reconstruction; RR - interventions 1990-now; I - Main Center; II - Bazaar components; III - periphery point of urbanization

3.2. Pattern of building forms

The aim of this study is to identify the pattern of building forms in Skopje's Bazaar. Pattern of building form refers to the typology of shops in the Bazaar. In this research, short overview of the typology of Ottoman facilities in Skopje's Bazaar is provided while the main analysis concentrates on the typology of vernacular units-shops since there is not enough previous research to define the typology of the shops. The purpose is to understand the typology of shops better and clarify the value of these building types for Bazaar's historic urban form. In Fig. 16 the distribution of Ottoman facilities and vernacular shops in Skopje's Bazaar is presented.

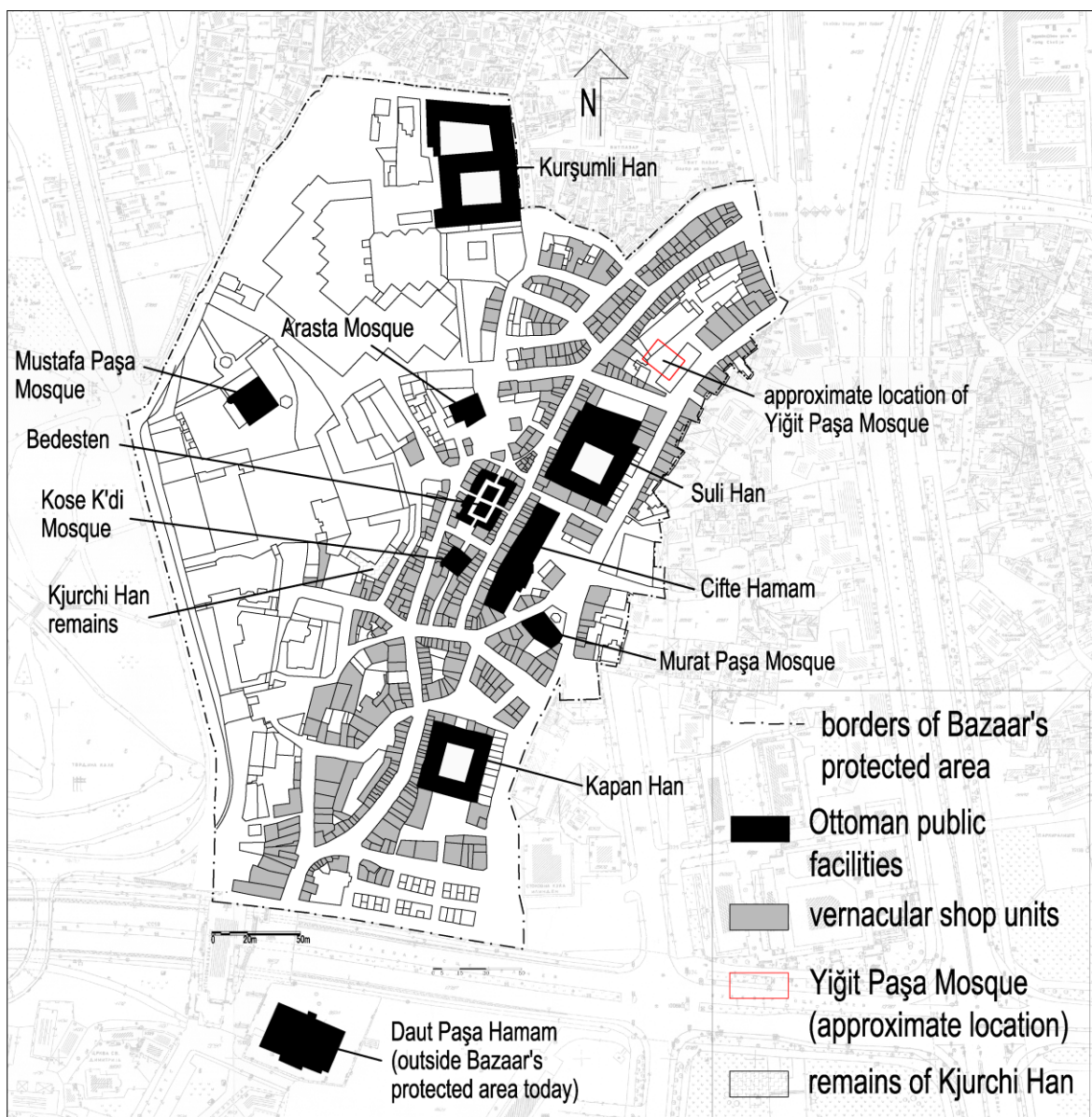


Fig. 16 Mapping of Ottoman facilities and vernacular shops in the Bazaar today
(adapted by the author on the map of 1999)

In the previous chapter 3.1., we discussed the meaning of Yiğit Paşa Mosque and the Bedesten as Main Centers of Ottoman Skopje. However, there are many other public facilities in the Bazaar, categorized as Bazaar's components, which were built to support the development of the Bazaar (Fig. 16). The building forms of these public facilities have already been studied by previous researches because of their exceptional architectural and historic value as monuments of the Ottoman construction mastership. In this study, only a brief overview of the morphology of public facilities in Skopje's Bazaar is provided, based on previous research.

However, the building forms of vernacular shops have received very little attention and have been insufficiently covered by previous research. Thus in this chapter, analyses of the morphology of vernacular shops in Skopje's Bazaar is performed based on our own field survey data. The purpose of this study is to define the variations of shop design within the local vernacular context in the present conservation area of Skopje's Old Bazaar, to facilitate preparation of guidelines for managing the alterations of units by rebuilding and renovations.

To meet this purpose, field surveys were carried out and historical data and previous studies were examined. The field surveys on vernacular shops were conducted in October 2009 and September 2010. The surveys, which consisted of observation, photography, sketching and physical measurement, were carried out with the members of the Laboratory of Japanese Architecture (Prof. Hyuga Susumu), Kyoto Institute of Technology. Due to the limitations of individual shop unit surveys to appraise structure and materials, and to a lack of documentation, field surveys concentrated on the elevation and form of vernacular shops that could be recorded from accessible public spaces.

"Vernacular unit" is a shop in the Bazaar built by the owner himself. One vernacular unit - shop can occupy one whole building or a part of a larger building. Buildings containing several vernacular units in the Bazaar are common. This "unit" is the surveyed unit in our research. During the Reconstruction Project of Skopje's Bazaar in 1970ties, some standardized shop models were introduced in the Bazaar by the planning authorities of the Institute of Urbanism-Skopje. These units were not included in our research.

The field surveys consisted of three work phases:

1. observational study to identify vernacular units (596) and record their distribution in the area;
2. detailed surveys of particular vernacular units (10), that were chosen according to previous research and observation studies, to examine form, structure, spatial composition and design attributes including some measurements;
3. field surveys of 72 vernacular units as components of 11 typical streetscapes, to analyze the form, volume and design variations of façade elements.

3.2.1 Morphology of Ottoman public facilities

The Ottoman facilities in Skopje's Bazaar conform to the standard typology of Ottoman public buildings—Mosques, Bedestens, Hans, Hamams, ext., that can be found throughout the territories occupied by the Ottomans²⁾. In all provincial centers across the Ottoman Empire, authority representatives built variations of the splendid facilities of Bursa and Istanbul, according to available resources⁸⁾. Following is a short overview of the main Ottoman facilities in Skopje's Bazaar, based on the data from Bogoević (1998)²⁾ in her book “Ottoman monuments in Skopje”, published by the Muslim community of R. Macedonia in Skopje.

Mosques

Old Bazaar's Ottoman Mosques are monolith structures built by *opus-mixtum* technique. The form usually consists of one central large space covered with dome and entrance portico with several arches²⁾. The first Mosque, built by Yiğit Paşa in 1414, which symbolizes the Main Center of the historic city was destroyed during the Second World War and its slim *minaret* tower was torn down in 1961²⁾ (Photo 8). The original design of the Mosque is not known, however it's assumed the typology might have been similar with Mustafa Paşa Mosque built in 1492, on the high Plato in front of the Fortress Gate²⁾ (Photo 8, Fig. 17).

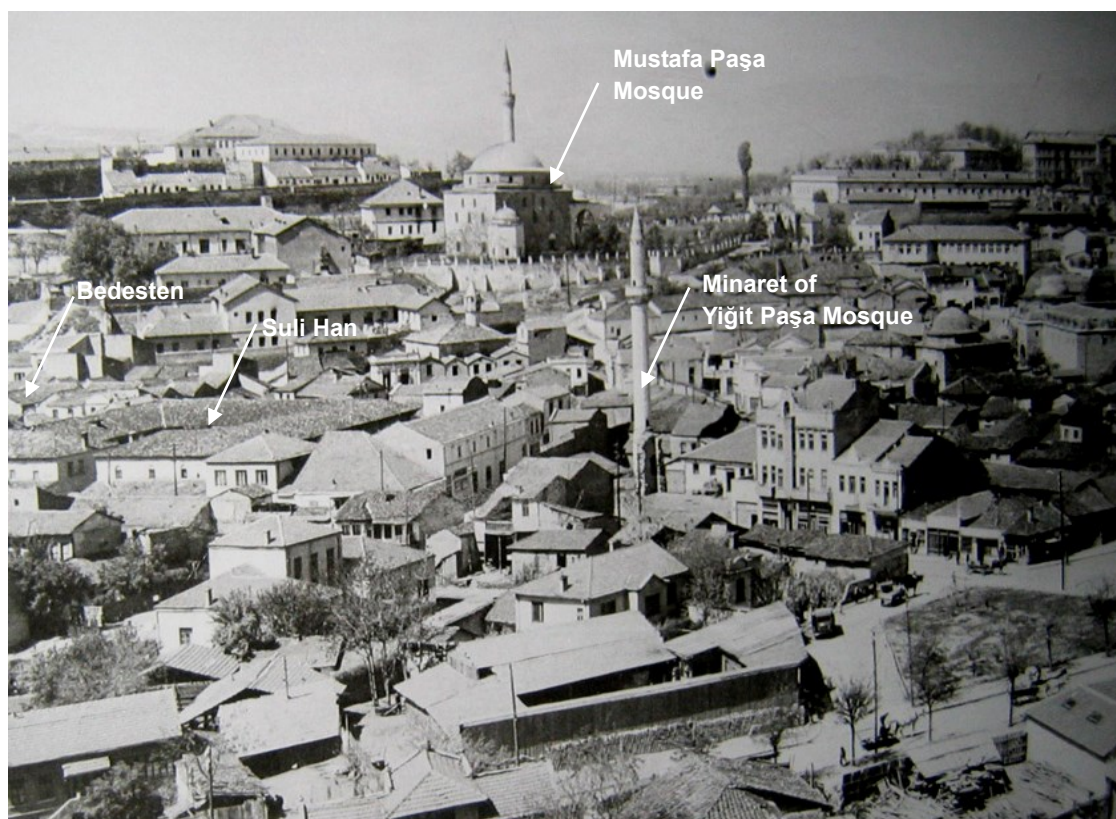


Photo 8 Yiğit Paşa Mosque's minaret in 1950ties -Yiğit Paşa Mosque was already destroyed
(adapted by the author on photo from Archives of R. Macedonia)

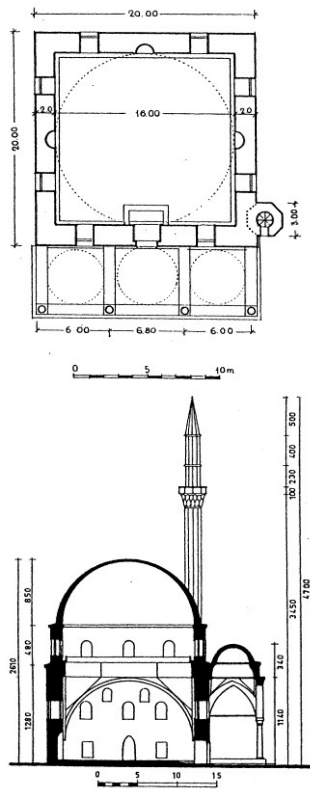


Fig. 17 Mustafa Paşa Mosque layout, Skopje²⁾



Photo 9 Mustafa Paşa Mosque today
Photo by the author

Mustafa Paşa (Photo 9) and Murat Paşa Mosque, built in the 15th century still exist today while Arasta Mosque-one of the oldest Mosques in the Bazaar, is currently being reconstructed.

Bedesten

In the Ottoman Empire, a “Bedesten” or “Bezzazistan” was a special commercial building for cloth trade. The word comes from “bez” meaning cotton or linen fabric and the Persian –istan suffix meaning place. The Bedesten and the shops in its vicinity constitute the central section of the Ottoman Bazaar⁸⁾. Skopje’s Bedesten was a monolith structure built by *opus mixtum* technique no later than 1439²⁾. It’s original layout (Fig. 18, top) was rectangular space roofed with six domes^{2),14)}. The roof was held by the exterior walls and two massive columns in the interior^{2),14)}. This Bedesten resembled the Bedestens built in Serez and Sarajevo⁸⁾.

However the original building was lost and replaced with a brick wall courtyard structure that has the same size but different layout from the original Bedesten (Fig. 18, bottom)²⁾. Some segments of the *opus-mixtum* walls were actually integrated in the new structure. Today’s Bedesten is a courtyard building where shops are arranged around and accessed from the central yard. In the yard, two 2-storey buildings are placed on top of the old massive columns from the original building²⁾ (Photo 10).

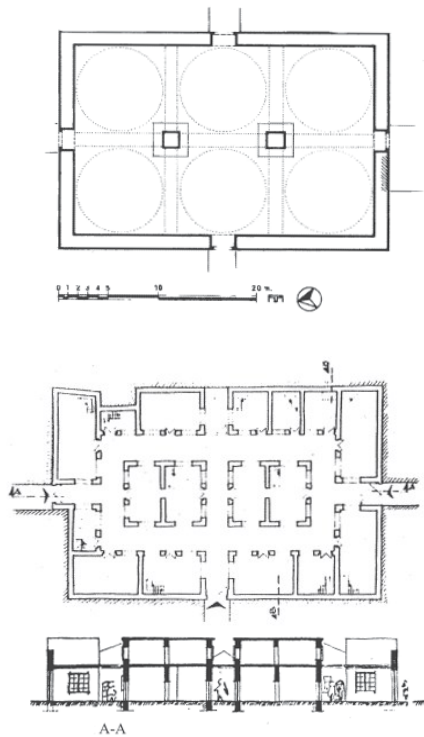


Fig. 18 Skopje's Bedesten – original layout-top and today's layout –bottom²⁾



Photo 10 Bedesten's courtyard today
Photo from the author

Hans

Han is a building in the Bazaar which main function is Inn. The term “han” comes from the Persian word “hân”. Hans were also utilized as trading spaces thus are considered commercial buildings⁸⁾. In the Skopje's Bazaar today, three Ottoman Han buildings exist as well as the partial remains of one other Han (Kjurchi Han)²⁾. The three existing Han buildings are 2-story monolith structures built with *opus-mixtum* technique. The buildings have similar layout, consisting of single rooms distributed around a square central courtyard²⁾. The rooms are entered from a covered porch on the ground floor and a gallery on the upper floor²⁾.

However, Suli Han (Photo 11) and Kapan Han (Photo 12) have been badly damaged in the



Photo 11 Suli Han with surrounding shops today
Photo from the author



Photo 12 Kapan Han's inner courtyard today
Photo from the author

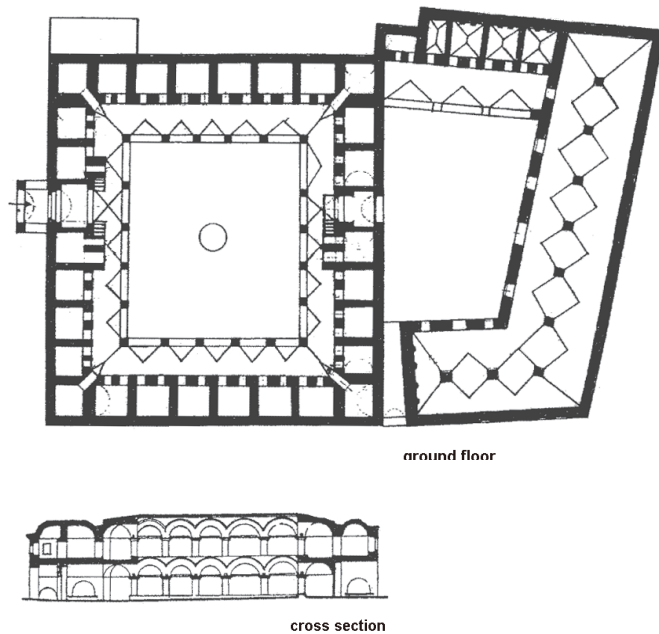


Fig. 19 Kurşumli Han, layout and cross section²⁾

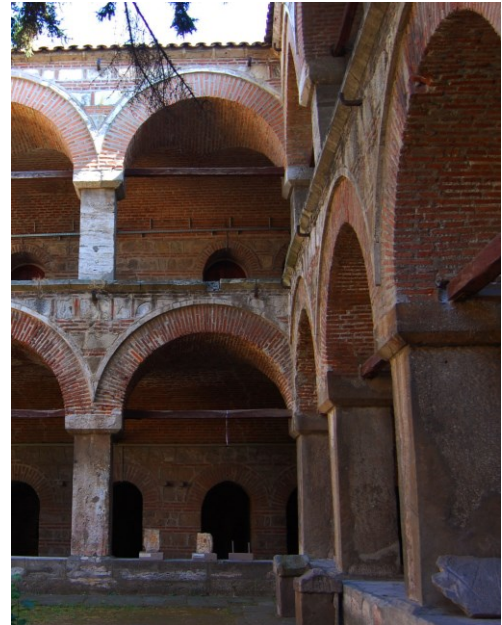


Photo 13 Kurşumli Han's inner courtyard today
Photo from the author

Skopje's earthquake 1963 and have been reconstructed in 1970²⁾. The reconstruction mainly kept the original layout form but replaced some details of the structure and building materials²⁾. On the other hand, Kurşumli Han (Fig. 19, Photo 13) survived from 1549 until today in its original construction, except for the iron tinned roof that was replaced with adobe tiles²⁾.

Hamams

Hamam in the Islamic world means Bath house. The term comes from the Arabic word "hammam" and "havuz" meaning pond, pool⁸⁾. Two monolith *opus-mixtum* Ottoman Hamams survived until today in Skopje's Bazaar - Daut Paşa (Photo 14, Fig. 20) and Çifte Hamam (Photo 15, Fig. 21)²⁾. Both Hamams have the typical layout of double Hamams (for both men and women), with two completely separate parts with separate entrances²⁾. Each part is comprised of one domed larger room near the entrance and many small domed cells in the back²⁾. The damages to the Hamams from the earthquake in 1963 were repaired by the National Conservation Center and the buildings became public galleries²⁾. However, today the Daut Paşa Hamam is outside the protected Old Bazaar's historic area⁷⁾ (Fig. 16).



Photo 14 Daut Paşa Hamam today
Photo from the author

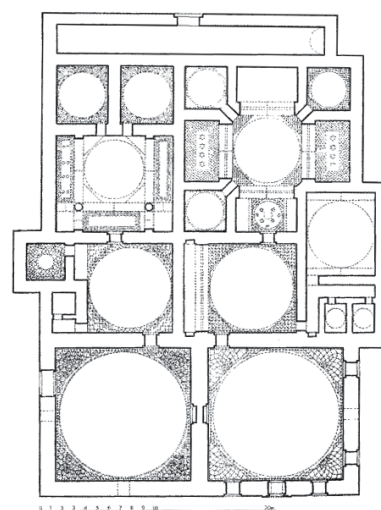


Fig. 20 Daut Paşa Hamam, layout²⁾

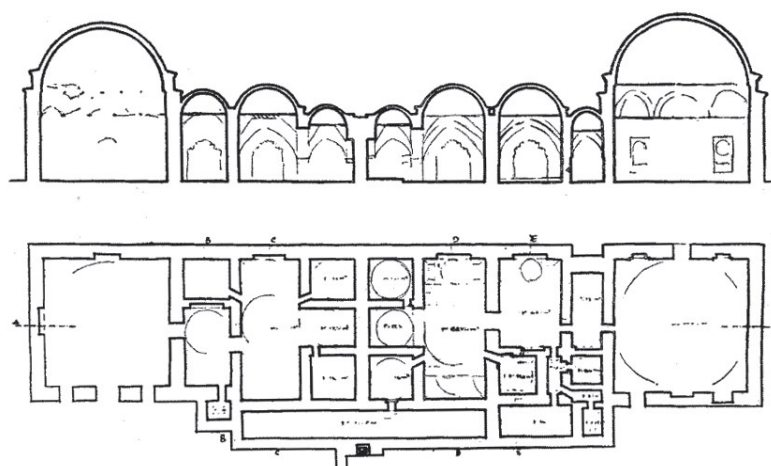


Fig. 21 Çifte Hamam, Skopje - layout²⁾



Photo 15 Çifte Hamam with surrounding shops today - Photo from the author

3.2.2. Morphology of vernacular shops

Vernacular unit is a shop in the Bazaar built by the owner himself. One vernacular unit - shop can occupy one whole building or a part of a larger building. This “unit” is the surveyed unit in our research. Buildings containing several vernacular units in the Bazaar are common. During the Reconstruction Project of Skopje’s Bazaar in 1970ties, some standardized shop models were introduced in the Bazaar by the planning authorities of the Institute of Urbanism-Skopje³⁾. These units were not included in our research.

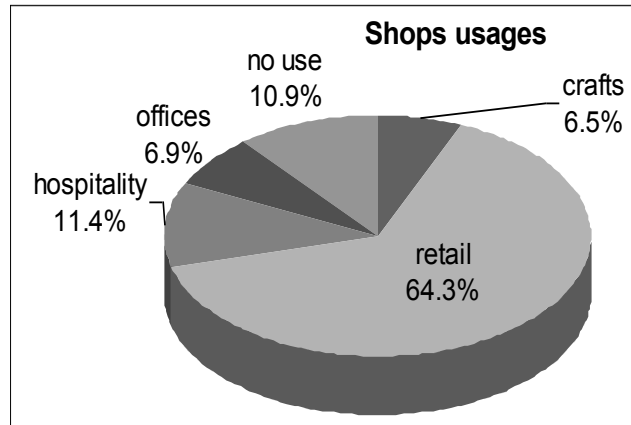


Fig. 22 Usage of the vernacular units - shops today

We identified 596 vernacular shops in the Skopje’s Bazaar during our field survey. Even though the crafts were very developed in the past, today they are marginalized. In our survey, we observed that the major part of shops are used for retail (64.3%) while the crafts are practiced in only 6.5% of shops today (Fig. 22). The present day shops occupy mainly the Southern and Eastern parts of the Bazaar. Most of them are built as attached row-type shops. The continuous shop fronts form the street front (no setbacks). The majority are located along the streets *Podgragje*, *Pokriena Charshija* and *Bitpazarska*, which are the main pedestrian routes in the Bazaar (Fig. 23). A few detached shops were also found.

Shop units were categorized as **1floor**, **1floor+mezzanine** and **2floors**, based on their street elevation form (Fig. 23). 1floor units have only one space that is accessed directly from the street and/or with a few steps. 1floor+mezzanine units have one floor accessed directly from the street and/or with a few steps (work/shop) and mezzanine above it (work/storage). 2floors units have the largest floor area: one floor accessed directly from the street (and/or with a few steps) and a second full height floor above it, with one or several rooms on each floor.

33.7% (201) of the identified vernacular units are 1floor, 29.5% (176) are 1floor+mezzanine and 32.8% (196) are 2floors. 1floor units are present in various parts of the Bazaar, but larger clusters exist in the Northeast. 1floor+mezzanine units are clustered in the Southern area. 2floors units are present in various parts, but larger clusters exist in the Western area. The remaining 23 units were not categorized due to advanced decay (Fig. 23).

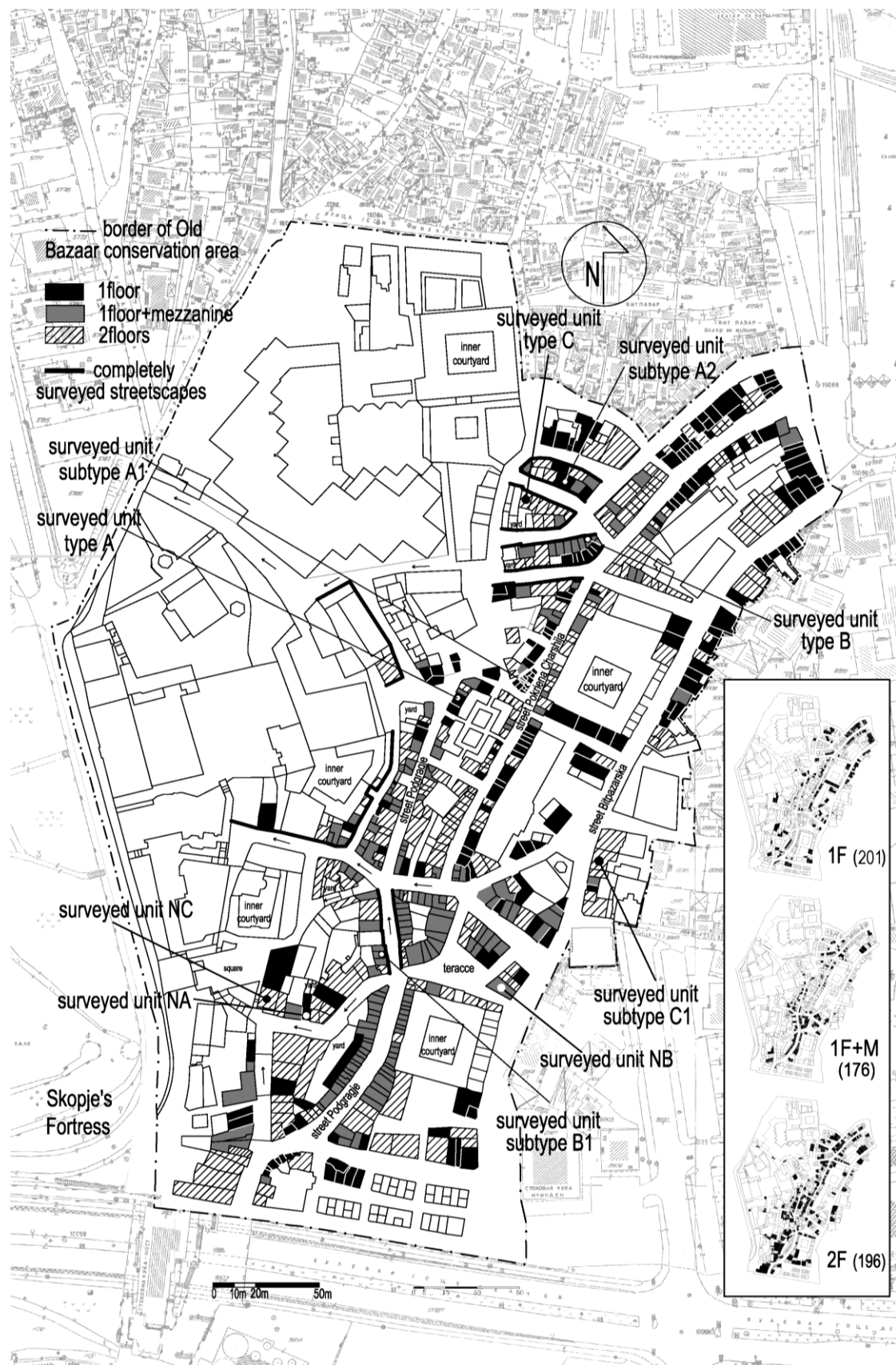


Fig. 23 Mapping of vernacular unit types (adapted by the author on the Skopje's Bazaar map of 1999)

3.2.2.1. Typological analysis

Previous studies defined the characteristics of three authentic unit types and determined the period of their construction. These three authentic types of units were developed in three different periods related to historical events in Skopje. The three periods of Bazaar's history, 1P, 2P and 3P were discussed in chapter 2.3.2 (Fig. 9) regarding Bazaar's history and development^(3),6),7)12). Previous studies identified three authentic types according to the features of the street elevation, structural materials and the design of architectural elements^(4),5). Following is a description of the three authentic types that represent the historic periods 1P, 2p and 3P, based on some data from previous studies and our detailed survey records of significant vernacular units (Fig. 24 - A, Type B, Type C)

The first period (1P) was from 15th to 17th century, between the conquering of Skopje by the Ottomans (1392) to the big fire that burned Skopje in the Great Turkish War (1689). The first period (1P) is characterized by the *Ottomanization* of Skopje under the name Üsküb. During 1P all traces of the medieval Christian town were dissolved into an Ottoman cityscape^(3),6),7)12). In 1P, the first type of vernacular unit- shop - named Type A in this research, was developed according to previous research.

Type A is considered the oldest authentic unit type, developed in 1P together with the Ottoman public buildings^(6),7) (Fig. 24); Type A is a 1floor unit, built with massive walls from roughly hewn stone and brick, vaulted ceiling covered by plaster and a shed-type roof shared with adjacent units. Wood is used for architectural details, while door arches are brick and lintels are hewn stone. Few type A units still remain⁽⁵⁾. Measurements of the surveyed type A unit are: 10.15m² floor area, 2.75m vault pitch height, 1.97m sidewall height and 2.5m frontage width.

The second period (2P) started 150 years after Skopje was burned and during the *Tanzimât* reforms in the Ottoman Empire (1839-1876). The *Tanzimat* reforms purpose was to modernize the Ottoman Empire. The reforms gave more economic freedom to the Christian population which boosted up economic development and Bazaar's revival^(4),5). The period of the 19th century is when businesses were revived and the second authentic shop type was developed^(3),6),7)12). In 2P, the second type of vernacular unit- shop - named Type B in this research, was developed according to previous research.

Type B is a 1floor+mezzanine unit, developed in IIP as the second authentic unit type^(6),7) (Fig. 24). The mezzanine height facing the street is less than half of the first floor height. The unit's frontage is between 3.2m and 3.4m wide⁽⁴⁾, with a showcase window and partially glazed door taking most of the first floor elevation, and one or two small windows in the mezzanine. Type B is a timber framed structure with wattle/daub or brick infill covered by plaster and a shed roof shared with adjacent units. Architectural elements are wooden with simple design. The window showcase is usually rectangular



SH - window showcase; D - product display; W - work area (master craftsman, office table, bar or kitchen); S - storage; WA - work area for apprentices; T - toilet; L - living

Fig. 24 Vernacular units' typology table

0 1 2 3 4 5m

and multi-paneled. Originally, the façade was protected by wooden planks (*kjepenci*) that served as a display table during the day⁴⁾, but today they are replaced with metal roller shutters or fences. Measurements of the surveyed type B unit are: 3.0m first floor height, 1.52m mezzanine height near frontage and 3.15m frontage width.

The third period (3P) was from the end of 19th to the beginning of 20th century, following the *Tanzimat* reforms, when a surge of European influence entered brought about new architecture styles and modern urban planning. Two years after the retrieval of the Ottoman army from Skopje in 1912, the first urban plan for Skopje was produced. During the third period (3P), the third authentic type of unit was constructed under the strong influence of Western European culture^(3),6),7)12). In 3P, the third type of vernacular unit- shop - named Type C in this research, was developed according to previous research.

The **Type C** is considered to be developed in IIP^{6),7)} (Fig. 24). It is a 2floors unit with massive walls in roughly hewn stone and brick or only brick. Hewn stones are often used for wall edges and/or door/window lintel. European influence is evident in the gabled roof, industrial products such as iron roof rafters and metal window/door shutter, and façade decorations. The façade often has arched or lined door/window transoms and low relief plaster decorations in the columns, cornices and floral or lined ornaments. Measurements of the surveyed type C unit are: 37m² each floor area, 3.5m first floor height, 3m second floor gable side height, 4.3m gable pitch height and 5.9m frontage width.

However, the big fire of 1689, the two World Wars and Skopje's earthquake in 1963 destroyed or damaged many shops and most of the Ottoman public buildings^(3),6),7). Today in the Bazaar there is variety of shop designs that cannot be described only by the three authentic shop types A, B and C.

During the surveys, we observed variations of shop design types described in previous research. I identified 4 subtype variations based on our survey of 10 significant vernacular units that examined layout, form, structure and design elements with detailed measurements. The following description of these variations, titled subtype A1, A2, B1 and C1 (Fig. 24).

Subtype A1 is a 1floor unit with the smallest area and narrowest frontage of all unit types (Fig. 24). The timber framed structure with wattle/daub or brick infill is covered by a shed roof, shared with adjacent row units. Architectural elements are wooden with simple design.

On the façade, a partly glazed multi-panel door with a showcase window (protruding cuboid) is common. Measurements of the surveyed model of subtype A1 are: 6.2m² floor area, 2.3m height and 2.3m frontage width.

Subtype A2 is a 1floor unit that differs from type A and subtype A1 in size and architectural elements (Fig. 24). It has a significantly larger area than A and A1 with high ceiling (lower over the basement if it exists), a wide street frontage and often uses an individual (gabled or pyramid hip) roof instead of a shared shed roof. Its massive walls are from roughly hewn stone and brick or only brick.

Architectural elements are simple though sometimes influenced by European styles and resemble type C in simplified version. Measurements of the surveyed model of subtype A2 are: 41.9m² floor area (38.1m² basement), 4.4m height (2.6m basement height) and 8m frontage width.

Subtype B1 is a 1floor+mezzanine unit that differs from type B with a more spacious first floor/mezzanine area, higher first floor/mezzanine ceiling (mezzanine height near frontage is more than half of the first floor height) and a slightly wider street frontage. B1 has a showcase window and a partially glazed door taking most of the first floor elevation and mezzanine windows larger than type B's. The structure is timber frame or a combination of stone walls in the first floor and timber frame in mezzanine, with wattle/daub or brick infill (plaster covered).

The roof is individual (gabled or shed form) or a shared roof. As in type C, European influences are evident in industrial products as iron roof rafters. Common element is a partly glazed multi-panel door combined with a showcase window (protruding cuboid). Mezzanine windows sometimes have decorative frames (wood or plaster) and stone corners decorative cuts. Low relief plaster decorations are used for columns, cornices, floral and lined ornaments. Measurements of the surveyed model subtype B1 are: 18.1m² first floor and mezzanine areas, 3.5m first floor height, 2.6m mezzanine height near frontage and 3.57m frontage width.

Subtype C1 is a 2floors unit, but differs from type C in size and the design of architectural elements. C1 elements are similar to subtype B1 and Macedonian vernacular houses, fully developed in 19th century⁴⁾. It has mixed usages (shops in the first floor and living in the first floor rear and upper floor). The street frontage is the widest of all types/subtypes.

The structure is usually timber frame with adobe brick infill and a gabled or cross gabled roof. Measurements of the surveyed model of subtype C1 are: 71.6m² first floor area, 49.5m² second floor area (basement-ruins), 3.5m first floor height, 2.7m second floor height and 10.2m frontage width.

From the analysis of shops typology we identified four subtypes of design of vernacular shop design from the three main types described in previous research. Even though each shop has been individually designed, the fact that most of the shops fit in the three types and four subtypes implies that each shop was designed in reference to other units to comply with already established shop models. This manner of designing shops with respect towards already established shop types is important attribute of vernacular shop design that produces the coherent urban form. Moreover through our surveys, we observed grouping of shop from the same type in almost all of the surveyed areas. This fact indicates that shops are often designed with awareness and acknowledgment of the place character and the wider context of the Bazaar's area. This approach creates a unified streetscape and coherent urban landscape (Photo 16).



Photo 16 A group of type B units in one building on Street Podgragje in Skopje's Bazaar
- Photo by the author

3.2.2.2. Alteration of shop types

The facades of 72 vernacular shops studied in our field surveys comprise 11 streetscapes in the Bazaar (marked on Fig. 23). We studied the alterations in form and design elements of the surveyed units in order to discuss the transformation process of vernacular shop design during the centuries. The term “transformation” refers to variations of vernacular units and is intended to signify alteration within the local vernacular context. As concluded in the analysis of vernacular shops’ typology, there are only 3 main types and 4 subtypes of vernacular shops. This indicates that the transformation of shop type occurred only several times during Bazaar’s history. The analysis of alterations in form and design elements provides clues in how this transformation might have occurred.

First, each unit was categorized in one of the defined types/subtypes and then recorded architectural elements were analyzed. Fig. 25 shows common or repeating designs categorized for each type/subtype. In addition to a general comparative study of the architectural design elements, focused was also placed on site form, volume and roof shape to examine relationships among form, spatial composition and designs of each type/subtype.

Analyzing the characteristics of each subtype design in comparison with authentic unit types, the following was clarified:

- Subtype A1 have similar elements as type A, although units differ in size (smaller), volume and construction method (Fig. 25);
- Subtype A2 differs from type A in size (much larger) but also in the architectural design elements. Their design is influenced by European styles and resembles type C in simplified versions (Fig. 25).
- Subtype B1 have similar architectural design elements as type B, although units differ in size (larger). In addition, moderate European influences are noted in industrial products used for iron roof rafters and simple European style façade decorations (Fig. 25).
- Subtype C1 differs from type C in size (larger) and architectural design elements that resemble subtype B1. In rare cases, simple European style façade decorations are used (Fig. 25).

The following is a discussion on the variations in form and architectural design elements within this vernacular context, to shed light on the possible transformation process of shops design models.

There is not enough data to estimate the age of surveyed subtype units that could be useful for understanding the context in which the variations were developed. However, since previous research clarified the chronological transformation of shop design types reflecting the socio-economic circumstances in the three main historic periods⁶⁷⁾, the sequential transformation of roofs,

spatial form						design elements				
	site form	main volume	roof - shape and cover	door(s) location	window(s) location	door structural opening	door lintel	door transom panel (usually fixed)	door type	door protection
A	regular	irregular	main volume vaulted	shape	street	street	brick	stone	glazing	wooden cover "jepeneq"
A1	regular	irregular	main volume cuboid	cover tiles red adobe	street	street	plain trim (usually combined with window opening)	simple wooden bar	metal mesh	metal bars
A2	regular	irregular	main volume cuboid	shape	street	street	plain trim (usually combined with window opening)	simple wooden bar	metal door	metal bars
B	regular	irregular	main volume cuboid	cover tiles red adobe	street	street	plain trim (usually combined with window opening)	simple wooden bar	wood metal mesh bars	metal mesh or bars
B1	regular	irregular	main volume cuboid	cover tiles red adobe	street	street	plain trim (usually combined with window opening)	simple wooden bar	metal mesh or bars	metal roll shutter
C	regular	irregular	main volume cuboid	shape	street	street	bricks	plaster - low relief	met. mesh bars	doc. bars
C1	regular	irregular	main volume cuboid	cover - red adobe tiles	street	street	simple wooden bar	metal bars	metal rolling shutter	

design elements										all surveyed units: 72
window structural opening	window lintel	window transom panel	window type	window protection	ornament/ decoration position	column	cornice	other ornaments or decoration		
A	flat (usually combined with door opening)	simple wooden bar	wooden cover "jepeneq"	metal mesh	metal bars				surveyed units of type A: 2	
A1	flat (usually combined with door opening)	simple wooden bar	metal mesh	metal bars	metal mesh				surveyed units of subtype A1: 6	
A2	flat (usually combined with door opening)	simple wooden bar	metal mesh	metal bars	metal mesh				surveyed units of subtype A2: 6	
B	flat (usually combined with door opening)	simple wooden bar	wooden plate	metal bars	metal mesh				surveyed units of type B: 15	
B1	flat (usually combined with door opening)	simple wooden bar	wooden plate	metal bars	metal mesh				surveyed units of subtype B1: 16	
C	bricks	plaster - low relief	metal mesh	metal bars	metal mesh				surveyed units of type C: 11	
C1	simple wooden bar	wooden beam	metal bars	metal mesh	metal mesh				surveyed units of subtype C1: 13	

Fig. 25 Design elements of vernacular units

in ruins/unknown: 3

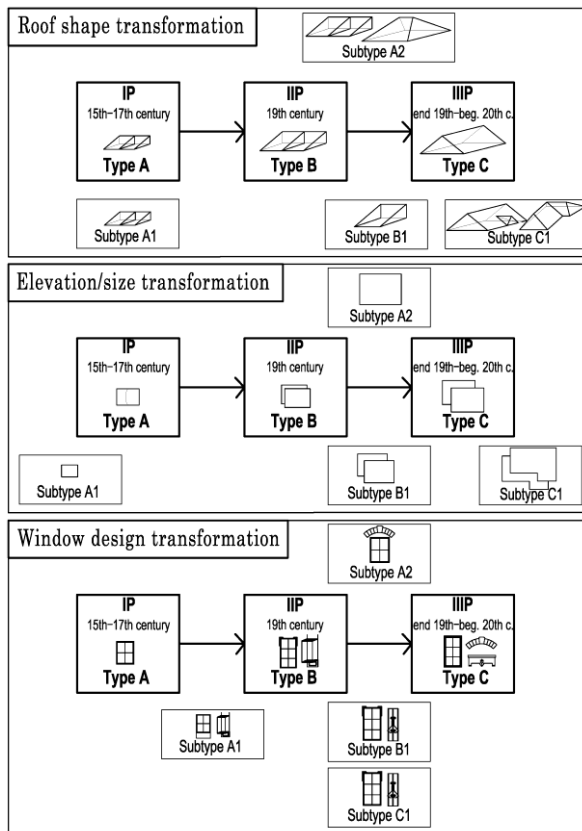


Fig. 26 Diagram of transformation of elements

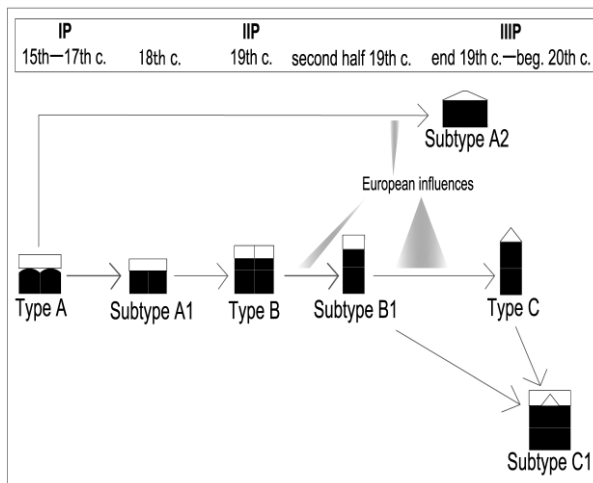


Fig. 27 Diagram of transformation process of shops

elevations/sizes and window designs in the three authentic types was analyzed and then variations in design were compared with the authentic types (Fig. 26).

1. *Roofs.* The sequential transformation of roof design in the authentic types develops from a small scale shared shed to an individual gable roof. Type A and A1 have the same roof shape and thus are closely related. A2 and B1 have shared and individual roofs, thus they are in the transformation phase between B and C. C1 has the most complex individual roof and is therefore the latest transformation in this context (Fig. 26).

2. *Elevations/sizes.* The sequential transformation of elevation/ size in the authentic types is from small size 1floor to 1floor+low mezzanine to 2floors. A1, the smallest unit, is least developed in this transformation. A2 and B1 have spacious floor area and ceiling heights, placing them between type B and C. C1 with the most spacious 2fl. is again the latest transformation (Fig. 26).

3. *Window designs.* The sequential transformation of window design in the authentic types develops from simple wooden rectangular frame to multi - panel showcase to European style decorative windows. A1 has multi-panel frames, thus is between type A and B. A2, B1 and C1 are between B and C because of moderate European style decorations used (Fig. 26).

According to the analysis of features of design elements of subtypes in comparison to the elements of the three main types, I was able to estimate the period of building of the shop subtypes (Fig. 27):

- Development of subtype A1, as a degenerate variant of A, is probably during the 18th century as a result of the unfavorable socio-economic situation. After Skopje was burned and looted, the locals were probably forced to improvise with limited resources. It's likely that A1 were repeatedly built when conditions were severe, since a number of small 1floor timber-framed units appeared in the Bazaar soon after the 1963 earthquake^{4),6)} (Fig. 27);
- Development of subtype B1, a larger variant of B, probably occurs in the second half of the 19th century, after *Tanzimât* reforms gradually improved the economic power of craftsmen and traders. Increased resources could have stimulated the development of larger and decorated units. European influence in the building domain also entered the Bazaar during this period^{4),5),6)} and was probably another motive for redesign (Fig. 27);
- Development of subtype A2, due to moderate usage of Euro- pean style elements similar to type C, is probably in the end of the 19th century. However, not enough information was found to speculate the circumstances of transformation of A into A2 (Fig. 27);
- Development of subtype C1 probably occurred in the beginning of the 20th century. This is based on the large floor areas and mixed-uses (shop+house) that could have become popular among the Christians after the retreat of Ottoman regime and the majority of Muslims from Skopje in 1912, as Muslims kept strict division between public and private spaces. The design elements similar to B1 also imply the development of C1 in this period (Fig. 27).

There are no historical or archeological records that can indicate the period of built for the shop subtypes. Therefore, although it is still open for discussion, based on my analysis of the transformation of design subtypes I estimated the most probable period of building for the subtypes.

To shed light on present trends in units' alteration, in September 2010, we surveyed 5 recently renovated units in the Bazaar. Three of these units, named type NA (A2 unit, adapted by the owner in 2008), type NB (B1 unit, adapted by the owner in 2009-2010) and type NC (C1 unit, adapted by the owner in 2010) are shown in Fig. 28.

All units were converted from old shops into a bar/café. New usage prompted redesign of old spaces. In NA the back yard was redesigned as café terrace and in both NA and NB gallery space was included in the units. NC had new construction added – a balcony on the second floor.

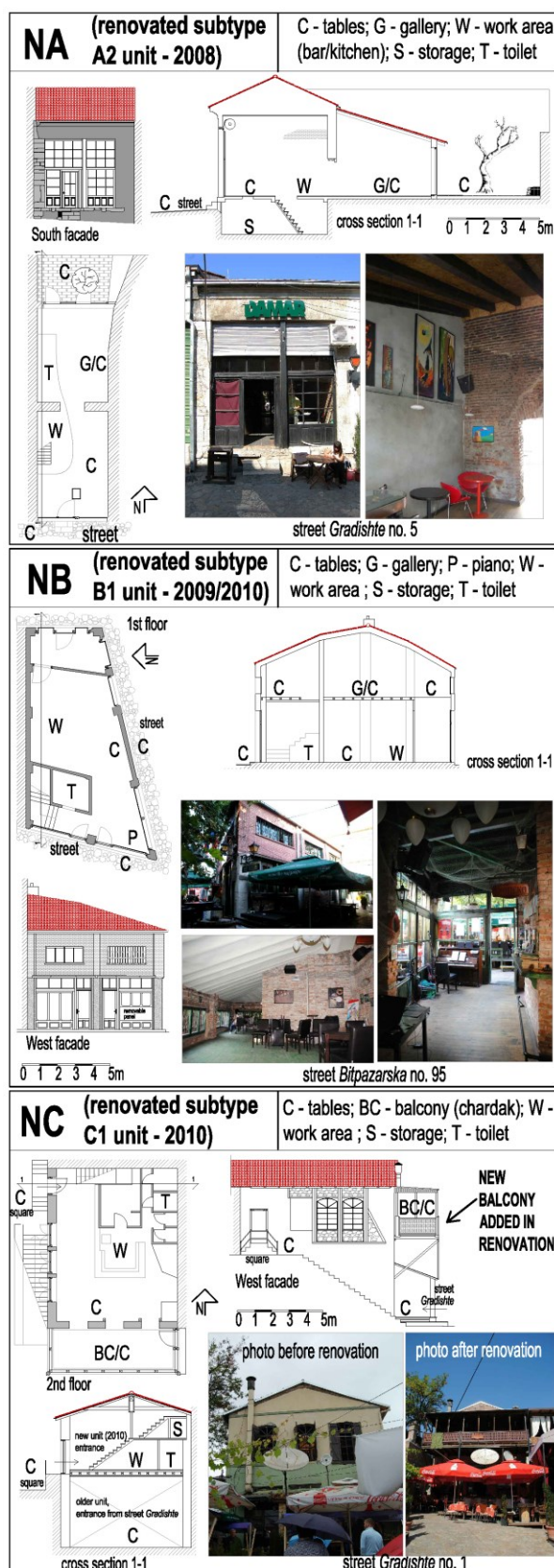


Fig. 28 Recently renovated units

Two tendencies were noted:

- Keeping the main bearing structure and façade as much as possible while interior adaptations were made to fit the space from workshop to a café. Adaptations included removal of the old interior walls, construction of new interior elements to reorganize the space-separation of toilets, sitting area, bar, reconstruction of ceiling and floor, and repair of wall damage surface—**NA**, **NB** (Fig. 28);

- Construction of additional spaces, alteration of the original façade and interior adaptations to fit the space from workshop to a café. The newly built balcony in **NC** imitate the design of “čardak”—a veranda for communication, work and enjoyment in the traditional Macedonian house. This element has never been used in the Bazaar’s shops since there never was housing in the Ottoman Bazaar — **NC** (Fig. 28).

Moreover, during the surveys a prevailing approach of building new units with concrete frame masked by wood/stone tiles and elements that imitate earlier models B/B1/C1 was noted. This approach can be best described as pseudo-historicism or pseudo-historic design that refers to contemporary design of buildings that imitate historic architectural styles. In Skopje’s Bazaar, pseudo-historicism was observed to be used in two ways:

1. as *façadism*: removing of the core of the building stock while preserving the façade wall or façade elements only - approach now endorsed by the National Institution

Conservation Center Skopje under the second degree for protection regime of blocks and buildings (chapter 1.2. and Fig. 1); and

2. as *historicism*: contemporary development that incorporates imitations of some elements of historic styles on the façade or inside the building. This approach was first used by Institute of Urbanism in the reconstruction after the 1963 earthquake³⁾.

According to the Vienna Memorandum, pseudo-historic design does not constitute appropriate mean of structural intervention in the historic area since it represents denial of both the history and contemporary alike¹⁸⁾.

From this analysis we concluded that the alteration of shop type occurred only several times during Bazaar's history, as a result of major historic incidents and technological advancement. However, the alterations didn't occur as introduction of completely different design models unrelated to the historic context but as a gradual transformation of design elements in the framework of the three authentic shop types: 1 floor-A, 1 floor+mezzanine-B and 2 floor shops-C. Thus, shops in the Bazaar are frequently rebuilt by the owners and their design was always a reinterpretation of the three established types which included technological advances and adapted to new socio-cultural conditions. This attribute of vernacular shops is important for the Bazaar's urban form because it allows the shops to accommodate to new needs of the owners without disturbing the historic context of the Bazaar. In comparison to the first attribute of shop design to comply to previously established shop types (3.2.2.1.), the attribute of shops to alter their type became obvious only three times in Bazaar's history although the gradual transformations are visible in the shop subtypes.

However nowadays, even though the socio-economic and technological circumstances have changed dramatically since the last shop type was introduced in the Bazaar, the renovation and rebuilding of units do not propose new models that are in correlation with their predecessors. Instead the shop renovation use pseudo-historical design that mask the modern building techniques with historical facade and imitates design elements of previous shop models. This could alter the meaning of the shop vernacular and have undesirable effect on the Bazaar's revival.

3.2.3. The pattern of building forms as a value of historic urban form

While in the previous chapter 3.1. I discussed Bazaar's urban form from a larger scale of city planning and urban strategy, this chapter 3.2. deals with the urban form from the opposite end: the small scale of architecture of single building. However, the architecture of building objects is discussed in relation to the urban form of the whole area rather than the architectural style. I analyzed the typology and transformation of shop buildings as a group quality that produces the scale and size of the Bazaar's urban tissue.

On one hand, the Ottoman facilities built by authority representatives conform to the common, well known and established facility design models present all over the Ottoman Empire. On the other, based on our findings we concluded that there are hundreds of individual shop designs that even though seem as unconnected individual endeavors, still can be classified in three main types and four subtypes. This manner of designing with awareness and acknowledgment to already established shop types is important attribute of vernacular shops. This attribute of shop design produces similarities in scale and appearance of the shops thus creates a coherent streetscape and urban setting.

Through our research we defined four subtype variations from the three authentic shop types and clarified the characteristics of form and design elements of vernacular units. It is still open to discussion, but the construction period of subtypes was estimated based on the comparison of forms and element designs with those of the authentic types.

We concluded that vernacular shops have the characteristic to alter the shop design elements in the framework of the three shop types, in times of major leaps in socio-economic circumstances, new technologies or aesthetic preferences. Each subtype is reinterpretation of the previous type but adapted according to the needs and resources of its time. Thus, the attribute of shops, which are frequently rebuilt by the owners, to introduce new design elements when rebuilding but sustaining the established shop types is another important aspect of vernacular shop design that preserved the coherent urban form of the Bazaar. In other words, shops relate to the wider urban context and preserve the Bazaar's urban form in size and scale of shop types but at the same time utilize modern architectural design for individual shop design. This aspect of the shop vernacular has to be considered in managing the new development and rebuilding in the Bazaar.

Therefore, the pattern of shop buildings is created by two attributes of the vernacular shops: to design with reference to previous shop types that preserves the Bazaar's urban form and the potential to introduce modern design elements in individual shops when rebuilding. These inherited attributes of shop design gradually create and adapt the coherent urban setting of Skopje's Bazaar.

In contrast to the street network and the pattern of Ottoman facilities which fixed the urban structure of the area and remained constant since its foundation, the shops compose the flexible, adaptable urban tissue of the Bazaar.

Thus, the pattern of building form is significant since it gives meaning to the scale and form of the Bazaar's urban tissue. In order to conserve Skopje's Bazaar historic urban form, the conservation of the pattern of building form is essential. Consequently, the pattern of building form, derived from the established Ottoman facility models and the attributes of the vernacular shop design, is important value of Skopje's Old Bazaar historic urban form.

The findings of our analysis are intended as a base for preparation of guidelines that will indicate future favorable alterations in the vernacular context when the units are rebuild or renovated. It should be considered that according to current policies, recent renovations of Bazaar shops use pseudo-historical design instead of suitable reinterpretation of established types to fit in their historic setting and respond to the significant changes in modern circumstances. This could alter the meaning of the shop vernacular and have undesirable effect on the Bazaar's conservation.

3.3. Urban order

The analysis of building types, although important to understand the value of the pattern of building form, only comes in focus when the set of rules for arrangement of the buildings in correlation to street and lot is analyzed. According to Marshal (2008), urban ordering refers to: “the creation of order through consistency of urban “building-blocks” and their relationships.”¹⁵⁾ In this research, the term “urban order” means the organization of the ground plan and the arrangement of street, lot and building in an area. Therefore, in this chapter the spatial structure of blocks was analyzed to clarify the traditional systematic relationships between street, lot and building – urban ordering.

Firstly, based on previous research concerning the development of Skopje’s Bazaar by the *waqf* facilities discussed previously in chapter 2.3, an analysis of the sequential formation of Bazaar’s blocks was performed.

Secondly, a typological analysis of blocks was based on the analysis of the 1929 map of Skopje. The map was produced by the experts in the *Cadastral Municipality Office-Skopje* to facilitate a creation of a new Master Plan by architect Mihajlović in 1929. A digital copy of Skopje’s map from 1929 was obtained from the Archive of Macedonia-Skopje in March 2012. This map has clearly marked street, lot and building patterns in Skopje as well as some other information. The basic typology that is defined in previous research of the Bazaar (Mateska 2011, Revalorization Report 2006) was upgraded with additional data on subtypes found through our analysis.

Through field surveys conducted with the Laboratory of Japanese Architecture (Prof. Hyuga Susumu) in Kyoto Institute of Technology during 09.2011 and 03.2012, we obtained data on six Bazaar blocks, where plot and building arrangements as well as measurements of the block volume were recorded. This data was compared with the structure of the same six blocks found on the 1929 map and 1999 map in order to clarify the transformations of the blocks during this period. The 1999 map was obtained from the Conservation Center Skopje in 2011.

Finally, the spatial analysis of Bazaar’s blocks indicated the presence of historic order in the way the urban elements are put together to form spatial structure of blocks. This urban order was extracted from the consistent street—lot—building relationships applied throughout the Skopje’s Bazaar.

3.3.1. Sequential block development in the Bazaar

The remarkable growth of the commercial centers under the Ottoman Empire, carried out by succession of pashas in the context of *waqf*, was described by André as: “...*systematic process within a general plan of development*...”¹⁶). In the *Ottomanization* of conquered cities, the main instrument for urbanization and redevelopment was the Ottoman public facility (3.1.1).

The Ottoman urban strategy in developing Skopje’s Bazaar was described earlier in the following stages:

1. Implanting the first communal center – the building of Yiğit Paşa Mosque thus initiating the development of the first block in the context of Skopje’s Bazaar (Fig. 29 – A);
2. Implanting the Bedesten crucial for international trade in vicinity of Yiğit Paşa Mosque thus, initiating the development of the most important commercial block in the Bazaar. This block together with the Yiğit Paşa Mosque’s block defined the central area of the historic city (Fig. 29 – B);

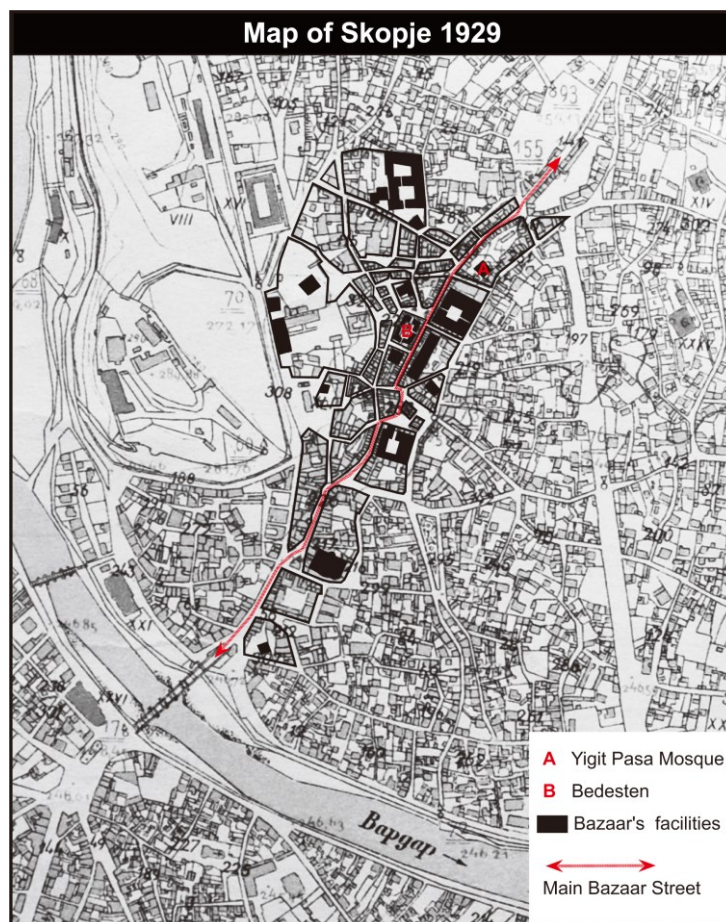


Fig. 29 Blocks on 1929 map of Skopje’s Bazaar
(Adapted by the author)

3. Developing a Main Bazaar Street between the Yiğit Paşa Mosque and the Bedesten by gradual development of other public facilities (Hans, Hamams and Mosques). Each public facility initiated development of a block structure composed of the facility lot and vernacular shops that spontaneously self-organized around the facility (Fig. 29).

4. Developing secondary Bazaar streets by conversion of previous residential into commercial sectors. The gradual conversion was made by implanting small shops along the street in the front part of the residential lots (Fig. 29).

We do not have precise historical data regarding the structure of blocks in Skopje's Bazaar in 15th-16th century. However, the fact the shops are arranged around the Ottoman facility lots and sometimes even use the facility's blind façade as their own rear wall, supports the fact that in the Ottoman urban concept the public facility was purposely build first, leaving the opportunity for shops to self-organize around the facility lot with time and form the urban block. Thus, even though the exact shape and size of blocks developed in those periods is unknown, according to the chronology of Ottoman facilities in Skopje's Bazaar, we can at least define the timeline of initiation of those blocks that included a facility. The chronology and location of Ottoman facilities founded in five consecutive historical periods during 1392-1550 can be understood from chapter 2.3.2. and Fig. 11.

It seems logical to assume that the initiation of Bazaar's blocks composed solely from shops must have been shortly after the establishment of the nearest public facility since the facilities carried out the urbanization process. Thus, the chronology and location of Ottoman facilities can indicate the process of block development.

Since our analysis is based on the chronology of *waqf* construction, the 5 time phases in which *waqf* construction proceeded from 1392 to 1550 (Fig. 10) were also used as time frames for blocks' development.

In the first phase, the blocks containing the Main Mosque-Yiğit Paşa and Arasta mosque were initiated (Fig. 30 – I). Between those two blocks the Main Bazaar Street started to form.

In the second phase, the Bedesten and Suli Han blocks were initiated and that further extended the Main Bazaar Street to the south (Fig. 30 – II).

The development of the Main Bazaar Street continued in the third and fourth phase with gradual inception of block structures towards the south and the Stone Bridge (Fig. 30 – III, IV). With the connection to the Stone Bridge, the Main Bazaar Street was finally fully formed. The southward expansion of Bazaar's blocks is concentrated on the east side of the Main Bazaar Street, probably because of the influence of the previous land use patterns in form of Fortified Lower Town that was still there and needed time to be dismantled and restructured in an Ottoman way.

In the fifth period, the northwest section of the Bazaar was formed with the large Kurşumli Han and Kjurçi Han blocks (Fig. 30 – V).

Fig. 30 shows the chronological development of blocks however, the shapes of the blocks in this figure are from the 1929 map. It is likely that some blocks, especially blocks without a facility, to have had different form before 1929. Thus, with this analysis we identified the origins of Skopje's Bazaar urban blocks from 1392 to 1550, although the blocks' shape and size in these period are unknown.

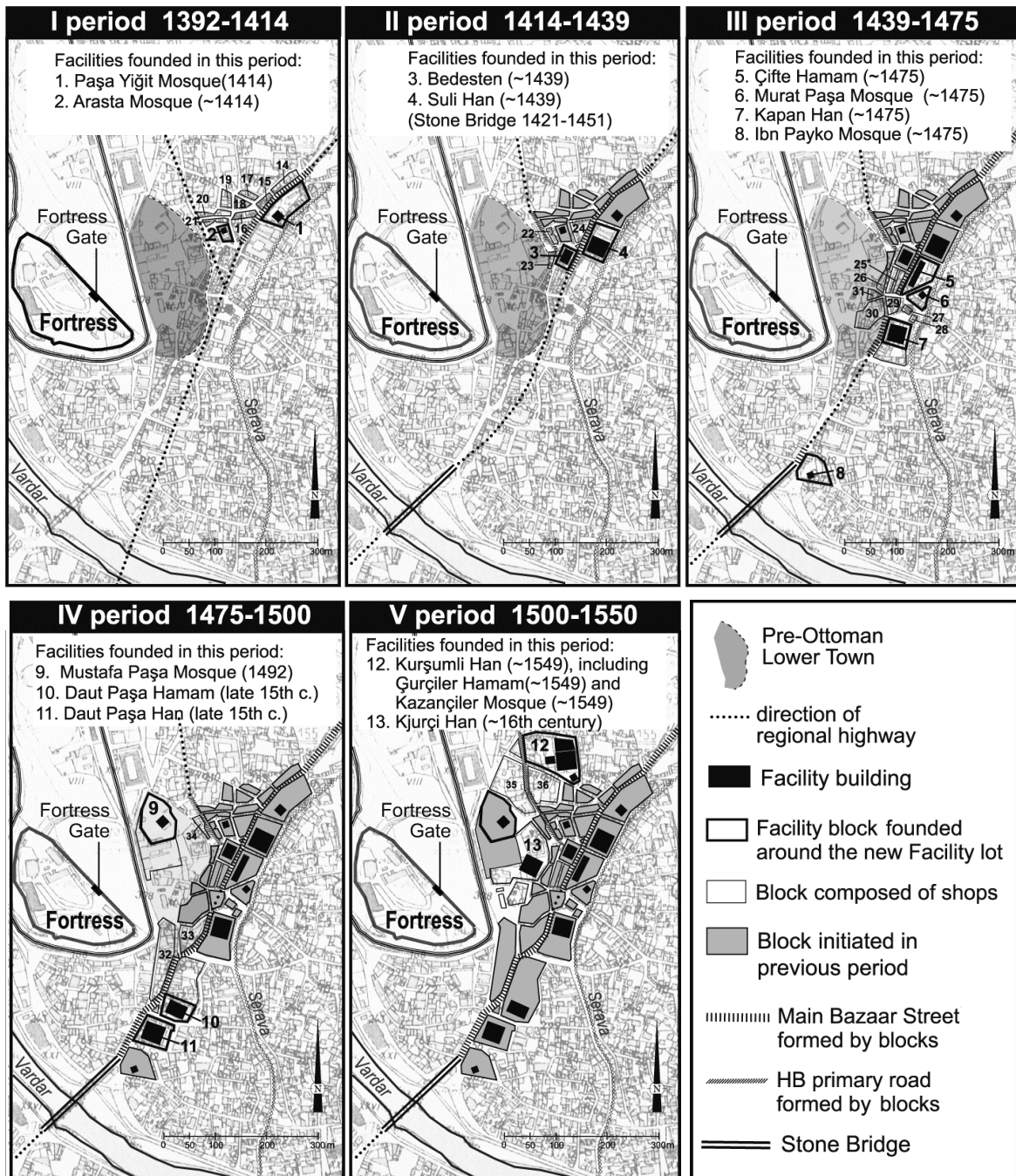


Fig. 30 Process of block development in Skopje's Bazaar based on chronology and location of Ottoman public facilities (blocks' outline from 1929 map)

3.3.2. Typology and spatial structure of blocks

Based on the 1929 map (Fig. 29)., we categorized the Bazaar's blocks in two basic types according to the presence of public facility:

- type A : blocks with public facility lot enclosed by shop rows (Fig. 31);
- type B: blocks without facility and composed solely by shops (Fig. 31).

In previous research Mateska (2011) informed on four types of blocks⁶⁾. One block is described as facility block composed of facility building surrounded with rows of shops attached to the facility building's outer walls. The other three blocks are shop blocks categorized in three types: fully built block with two rows of shops back-to-back, block with central inner yard surrounded with rows of shops and semi-open block with undefined free space and interrupted row of shops⁶⁾.

The facility block defined in previous research⁶⁾ is:

subtype AII — block that contains facility building in the central part of the block. The facility is surrounded by shops structurally connected with their rear wall to the facility's façade (Fig. 31-AII and Photo 17).

However on the 1929 map, I detected two other subtypes of distinct facility blocks that differ in the structural relationship of the facility building with the other buildings of that block:

subtype AI — block that contains a facility lot in the central part of the block. The facility building/s is/are free standing in the lot and detached from surrounding shops (Fig. 31-AI);

subtype AIII — block with loosely built structure composed of facility lot with one or several facility buildings and a group of sparsely built lots (residential or other). On one side of the facility lot, a group of several shops can be attached (Fig. 31-AIII).

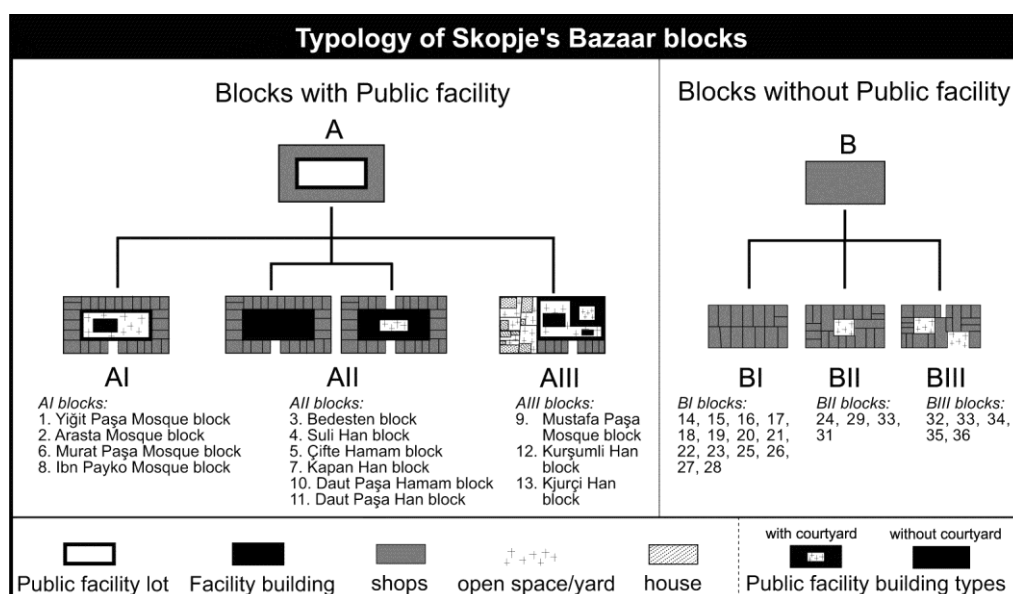


Fig. 31 Diagram of blocks' typology in the Bazaar in 1929



Photo 17 Suli Han block in Skopje's Bazaar- block type AII (photo from the author)

The three shop blocks defined in previous research⁷⁾ differ in the density of the built up area and continuity of the street-front:

subtype BI — fully built block containing two rows of shops attached back-to-back (Fig. 31-BI);

subtype BII — block with a common central yard enclosed by shops attached in a row (Fig. 31-BII);

subtype BIII — block with multiple yards, loosely built area and some detached or semi-detached shops. According to Mateska⁷⁾, this block subtype is a deteriorating BI or BII block (Fig. 31-BIII).

Thus, I identified two other subtypes of facility block from the one presented in previous research. While the previous research described the 3 shop block types rather closely, the typology of facility blocks was incomplete. My analysis further explained the typology of the Skopje's Bazaar blocks.

Secondly, I analyzed the morphology of blocks presented in the 1929 map in relation to their historical period of initiation (Fig. 32):

1. The block subtypes seem to change from AI-AII-AIII and BI-BII-BIII in relation to their chronology of initiation.

2. Facility blocks initiated in the I period (1, 2) are subtype AI while the blocks initiated in II, III and IV period are subtype AII with exception of block Ibn Payko Mosque (8). It is possible that subtype AI was preferred for blocks containing a Mosque to ensure the tranquility of religious ceremonies. The AIII blocks are the last ones initiated in the Bazaar. In the 1929 map, these blocks also include some

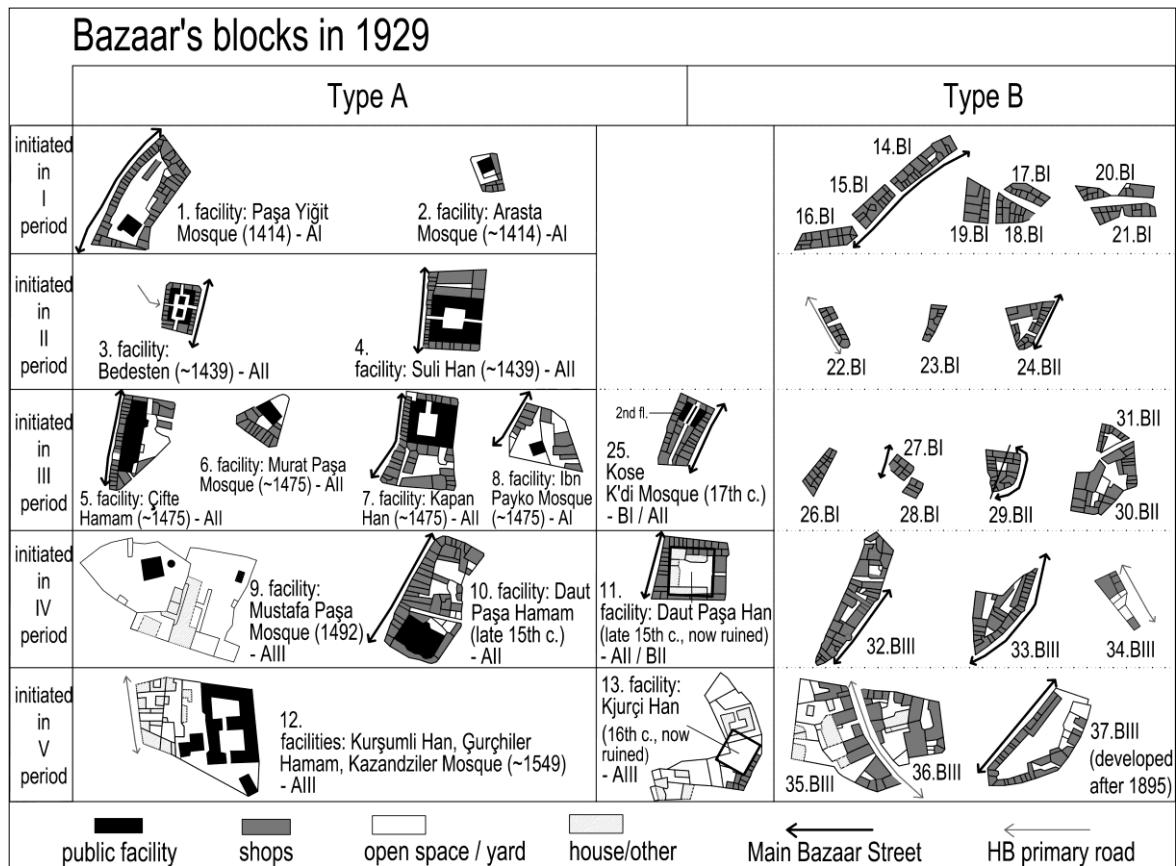


Fig. 32 Structure of blocks in Skopje's Bazaar based on 1929 map

houses or other buildings in the Bazaar's outskirts, thus we assume that their formation or restructuring from residential into Bazaar block in the 16th century was unfinished and later deteriorated into subtype AIII.;

3. Shop blocks from I, II and III periods are subtype BI and BII while blocks from later periods are BIII and even contain some houses in the outskirts. This is consistent with the possibility that the restructuring of blocks from later periods was unfinished or partial although, in some cases BIII can be a deteriorating AI or BII blocks;

4. Kose K'di Mosque (25) and Daut Paşa Han (11) blocks are exemplars of transformation of one block type into another. In Kose K'di block, a longitudinal alley separates two independent BI blocks on the ground floor. The Kose K'di Mosque located on the second floor of the block was built in the 17th century, most likely after the two BI blocks were already formed. Thus, a hybrid block structure was formed of two BI blocks on the first floor and AII block on the second.

On the other hand, Daut Paşa Han block was formed as AII block but later lost the facility building. The facility lot was overtaken by auxiliary and shop buildings thus in 1929 the block was already altered to BII;






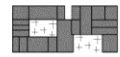
5. The Kapan Han (7) and Daut Paşa Hamam (10) blocks have a large area of shops attached to one

side of the block. These shops are grouped around an inner yard thus, it seems like a BII block became attached to a neighboring AII, probably after a small alley that separated them was closed up by auxiliary buildings;

6. The block 29 (BII) on the 1929 map seems to be obstructing the linear extension of the Main Bazaar Street. However, we don't know the exact shape of the shops blocks and the precise outline of the Main Bazaar Street during the early periods of Bazaar's development. More maps and historical research is needed to clarify the shape and position of this block in relation to the Main Bazaar Street.

Further, we analyzed the scale of blocks based on the data from the 1929 map and our own field survey. The size of blocks taken from the 1929 map are considered approximate because the preciseness of the survey method cannot be confirmed. The maximum length and width of each block was analyzed to determine the average scale of each block subtype (Table 3). We concluded that blocks subtype AI and AII have similar size and are slightly elongated. The AIII and BIII blocks are largest blocks in the Bazaar. The BI blocks are the smallest, with area five times smaller than BIII's and eight times smaller than AIII's.

Table 3 Scale of Skopje's Bazaar block subtypes

		AI	AII	AIII	BI	BII	BIII
blocks from I period		2			8		
blocks from II period			2		2	1	
blocks from III period		1	3		4	3	
blocks from IV period			2	1			3
blocks from V period				2			2
blocks total		3	7	3	14	4	5
Length*	max.	117.4	120.5	121	61	73.5	130
	min.	32.4	45	90	15	23.4	49
	average	74.9	82.75	105.5	38	48.45	89.5
Width*	max.	66.7	65	70	27	42	60
	min.	20.8	32.5	33.2	9	26	18
	average	43.75	48.75	51.6	18	34	39
length/width ratio		1.7	1.7	2	2.1	1.4	2.3
diagram of approx. scale relative to other subtypes							

*in meters

3.3.2.1. Transformation of block structure 1929-1999-2011

To understand the changes in the spatial structure of blocks through the years, first we conducted a field survey in 2011 with the students from Kyoto Institute of Technology (Prof. Hyuga Susumu). During the survey, 6 blocks on the Main Bazaar Street were documented (Fig. 33, blocks 1, 3, 4, 24, 25, 29). The survey data included: block's overall size including perimeter and volume, arrangement of lots and buildings, and mapping of entrances.

Further, we compared the surveyed 6 blocks with the same blocks found on the 1929 and 1999 map of Skopje's Bazaar. Both maps were obtained from the National Institution-Conservation Center Skopje (Table 4).

The transformation of block structure was analyzed from three aspects:

- alteration of block type;
- alteration of lot arrangement and
- alteration of building arrangement.

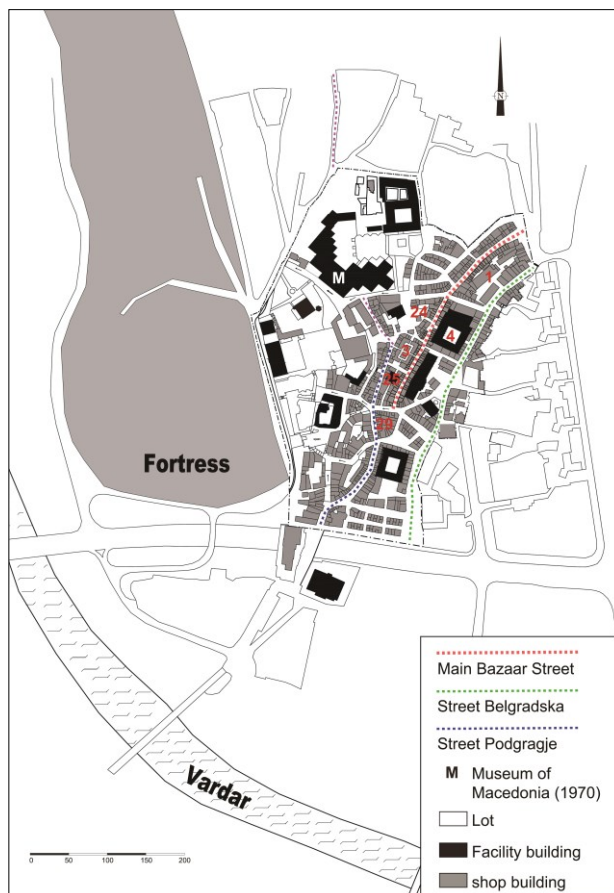















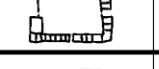
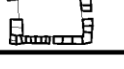



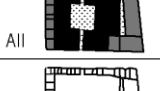
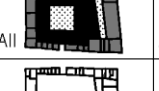
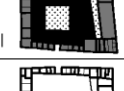






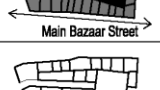








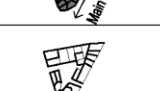








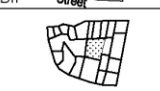
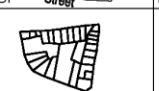
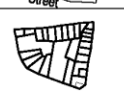






Fig. 33 Map of the six surveyed blocks in 2011
Adapted by the author on the 1999 map

The lot and building area in the Bazaar are same in many of the Ottoman facilities and almost all of the shops, thus the building density is high.

The block type transformation in some cases was caused by destruction of Ottoman public facility, which led to a change from type A to type B block (1. Paša Yiğit Mosque block, 3. Bedesten block).

Yiğit Pasa Mosque was destroyed during 1945-61²⁾ and the facility lot was divided between several new owners who constructed buildings in the facility lot yard thus, the type of block was changed from AI to BII. This altered not only in change of block type but the structure of the plot and building arrangement of the block (Table 4 — 1; buildings in black color represent the Ottoman facilities).

Table 4 Transformation of 6 Bazaar blocks 1929-1999-2011

Block no.	Feature	1929	1999	2011
1. Paşa Yiğit Mosque	Block type			
	Plot arrangement			
	Building arrangement			
3. Bedesten block	Block type			
	Plot arrangement			
	Building arrangement			
4. Suli Han block	Block type			
	Plot arrangement			
	Building arrangement			
25. Kose K'di Mosque	Block type			
	Plot arrangement			
	Building arrangement			
24.	Block type			
	Plot arrangement			
	Building arrangement			
29. central block	Block type			
	Plot arrangement			
	Building arrangement			

On the other hand, the original Ottoman Bedesten was replaced with another commercial building on the same location by the late 19th century²⁾ thus the block type was changed from AII to BII.

However, in this case even though the facility was destroyed the block kept its lot and building structure because the new building kept the same lot area and building size of the Ottoman facility. The new building's cells were rented to shop owners (Table 4—3).

Suli Han and Kjose K'di blocks still house the Ottoman facilities in their structure thus the type of block as well as the lot and building arrangements are mostly unchanged (Table 4—4, 9).

In the Central block, the inner yard of the block was taken over by one of the shop lots and built up. This altered the block type from BII to BI and slightly altered the lot and building arrangement in the central area of the block (Table 4 - 27).

During the 2011 survey, we observed some alterations of the lot and building arrangements seemingly independent of the block type change and facility alteration.

For example, in the survey of Yiğit Paşa Mosque block (1), Bedesten block (3) and blocks 23,

the destruction of few shop buildings not on the Main Bazaar street was noticed. In the case of the Bedesten and block 23, the blocking of the HB primary road by the Museum of Macedonia built in 1970³⁾ (Fig. 33-M), might have contributed to loss of land value in that area and consequently vacancy and decay of some of the shops (Table 4). On the other hand in K'ose K'di block (9), a unification of few shop lots into one lot/building occurred, also in the area not on the Main Bazaar Street (Table 4).

However, the opposite tendency was observed in the fronts along the Main Bazaar Street. The lot density of the block fronts facing Main Bazaar Street increased over time in all of the surveyed blocks. The density was increased by subdividing one lot into two or several other lots.

Today these lots each have separate shops but in some cases they are still in one building that spans over several lots (Table 4).

Based on this analysis, we concluded that the elements and structure of Bazaar's blocks that survived until today remained mostly unchanged from 1929. However, the strong influence of the fixed elements of the urban structure – public facility and primary road, on the changes of Bazaar's urban tissue became evident.

For example, the destruction of the public facility brought about block type transformation where the facility lot was overtaken by shops. On the other hand, the significance of the Main Bazaar Street, as segment of the primary road ABC, brought about alterations in the urban tissue in a form of gradual increase of the lot/shop density.

Even though the modernization significantly altered the main traffic network in Skopje's central area, in the context of the Bazaar, the Main Bazaar Street still have significant impact on lot and building value.

3.3.2.2. Evolution of the block pattern of Skopje's Bazaar

Based on the above analysis, the evolution process of Skopje's Bazaar block pattern was clarified (Fig. 34).

The development progressed with the founding of Ottoman facilities on empty land or in already existing pre-blocks. The facility attracted shops around its lot thus, facility block type A were gradually formed. In the facility's vicinity, B type blocks formed from the congregation of shops on empty land or by conversion of previous residential pre-blocks. The conversion progressed by gradual installment of shops around the pre-blocks' perimeter. In the restructuring process, it is likely that the any pre-block would have been split on several shop blocks since the size of BI and BII blocks is quite small. This process recurred with each Ottoman facility founded in the Bazaar.

The unique case of Kose K'di Mosque built in the 17th century on the 2nd floor of two adjacent shop blocks is exemption from this strategy (Fig. 34/25). Most of A blocks are along the Main Bazaar Street thus the outline of this street was formed by the 16th century and remained unchanged until the Bazaar's Reconstruction in 1970³⁾.

Until the 20th century, significant changes to A blocks seem unlikely because the facility, as a main structural element of the block, remained. Even when some facilities were destroyed after the Ottoman army retreated from Skopje (1912), the block kept its main shape but altered the block type into BII or BIII (Fig. 34/1, 11).

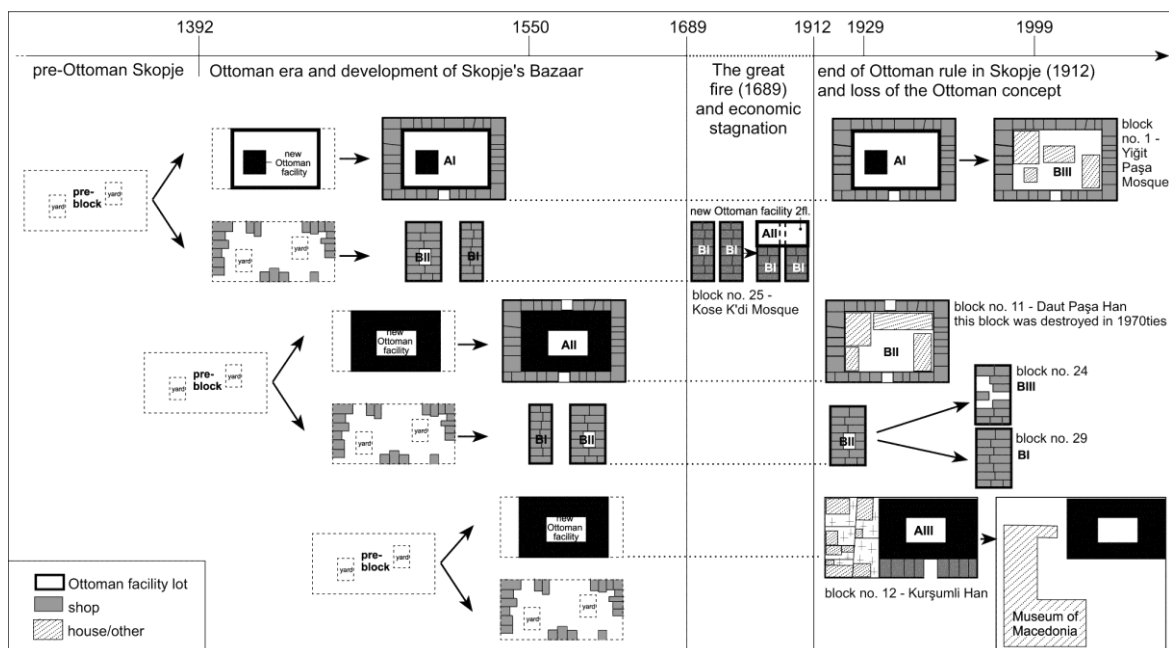


Fig. 34 Diagram of the block pattern evolution in Skopje's Bazaar

In case of Kurşumli Han block (Fig. 34/12), its partially developed structure from the late 16th century was transformed by the Reconstruction in the 1970ties that demolished the Kazandziler Mosque and the buildings in the west part of the block³⁾. The Kurşumli Han was included in the new block of Museum of Macedonia³⁾. This transformation weakened the Ottoman concept of the Bazaar's block pattern.

Some alterations of B blocks occurred as a result of rebuilding of shops. In block 24, decay of shops from the block side opposite of the Main Bazaar Street brought about block type change from BII to BIII (Fig. 34/24). On the other hand in block 29, the inner yard of the BII block type was filled up by shop extensions therefore the block type was altered from BII to BI (Fig. 34/29).

Thus, even though the modernization obscured the Ottoman concept in Skopje's Bazaar, the historic block pattern is still preserved. However, as the pressure for new development surges with the economic growth, the threat to the preserved block pattern increases. The results of this study can facilitate the creation of design guidelines for conservation of the block pattern and urban form of Skopje's Bazaar.

3.3.3 Street-lot-building relationships in the Bazaar

Based on the previous analysis of blocks' typology and structure, we clarified the following consistent relationships between streets, lots and buildings in Skopje's Bazaar.

Street-street: Streets in Skopje's Bazaar form a network comprised from:

- Main Bazaar Street, segment of the SW-NE primary road ABC (chapter 3.1.2.-Fig. 14, Fig. 34);
- two other relatively long streets in SW-NE direction. One of these streets is east of Main Bazaar Street and over the former riverbed of river Serava. Today this street is called "Belgradska". The other street is on the west side and today called "Podgragje" meaning Lower Town (Fig. 34);
- other streets with shorter routs joining the three main streets (Fig. 34).

Street-lot: All lots are directly accessed from the Bazaar's street network. In the case of shop lot, the access to the street is direct, along one side of the lot rectangle or two sides in case of corner shop lots. However in most of the facility lots, the access is indirect and through a narrow passage that connects the street and the facility lot. There can be one or several passages and the width of the passage is usually one average shop front width – 4.5 m (Table 4).

In exceptional cases like Mustafa Paša and Kurshumli Han blocks, the facility lot is directly accessed from the street.

Lot-lot: The lots of facility buildings are the largest areas in the Bazaar. On the other hand the shop lots are very small, with the smallest shop lot being only 2x2m. The blocks are comprised either solely of shop—lots (usually in two rows back-to-back) or from one facility lot enclosed by shop—lots.

There can be only one facility lot in one block and its position is usually in the central part of the block, bounded by shop lots from at least 2 sides.

Lot-building: In the case of facility lot, the facility building can:

1. be inside the lot and surrounded by facility yard or
2. occupy the whole lot and have or not have inside courtyard.

In case of shop lot, the building occupies the 100% of the lot area in most of the cases thus the building density is very high. In very rare cases, the shop has back yard which serves auxiliary purposes or a common back yard can be shared from several adjacent shops.

Building-building: Shop buildings are structurally connected by lateral shared walls thus their arrangement along the Bazaar streets is the type of row houses. Sometimes several shops in a row even share the same building roof thus form a compact structure (Photo 16). In blocks type AII where the

building lot coverage is 100%, the shops can also be structurally connected with the facility building. This connection is formed when the shop buildings borrow the facility's façade as their own rear wall. In blocks type AI where the facility building is inside the lot and surrounded by facility yard, there is no structural connection between the shops and facility building.

Street-building: The shops have 100% of building lot coverage, no set backs and are arranged in a row without building gaps thus the shop buildings shape the street line and directly form a continuous streetscape with their façades. However today, in some cases of decayed buildings, mostly in the Bazaar's boundary areas, there is disintegration of the street front. In regard to the facility buildings, most of them don't have direct access to the street but communicate through passages from the street to the facility building, on one or several sides. In rare cases where there are no shops surrounding the facility lot (Kurşumli Han), the facility building can be directly exposed to the street. The entrance to the building however is always from the more significant rout.

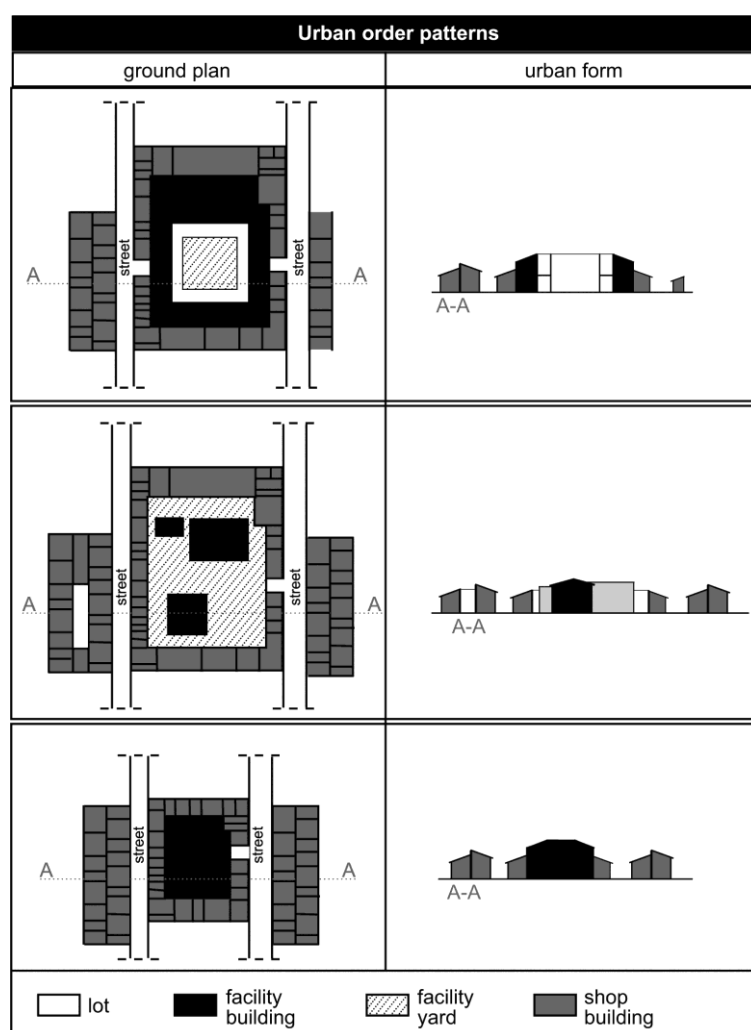


Fig. 35 Urban ordering patterns in the Bazaar based on street-plot-building relationships

The street — lot — building relationships are consistently applied throughout the Skopje's Bazaar thus we concluded that they form a systematic urban order. This urban order directly produces the ground plan and has direct impact on the Bazaar's urban form (Fig. 35).

3.3.4. Urban ordering as a value of historic urban form

From our analysis of Skopje's Bazaar historical development we concluded that the Skopje's Bazaar blocks were created in 5 consecutive phases during the 15th and 16th century. The Ottoman urban strategy decided the layout and function of public buildings that served as a framework on which the vernacular shops built up to gradually form the Bazaar's blocks and streets.

Previous research marked two distinct types of Bazaar's blocks, based on the comprising elements: block with public facility + shops, and block composed solely from shops. According to previous research only one type of facility block is described: a block with centrally located courtyard type public building, structurally connected with its outer walls to the surrounding shop rows. The shop types are described with three models: 100% built blocks composed of two rows of shops back-to-back, rows of shops surrounding a central common yard and looser block structure with partial shop rows organized around several yards or open spaces. Based on our examination, we concluded 2 other models of facility blocks from the one presented in previous research.

One of the subtypes of facility block identified in our research differs from the previously defined block in the structural relationship of the facility building with the surrounding shops. While the previously defined block is structurally connected with the shops around it (the shops use the facility's façade as their rear wall), the facility block identified in this research has a facility building free standing in the facility lot and structurally unconnected with the surrounding shops.

The other subtypes that was identified in this research is partially developed facility block that has a group of houses or other buildings attached to one side. These are blocks at the periphery of the Bazaar and blocks that were last to initiate in the V phase (1500-1550).

Previous research (André 1984) suggested that the development secondary streets in the Ottoman bazaars proceeded by conversion of previous residential blocks into commercial. Based on our analysis of chronology of block types, we concluded that the facility blocks from later phases have large area and undefined empty land than the blocks from the earlier phases. This is also evident in the shop blocks from later phases as opposed to shop blocks from earlier and middle phases that are smaller in size but with 100% building lot coverage. Thus, we suggested the possibility that the blocks from the last phase of Bazaar's development were unfinished in their transformation from residential to commercial sectors. The Bazaar's blocks were being developed during 1392-1550 by either 1. implanting a facility inside the residential block in which case facility type block was formed or 2. by gradual congregation of shops in the vicinity of the ottoman facility or around a previous residential block. Until the 20th century, significant changes to A blocks seem unlikely because the facility, as a main structural element of the block, remained. However, change of block type occurred in blocks that

later lost the Ottoman facility even though they kept the main shape and size. Few alterations of the shop blocks occurred as a result of shop rearrangements. Even though the modern reconstruction in the Bazaar altered the original planning concept of the area, in the context of the Bazaar the Main bazaar Street still influence the lot and building arrangements. The density of shop lots and shop buildings is highest along the Main bazaar Street.

The analysis of the spatial structure of blocks in this research indicates the presence of historic order in the way the urban elements are put together to form spatial structure of blocks (Fig. 35). This urban order is formed by the consistent street—lot—building relationships applied throughout the Skopje's Bazaar described in chapter 3.3.3. On the other hand, the relationships are derived from the main attributes and function of primary road, public facility and shop in the original Ottoman urban concept. If the urban order is neglected, as in the case of the construction of the Museum of Macedonia in 1970ties (Fig. 34), it creates very noticeable disruption in the ground plan and in the resultant urban form. Thus the urban order, that we identified through the consistent street—lot—building relationships based on the Ottoman urban concept, is inherited value of the Skopje's Bazaar historic urban form. The urban order that we defined in this research can be used as a base for future planning guidelines to sustain the authentic ground plan ordering thus conserve the Skopje's Bazaar historic urban form.

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4. Loss of the concept of center in Skopje's Bazaar thru the process of modernization

Chapter 4 deals with the transformation of the position of the Bazaar in the city center and the alterations of the authentic spatial structure caused by modernization.

Firstly, the impact of modernization on the position of Old Bazaar in the city center was analyzed through comparative discussion on consecutive urban planning schemes during the 20th century (4.1.). The Master Plans of Skopje from 1929, 1948 and 1964 were analyzed. Moreover, the Specific urban plan for the central area finalized in 1965 was also considered.

Secondly, modern urban developments that impaired the Ottoman concept of city center were examined (4.2.). The modernization of the authentic planning structure of Old Bazaar was analyzed in more detail through the projects of Reconstruction of the Skopje's Bazaar by the Institute of Urbanism Skopje in 1970ties.

The analysis of the strategy of Institute of Urbanism together with the urban restructuring of Skopje by the modern urban plans was used to clarify the alteration of the historic planning structure of Skopje's Bazaar imposed by modernization. It was summarized that modern developments had significant impact on the values of the historic urban form, sometimes even implicating several categories of the value concept (4.3.).

4.1. Transformation of the position of Old Bazaar in Skopje's urban center

Modern urban plans of Skopje during the 20th century were analyzed to understand the transformation of the position of the Bazaar in the city center and the alterations of the authentic spatial structure by modernization. The impact of modernization on the position of Old Bazaar in the city center was analyzed through comparative discussion on consecutive urban planning schemes for the central area. For this purpose in this chapter the Master Plans of 1929, 1948 and 1964 were analyzed.

4.1. 1. First urban plans of Skopje

The first urban plan for Skopje was produced in 1914 by architect D.T. Leko, after the Ottoman's withdrawal from Skopje (1912)^{1,2}. This plan is considered a turning point in Skopje's urban history because for the first time coherent urban planning approach was used to deal with urban issues^{1,2}. Leko's plan was not implemented but served as a conceptual base for the next official Master plan by architect Mihajlović in 1929³ (Fig. 36).

The 1914 and 1929 urban plans exhibit general lack of appreciation for the Ottoman city model and promote radical change of Skopje's urban structure.

One of the significant urban elements brought into use in these plans was the **Public Square** (S on Fig. 36). The Squares were envisioned as main traffic hubs enclosed by large public buildings.

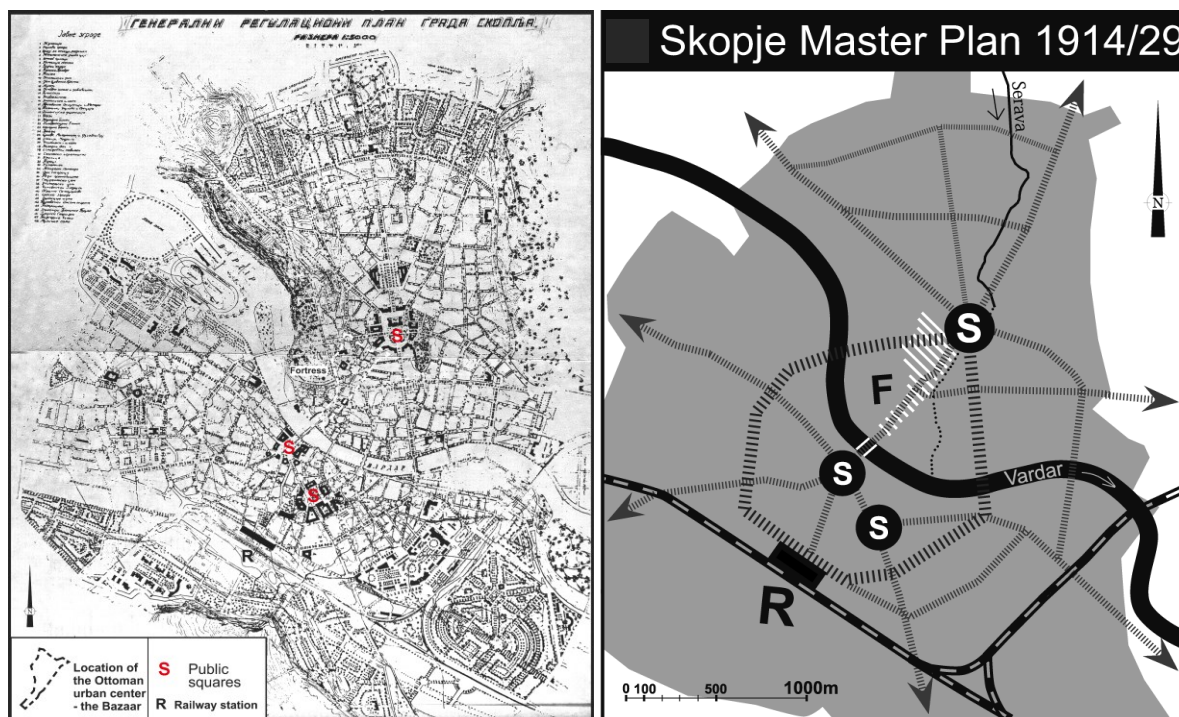


Fig. 36 First Master Plan for Skopje by Mihajlovic 1929 — Adapted by the author

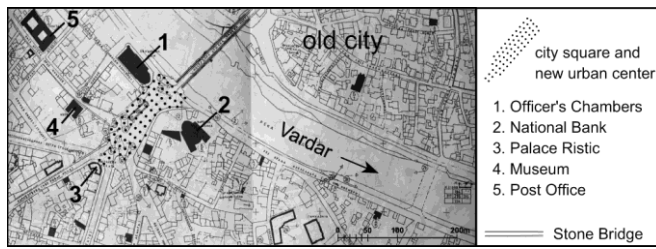


Fig. 37 New urban center¹⁾ – adapted by the author

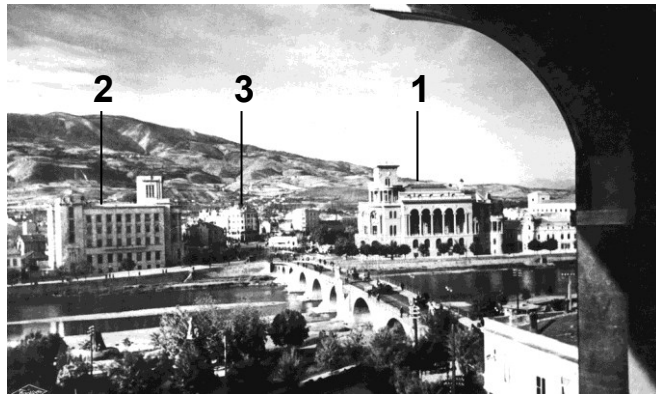


Photo 18 View from the historic town to the new center-
Adapted by the author on photo from Archive of Macedonia

One large square in the historic city on the left side of Vardar and two smaller squares on the right side were planned.

However, only the square adjacent to the old Stone Bridge on the right bank of Vardar — today known as Square Macedonia, was gradually formed by erecting public facilities of the new government. The facilities included the Chamber of Industry and Commerce, Army Officer's Club, National Bank, Ristic Palace, Natural Science Museum and Post Office¹⁾. Skopje's urban center was relocated on the right bank of Vardar (Fig. 37, Photo 18).

Thus, we concluded that the Ottoman symbol of center, embodied in the Main Mosque, was substituted with the symbol of the public Square. The symbol of Skopje's center became the newly developed Square on the right bank of Vardar.

This new urban concept of center radically changed the position of the Old Bazaar from historic urban center to a commercial zone adjacent to the New Square. The Stone Bridge served as a main communication link between these two zones. Majority of Ottoman public facilities in the historic center were abandoned while some were used by locals for storage or workshops^{4),5),6)}. Further, for the first time the idea of encircling the central area with roads—**City Ring**, was introduced. The City Ring will continue to be a dominant form of the central area in future plans.

4.1.2. Planning of Inner central area

After the Second World War, in Skopje began a process of intensive development and urban growth^{1),2)}. In 1948, a task of developing a Master plan for Skopje was entrusted to a team of Czech experts (L. Kubeš)^{1),2)}. They proposed a plan that implemented the new ideas of the Modern Movement with urban zoning of all city functions, as well as reorganization of the infrastructure and traffic systems¹⁾. The Government of Socialist Republic of Macedonia accepted the plan in 1950¹⁾ (Fig. 38).

The plan, developed under the influence of Mata's "Linear city" and Tony Garnier's "Cite industriell", proposed a model of linear urban development in NW-SE direction³⁾ (Fig. 38).

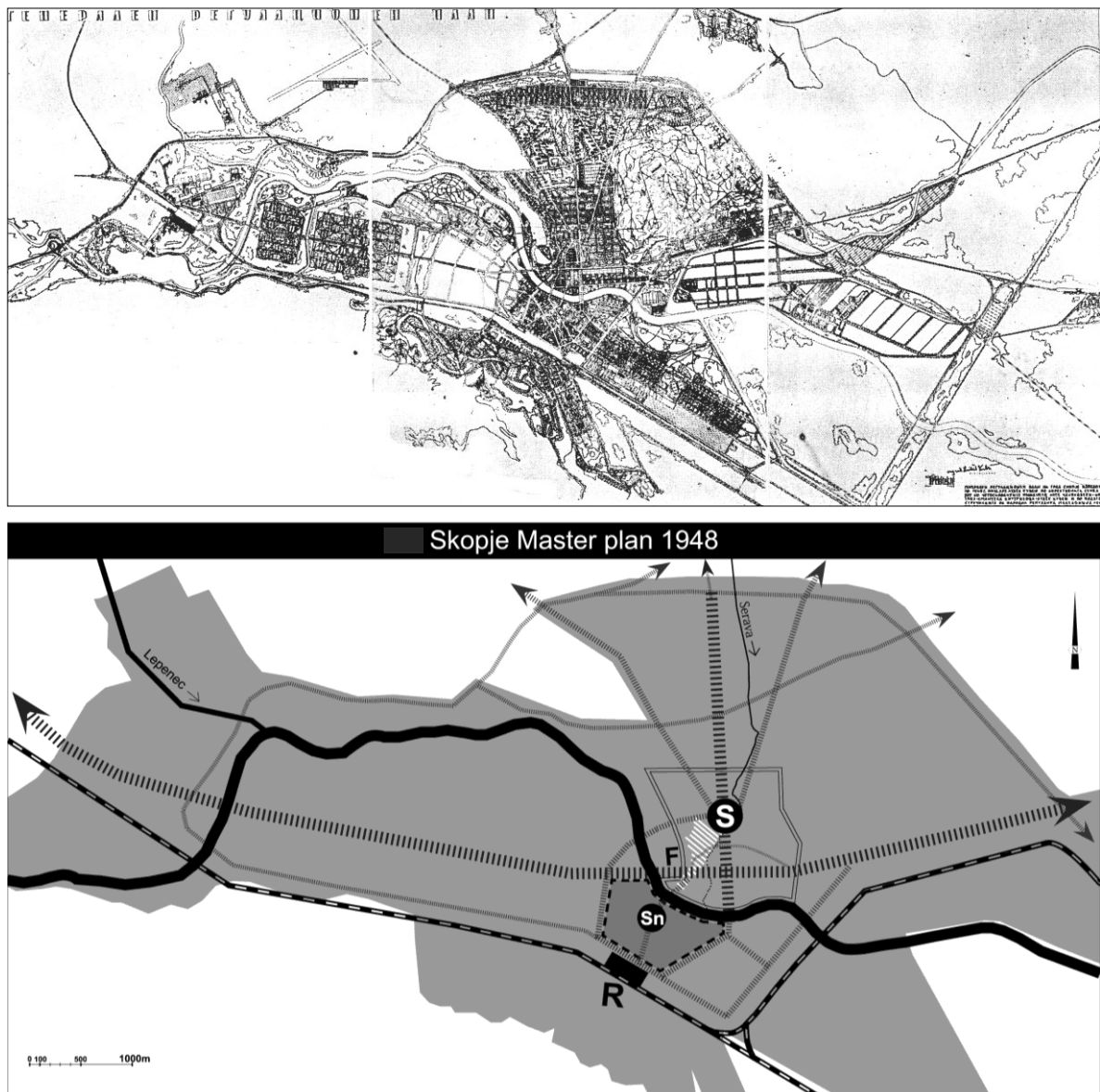


Fig. 38 The 1950 Master Plan of Skopje - original plan top, diagram by the author bottom

The main road axes were in north-south and east-west directions. The City Ring remained as a delineator of the new urban center.

This zone encircled by the City Ring was for the first time planned as **Inner Central Area** in a Specific Urban Plan for Skopje's Center in 1961¹⁾. In the Specific Plan, the Square Macedonia is treated as a focal point of the Inner center, where all political, social and economic facilities were located¹⁾.

Thus, the Inner center delineated by the City Ring became the main business district of Skopje¹⁾ (Fig. 39 and Photo 19).

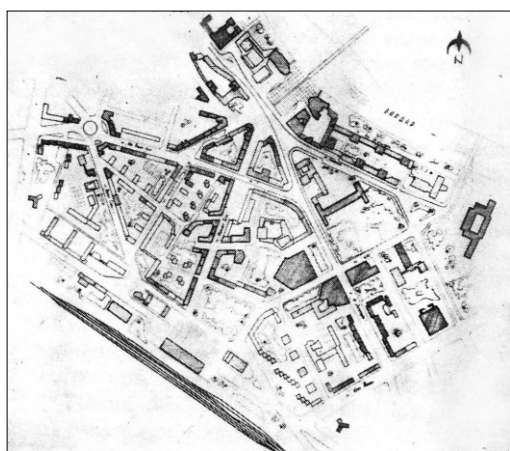


Fig. 39 Specific Plan for the new center, 1961¹⁾



Photo 19 East view of the new urban center, 1961
Photo from Archive of Macedonia

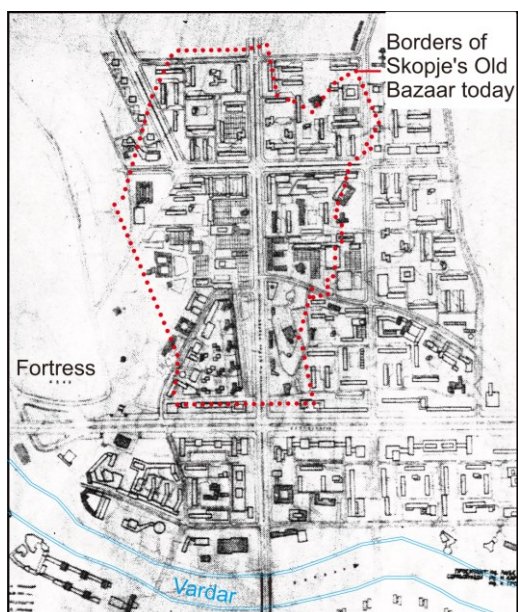


Fig. 40 Specific plan for the Bazaar, 1961¹⁾
- Adapted by the author

The Old Bazaar was planned in a separate Specific Plan for the left side of Vardar¹⁾ (Fig. 40). This approach illustrates the intention of exclusion of the Old Bazaar from the Inner Central Area.

Moreover, in the Specific plan, the historic city on the left bank was planned for complete restructuring, with orthogonal street pattern and rectangular blocks. The idea of a Square on the north border of the Bazaar, as a symbol of urban center for the historic city was again included in the plan. However, only a small area was restructured according to this Specific Plan. The area of the historic center—the Old Bazaar remained largely unchanged.

4.1.3. Urban planning after the 1963 earthquake

Skopje was heavily damaged in the earthquake that occurred on 26th July 1963, when 75% of the buildings were destroyed or damaged^{1),7),8)}. The Institute for Urbanism of city Skopje took the task of deciding the directions and guidelines for rebuilding the city. In a cooperative workshop with experts from “Polservis”- Warsaw, “Doxiadis”-Athens, USA and Soviet Union, Master Plan for Skopje was made in 1964⁷⁾.

The Master Plan (Fig. 41) had two main tasks:

1. Deciding the main road network based on the best topographical conditions;
2. Deciding the zoning, especially the location for residential development based on a research of seismically suitable areas⁷⁾.

According to this Master Plan, the main road channels became the North and South Boulevard in NW-SE direction (Fig. 41). The boulevards were linked with a NE-SW road, east of the Inner



Fig. 41 Master Plan for Skopje 1964 - Shin Kenchiku 04.1967⁹⁾ top and author's diagram bottom

Central Area, where the New Train Station was relocated. The area enclosed with these wide roads—called Major Ring, was subject to urban planning competition supported by the UN⁸⁾. The competition's objective was reconstruction of Skopje's urban center. The area planned as Skopje's New Urban center included the Old Bazaar on the left bank. Moreover, the competition's requirements emphasized the need for careful consideration of the historical heritage^{1),2)}. Thus, the Old Bazaar became integral part of Skopje's central area in the urban planning of 1964.

The competition for Skopje's central area had 8 entries. Highest evaluated proposal was from the laboratory of Professor Kenzo Tange, Japan (Fig. 42)⁹⁾. However after the competition, the Institute for Urbanism organized a team of experts, including members of Kenzo Tange and Mishchevic-Vencler teams that ranked highest in the competition, to work on a final synthesis of a Specific Urban Plan for Skopje's center (Fig. 43)^{1),8)}.

Main characteristics of the final Specific plan, called IX version, were:

- complete restructuring of the right bank of the center with urban mega structures that included infrastructure and modern facilities. Major traffic hub was the New Train Station;
- enclosing a smaller part of the of the inner center with roads—Minor ring that was delineated on the right side with mixed use block structures, called the City Wall;
- demarcation of the Old Bazaar area on the left side. A separate project for the Old bazaar conservation was made by the Institute of Urbanism in 1967¹⁾.

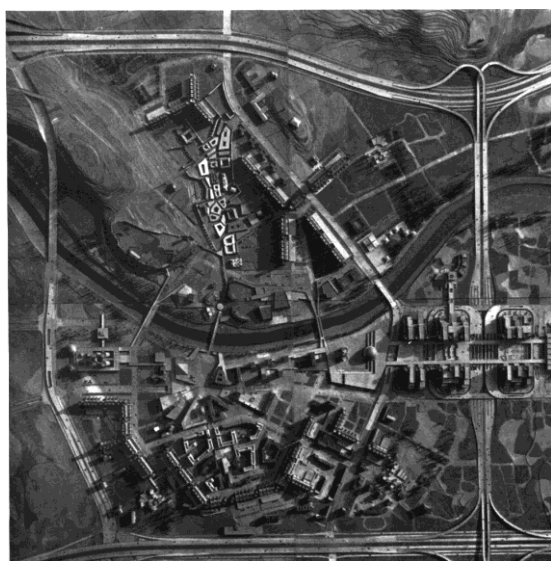


Fig. 42 Kenzo Tange's team proposal for Skopje's center-Photo from N.I.-Conservation Center Skopje



Fig. 43 Final version of Specific plan for Skopje's center⁹⁾

Some of the planned restructuring on the right bank of the center, including the New Railway Station and the City Wall were developed. The main government and business facilities were located again on the right bank¹⁾. On the other hand, a major part of the planned spatial restructuring on the left side was not realized. Therefore the Old Bazaar, although for the first time marked as historical center, remained as an adjacent commercial and cultural area to the business district on the right bank of Vardar that functioned as the city's urban center.

4.2. Alteration of the Old Bazaar's traditional planning structure by modernization

The Master Plan of 1964 was only partially realized. In this chapter the alterations to the Master Plan of 1964 as well as the Reconstruction Project of the Bazaar by the Institute of Urbanism — Skopje during 1963-1970 were analyzed. Consecutive projects significantly altered the main ideas of the 1964 Master plan and introduced modern developments that brought about destruction to the spatial context of the Ottoman urban concept. We summarized the impact of modern planning on altering the historic concept and planning structure of the Bazaar.

— *The Old Bazaar is physically isolated from the new center by new development*

The restructuring of the main road network proposed in the Master Plan of 1964, was not developed as planned. The Southern boulevard was not constructed thus today the main traffic link in the right side of the city is road A (Fig. 45-V). The road A connects with the Northern Boulevard through a road B, which passes through the south part of the historical center and marks the south edge of the Old Bazaar preserved area today. This disrupts the primary idea of the 1964 Master Plan to integrate the Old Bazaar in the city center and physically isolated the Bazaar from the rest of the central area on the south.

— *The Old Bazaar is functionally isolated from the new center by modern facilities allocation*

The dominant policy of the Planning authorities to keep the main political and business centers on the right bank of Vardar resulted in functional isolation of the Bazaar from the main business district. The Bazaar today functions only as cultural and commercial area adjacent to the real center (Fig. 44).

— *The Old Bazaar is legally isolated from the new center by new territorial division*

Moreover, with the Law on Territorial Division (2004), the Old Bazaar area was divided between Center (south) and Čair municipality (north). This further depreciated the authentic significance of the Bazaar as historic center and made its reintegration in the center more even complex (Fig. 44).

In this context, the position of the historical center today is transformed from urban center to an edge of the modern urban center with cultural and commercial function.

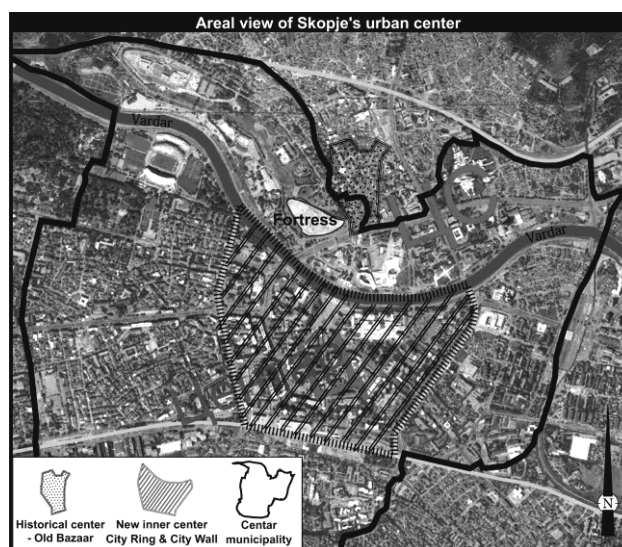


Fig. 44 Skopje's center municipality today - Adapted by the author on photo from N.I.Conservation Center Skopje

4.3. The impact of modernization on concept of urban center in Skopje's Bazaar

In Skopje, the concept of urban center has been changing at significant periods. The changes progressed from:

1. the Ottoman concept, where the symbol of urban center was the Main Mosque (1392-1912) — Fig. 45/I;
2. the European concept, where the symbol of urban center became the Square (1914-1948) — Fig. 45/II;
3. the Modern concept that impelled central area redevelopment (1948~) — Fig. 45/III, IV, V;

The change of the urban center's concept and following modern developments transformed the meaning of the Bazaar in the city from:

- city center where the Main Mosque is located (1392-1912) — Fig. 45/I;
- common area that lost the meaning of urban center (1914) — Fig. 45/II, III;
- historic center that is integrated in city center (1964) — Fig. 45/IV;
- historic center that is isolated, physically and functionally, from the city center by modern developments (today) — Fig. 45/V;

Therefore, the meaning of a city's center can vary according to the planning concepts of different periods. For example, while the Bazaar's location remained constant, the position of the Bazaar in the city transformed from city center to edge of the city center (Fig. 44, Fig.45/V).

Moreover, modern developments had significant impact on the values of the historic urban form. The building of the Museum of Macedonia cut off the primary road network, obscured the significance of the Bedesten as a historic Main Center and disrupted the traditional urban order of the ground plan (Fig. 46). This creates confusion in the urban setting and devaluates the historic urban form.

However, even though Skopje's Bazaar is today recognized as edge of the city center and its traditional planning structure is impaired, the authentic value of the location concept and the values of the historic urban form can be clarified by careful examination of the Ottoman urban concept. The values of the significance of place, pattern of building forms and urban order that were clarified in the previous chapters can serve as a base for a new urban form concept that can sustain the authentic meaning of historic center and integrate the Bazaar in the new city center.

The integration of historic place and modernization in the future city center has the possibility to conserve Skopje's identity and authenticity.

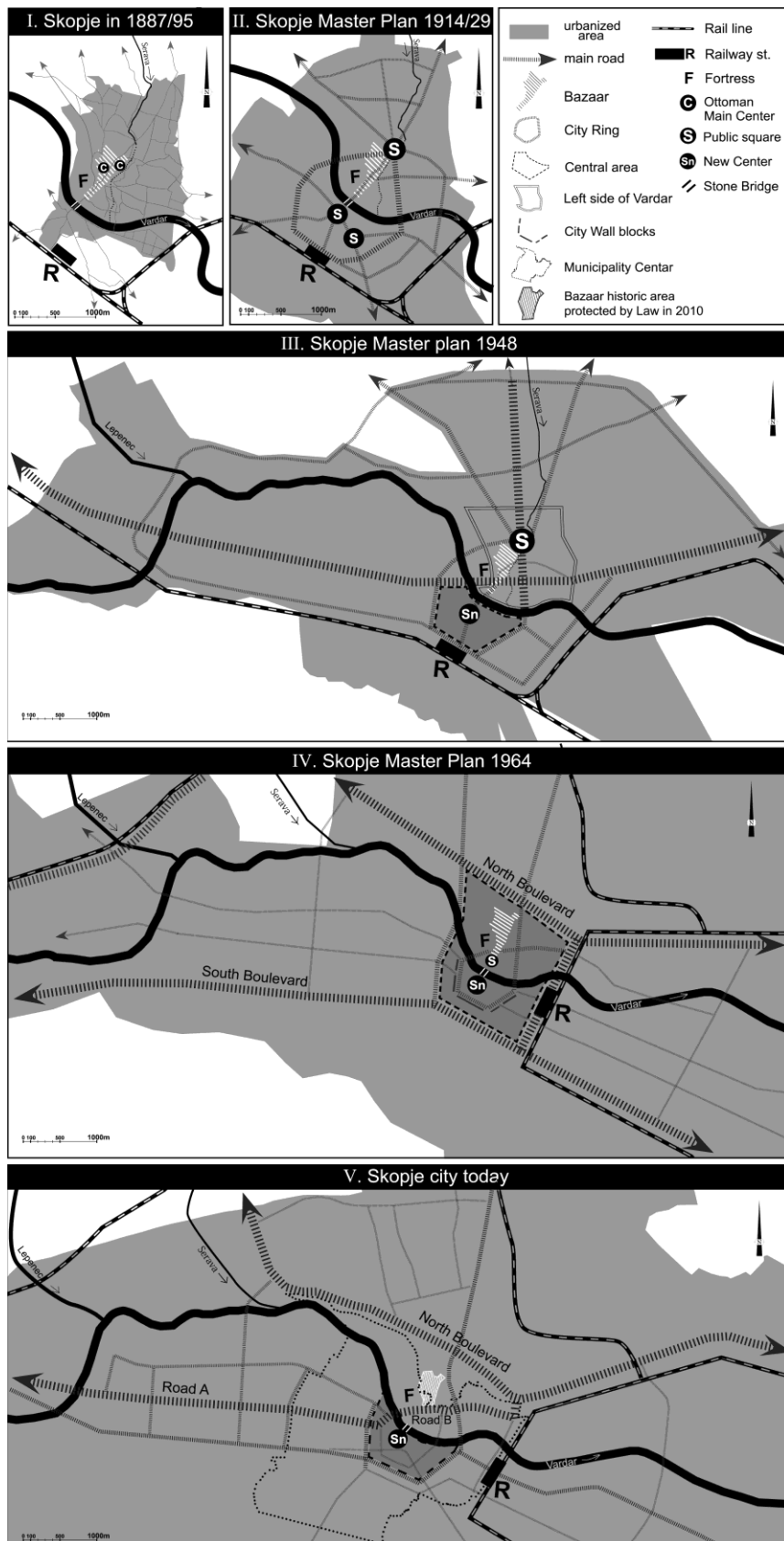


Fig. 45 Diagram of the urban transformations of Skopje due to urban planning in the 20th century

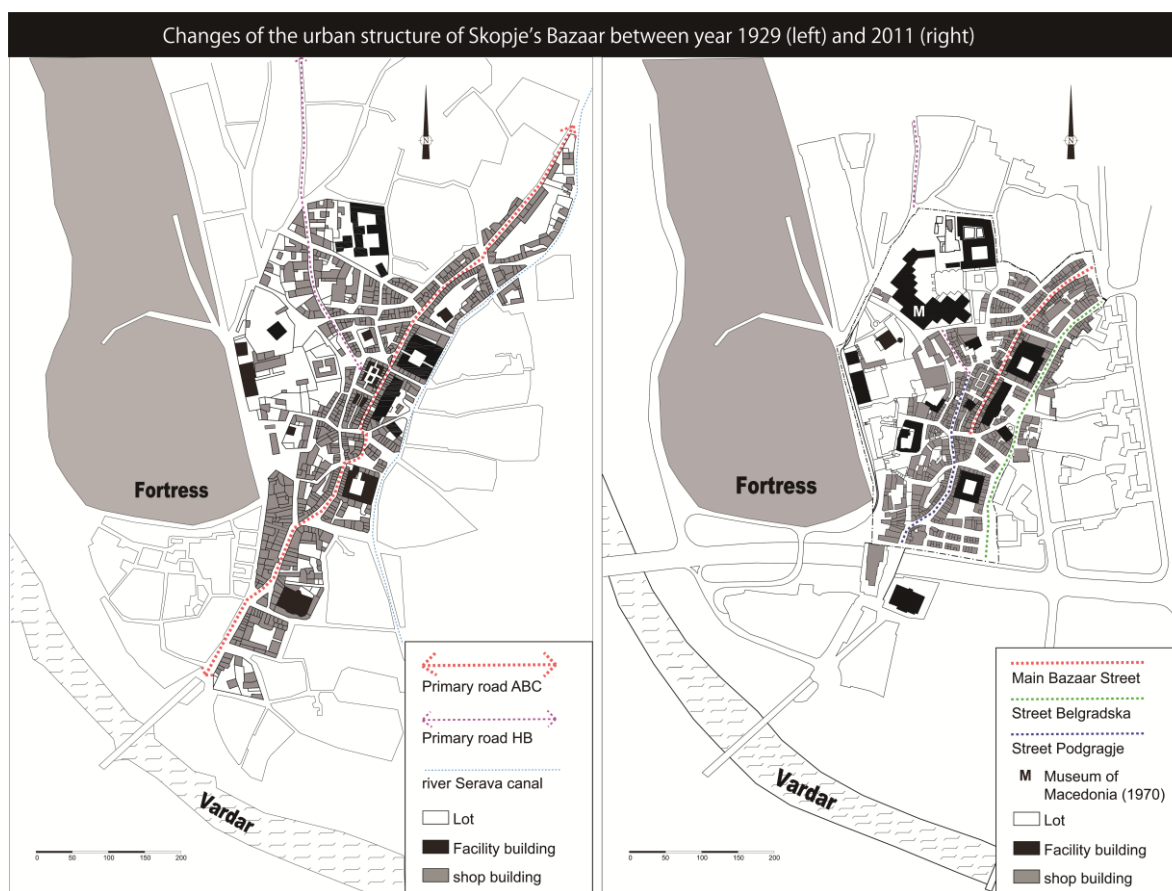


Fig. 46 Impact of modernization on Skopje's Bazaar historic urban structure — 1929 (left) and 2011(right)

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5. Conclusion

Many urban settlements acquired meaning through gradually developing the man-made environment in harmony with local cultural values and nature. However, the modernization of the 20th century has brought about the “loss of place” by ignoring the historical place significance. This resulted in chaotic urban landscapes and incomprehensible urban form^{1), 2)}.

In many big cities of the developed world, the historic urban form has been completely or partially lost. On the other hand, cities of the developing countries still have historical districts where the meaning of place is preserved. However, as the pressure for rebuilding and new developments is increasing, the threat to the still preserved historical and cultural resources is becoming apparent. In order to preserve the historic urban form and the meaning of place, planning guidelines that can manage rebuilding and new developments without compromising the values of the historic urban form are necessary.

In 2005, under the patronage of UNESCO, a *Vienna Memorandum* was adopted on the International Conference “World heritage and Contemporary Architecture – Managing the Historic urban landscape”³⁾. The Memorandum recognized the need for integration of the socio-economic development in the structural interventions in the historic districts as necessary³⁾. However, the character and identity of the historic urban form must not be lost in the process of redevelopment.

The main research question of this study was: what kind of values of the historic urban form must be preserved while rebuilding the historic urban areas. If we can define the values of the historic urban form then the type of modern developments, both general-from the planning aspect and particular-from aspect of individual rebuilding by the owners, that can sustain the historic context can be clarified.

However, while the evaluation method for historic architecture styles has already been established to some point¹⁾, the evaluation of the historic urban form has rarely been performed. The values of the historic form have often been obscured or diminished by modern urban planning and redevelopment that ignored the authentic urban concept. In this study, a new approach for evaluating the historic urban form is proposed based on analysis of the original planning strategy.

As case study, the historic center of Skopje, capital of R. Macedonia was chosen. The historical center of Skopje is an Ottoman Bazaar developed in the 15th and 16th century. The Ottomans conquered Skopje in 1392 and developed the settlement based on the site conditions and their own cultural background. Today the Skopje's Bazaar is designated "Cultural Heritage of Significant Importance" by the Macedonian Ministry of Culture (2008). However, a comprehensive strategy for urban conservation of Skopje's Bazaar, which will integrate the socio-economic development in the structural interventions, has not been developed yet. This resulted in a stalemate in the area's development and reduced its attractiveness as commercial and public district. Therefore in order to support development of planning guidelines that can manage rebuilding and sustain the historical urban form of Skopje's Bazaar, the specific question that this thesis dealt with was: what are the values of the historic urban form of Skopje's Bazaar based on the original Ottoman urban strategy that developed the Bazaar's structure and form?

The research question was considered from three topics of the value concept:

1. Significance of place – purpose of public facility and primary road in the Ottoman urban strategy;
2. Pattern of building forms – typology and transformation of shops;
3. Urban order – traditional systematic relationships between street, lot and building.

These topics were intended to clarify the interior structure of the historic area based on the original planning concept. Even though the topic "Pattern of building form" might seem more related to the architectural evaluation of building style, in this research the typology of shops is considered from aspect of the collective attributes that produce the size and scale of the urban tissue. The intention is to evaluate the typology of designs that can take the value of collection and contribute to the strengthening of the urban form character or as Schulz (2000) named it "self-realization of the place"¹⁾. This will allow the historic area to continue its evolution and not be a frozen monument devoid of real life.

The data for the research was gathered from document analysis and field surveys. The document analyses included:

- previous research, to understand the Ottoman urban concept and strategy behind the development of Skopje's Bazaar urban form; and
- historical documents - old maps of Skopje, to analyze the form and size of Skopje's Old Bazaar urban structure and its alterations through the years.

Moreover, field surveys were conducted in 10.2009, 09.2010, 09.2011, 03.2012 and 03.2013. The aim of the field surveys was to gather data on the typology of shops and blocks in the Bazaar. The first three surveys were carried out with the members of the Laboratory of Japanese Architecture (Prof. Hyuga Susumu) in Kyoto Institute of Technology.

1. Significance of place as a value of historic urban form

Firstly, previous research regarding the form of cities in the Ottoman Empire and the Ottoman construction system was analyzed in order to understand the purpose of public facility in the Ottoman urban strategy. It was concluded that the public facility was the main instrument in promoting urbanization and redevelopment in the conquered cities. The public facilities founded by the *waqf* institution were static indivisible elements in the urban fabric and formed the urban structure of the city.

I used the research by Boykov (2011) to clarify the consistent Ottoman urban strategy utilized in the conquered cities in the Balkans. The strategy consisted from two main steps:

1. To form an urban center by founding the Main Mosque and the Bedesten
2. To promote urban development by founding community complexes in the city's outskirts.

In Skopje, Boykov (2011) identified the first Mosque built by Yiğit Paşa in 1414 and Skopje's Bedesten as the centers of Ottoman Skopje. Moreover, he identified the Ishak Bey Mosque (1439), Sultan Murat Mosque (1436) and Isa Bey Mosque (1475) as the outskirt complexes built to promote urban growth in the 15th century.

My analyses of the increase in population in Skopje from 1392 until the end of 17th century, based on the data from Gorgiev (1997), indicated that the city continued its growth all through the 16th century as well. Thus, I searched for community complexes that had the purpose to boost up urban growth during the 16th century. I identified three big Mosque complexes built in the outskirts of the city in the 16th century: Burmalı Mosque (1495), Yaya Paşa Mosque (1504) and Dükkanlık Mosque (1549). Therefore, my contribution to further clarifying the Ottoman urban strategy in the Skopje's development is in identifying these three locations as the outskirt complexes built to promote urban growth in the 16th century.

Secondly, I used the location of the previously identified main Ottoman facilities to search for roads that had the meaning of regional network through the city. The regional network through Skopje's valley in pre-Ottoman time is not known. However, with the establishment of the main public facilities, the Ottomans clearly defined the outline of the regional roads, since the main facilities were always placed near the most important roads of the city.

For this analyses I used a historic map of Skopje from 1887/95 which has clearly marked the road network of Ottoman Skopje. First, the entrances of the regional network in the urbanized area – City gates were identified based on the restrains of the topographical conditions. Then, with connecting the City gates with the locations of main Ottoman facilities, I identified the primary road network in Ottoman Skopje that had the purpose of connecting the regional roads with the main Ottoman facilities as arrival point of primary meaning. The primary road network is composed of one SW-NE road, which segment in the area of the Bazaar has the meaning of Main Bazaar Street, and one SE-NW road. The roads intersect at the Ishak Bey Mosque, an outskirt complex from the 15th century. From the NW Gate and Dükkandzik Mosque a direct access to the center, where the Bedesten is located is provided.

Finally, the alteration of the original planning structure done thru the Bazaar's Reconstruction in 1970ties was analyzed. I identified three main transformations that obscured the meaning of location in the Bazaar: building of the Museum of Macedonia which cut off the north primary network and obscured the meaning of Center where the Bedesten is located; the construction of the new auto road that cut off the SW-NE primary road in the segment of Main Bazaar Street and isolated the south area of the Bazaar from the historic center; and relocation of river Serava that brought loss of recognition for the natural edge of the Bazaar and the loss of waterfront character.

Based on my analyses of the significance of place in the Ottoman urban strategy I concluded:

1. The layout of Ottoman facilities signify the Ottoman urban strategy in forming the city center and city development. Although in some places the original buildings were lost, the location possibly preserves the significance of the Ottoman concept. The location significance was evaluated from three aspects:

I) Main Center—Paşa Yiğit Mosque and the Bedesten signify the Main Center and the origin of the Ottoman city. Although the original buildings were lost, preservation of the location concept of these two facilities, in terms of place making, is crucial for recognizing the center of the historic city;

II) Bazaar components—Ottoman facilities in the Bazaar carry the Ottoman concept that formed the Bazaar as an urban center. Even though some of them have been altered due to repairs and rebuilding, their layout and original functions are significant to understand the Ottoman urban structure of Bazaar;

III) Periphery point of urbanization—the location of 15th century complexes of Ishak, Isa and Sultan Murat Mosques and the 16th century complexes of Burmali, Yaya Paşa and Dükandzik Mosques, signify the periphery of Ottoman urbanization in two stages of Skopje's expansion. In relation to the Bazaar's location, the visibility of the complexes from the Bazaar's area provides orientation and thus the location of the Bazaar in Ottoman Skopje can be understood.

2. The historic road network is indivisible from the layout of Ottoman facilities thus, its conservation is vital for conserving the historic urban form of the Bazaar. In the Bazaar, the most significant segment of the primary road network is the Main Bazaar Street on which most of Bazaar's facilities are located.

The Ottoman public facilities and historic roads preserve the significance of their location and layout derived from the Ottoman urban strategy. They form the urban structure of the historic center developed thru the 15th and 16th century and their location concept is vital for the comprehension of the identity of the place. In order to conserve the historic urban form of the Bazaar, the conservation of the location concept of Ottoman facilities and primary roads, especially the segment of Main Bazaar Street, is most significant. Consequently, the significance of place derived from the Ottoman urban strategy is important value of Skopje's Old Bazaar historic urban form

2. Pattern of building form as a value of historic urban form

In this topic the pattern of shops in the vernacular context was analyzed through field surveys and previous research. In previous research, the typology and architecture style of Ottoman public facilities built in Skopje has been covered in the major part. These monuments conform to the common, well known and established facility design models present all over the Ottoman Empire.

On the other, the small shops built by the local owners have been insufficiently covered in previous research that categorized only three basic types of shops-1floor, 1 floor+mezzanine and 2 floors units. Each shop type was developed in one of the three main time periods of Bazaar's history: 1floor in 15th -17th century, 1 floor+mezzanine in the 19th century and the 2 floor type in end of 19th - beginning of 20th century.

First, based on our field surveys we identified 596 vernacular shops in the Bazaar. The proportion of each type in the 596 vernacular shops is almost the same: each of the three shop types are used for a third of the shops.

Secondly based on our field survey of 10 significant shop units, we identified variations of the established three design types. Two variations of the 1floor shop type, one variation of the 1

floor+mezzanine shop type and one variation 2 floors shop type were identified.

Based on my comparative analyses of the spatial form and design elements of the subtypes with the established types, the transformation process of the shop design was clarified. It is still open for discussion but the built period of the subtypes was estimated based on the transformation of spatial form and design elements of the subtypes in comparison with the established types for which the built period is already known. It was concluded that in times of socio-economic changes or new technological advances, the three established types were reinterpreted to accommodate the needs of the owner and the changes in technology or style.

Finally, recent rebuilding of shop units were analyzed to identify recent trends in shop design. It was concluded that the shop rebuilding today uses historicism in the shop rebuilding. New architectural design in individual shop design is not used.

Based on my analyses of the pattern of shop design I concluded:

1. Four subtypes in the framework of the three established types of vernacular shops. This indicates a manner of shop designing that is aware and acknowledge already established shop types. This manner of design produces similarities in scale and appearance of the shops thus creates a coherent streetscape and urban setting;
2. Vernacular shops have the attribute to reinterpret an established shop type in times of extraordinary new circumstances. Each subtypes is reinterpretation of a previous model but adapted according to the needs and resources of its time. This implies that while the basic shop typology was conserved through time, the shop elements used contemporary design in the rebuilding.

The congregation of shops around the Ottoman facilities in the Bazaar form the Bazaar's urban tissue. In contrast to the street network and Ottoman facilities which fixed the urban structure of the area and remained constant since its foundation, the shops compose the flexible, adaptable urban tissue of the Bazaar. The pattern of shops in Skopje's Bazaar, is created by two attributes that form the shop vernacular: to design with reference to previous shop types and to use contemporary design elements for the shop rebuilding. The similarities in form created by the limited number of shop types form a coherent urban landscape.

Thus, the pattern of building form is significant since it gives meaning to the scale and form of the Bazaar's urban tissue. In order to conserve the Skopje's Bazaar historic urban form, the preservation of the pattern of building form represented in the three main types is essential. Consequently, the pattern of shops is important values of Skopje's Old Bazaar historic urban form.

However, this does not imply that the architecture of the individual shop elements needs to be traditional. On the contrary, my analyses shows that technological advances and changes in taste were regularly implemented in the shops rebuilding. Therefore in order to conserve the meaning of the shop vernacular, contemporary design of shop elements is also essential. Recent renovations of Bazaar shops use pseudo-historical design instead of modern design in the framework of the established types to fit in their historic setting and respond to the significant changes in modern circumstances. This could alter the meaning of the shop vernacular and have undesirable effect on the Bazaar's development.

3. Urban order as a value of historic urban form

In this topic the pattern of blocks in Skopje's bazaar was clarified by analyzing the relationships between form and development. The method was based on field survey and previous research. Previous research, a map of Skopje from 1929 and our own survey records were used to analyze the spatial structure of blocks in Skopje's Bazaar.

Firstly, based on the chronology of Ottoman facilities in the Bazaar, the process of initiation of block structures in the Bazaar was identified during 1392-1550. Even though the shape and size of block from this early periods is not known, based on the chronology of facilities at least we identified the location and time period of Bazaar's blocks development. For blocks that include public facility the time origin of the block is fairly certain however, blocks comprised only from shops are assumed to be developed shortly after the nearest public facility since the facilities were the promoter of urbanization and redevelopment in the Ottoman strategy.

Secondly, based on our examination of the 1929 map, we concluded 2 other models of facility blocks from the one presented in previous research. Previous research marked two distinct groups of Bazaar's blocks, based on the comprising elements: block with public facility + shops, and block composed solely from shops. Further description is given on only one facility block type and three shop blocks types. While the previous research described the 3 shop blocks rather closely to our examination results, the typology of facility blocks is incomplete. One of the subtypes of facility block identified in our research differs from the previously defined block in the structural relationship of the facility building with the surrounding shops. While the previously defined block is structurally connected with the shops around it (the shops use the facility's façade as their rear wall), the facility block identified in this research has a facility building free standing in the facility lot and structurally unconnected with the surrounding shops. The other subtypes that was identified

in this research is partially developed facility block that has a group of houses or other buildings attached to one side. These are blocks at the periphery of the Bazaar and blocks that were last to initiate in the V phase (1500-1550). Therefore, my analyses further clarified the typology of Skopje's Bazaar blocks.

Thirdly, based on our own measurements during the field survey and some data from the 1929 map, the width and length of each block in the Bazaar was estimated. By analyzing the maximum and minimum length and width, I determine the average scale of each block type.

My analysis of blocks alteration from 1929-1999-2011, based on historic maps and our own field surveys, clarified that the shape and size of Bazaar's blocks was preserved. One reason for this is the permanence of the early fixed elements of the urban structure – public facility lot and primary road, in the spatial structure of Bazaar's blocks. However, in some blocks the type of block was altered due to the loss of the Ottoman facility building or shop rearrangements. Even though the modernization altered the urban structure of Skopje's central area, in the context of the Bazaar, the Ottoman facilities that survived and the Main Bazaar Street still influence the lot/building arrangements in the blocks.

Based on my analyses of the block pattern based on relationship of form and development I concluded:

1. Three types of facility blocks and three types of shop blocks in the Bazaar
2. The approximate scale of block types was estimated based on our field records and the 1929 map
3. The pattern of blocks in the Bazaar is conserved although some alterations of block type occurred as a result of the loss of the Ottoman facility inside the block.
4. The analysis of the spatial structure of blocks in this research indicates the presence of historic order in the way the urban elements are put together to form spatial structure of blocks. This urban order is formed by the consistent street—lot—building relationships applied throughout the Skopje's Bazaar. The relationships are derived from the main attributes and function of primary road, public facility and shop in the original Ottoman urban concept. If the urban order is neglected, as in the case of the construction of the Museum of Macedonia in 1970ties, it creates very noticeable disruption in the ground plan and in the resultant urban form.

Thus the urban order, that we identified through the consistent street—lot—building relationships based on the Ottoman urban concept, is inherited value of the Skopje's Bazaar historic urban form. The urban order that we defined in this research has to be conserved in order to conserve the internal structure of Skopje's Bazaar historic urban form.

Furthermore, the transformation of the position of the historic center in modernization and the alteration of Bazaar's historic planning structure were discussed by comparatively analyzing modern planning schemes of the 20th century. Modern developments during the Reconstruction Project after Skopje's earthquake were also analyzed to understand the physical alterations of the historic built form that resulted in obscuring or diminishing of its value.

The conclusion from the analysis were following:

In Skopje, the concept of urban center has been changing at significant periods from

1. the Ottoman concept, where the symbol of urban center was the Main Mosque (1392-1912);
2. the European concept, where the symbol of urban center became the Square (1914-1948);
3. the Modern concept that impelled central area redevelopment (1948~).

The change of the urban center's concept and following modern developments transformed the meaning of the Bazaar in the city from:

- city center where the Main Mosque is located (1392-1912);
- common area that lost the meaning of urban center (1914);
- historic center that is integrated in city center (1964);
- historic center that is isolated, physically and functionally, from the city center by modern developments (today);

Therefore, the meaning of a city's center can vary according to the planning concepts of different periods. For example, while the Bazaar's location remained constant, the position of the Bazaar in the city transformed from city center to edge of the city center. Moreover, modern developments had significant impact on the values of the historic urban form, sometimes even implicating several categories of the value concept.

For example, the building of the Museum of Macedonia cut off the primary road network, obscured the significance of the Bedesten as a historic Main Center, destroyed the historic block structures of the area and disrupted the traditional urban order of the ground plan. This creates confusion in the urban setting and devaluates the historic urban form.

However, even though Skopje's Bazaar is today recognized as edge of the city center and its traditional planning structure is impaired, the values of the historic urban form can be clarified by careful examination of the Ottoman urban strategy. My research identified values of the historic urban form in the significance of place in the Ottoman urban strategy, in the pattern of shops that create the coherent urban tissue and in the urban order of the ground plan derived from the consistent relationships of facility-shop-street in the Ottoman urban concept.

The values of the historic urban form clarified in this study of Skopje's Bazaar, can serve as a base for future design guidelines that can conserve the urban form of the historic center while creating opportunity for new development and rebuilding. By clarifying the values of the historic urban form derived from the original urban concept and strategy, the design guidelines for new developments that can conserve the historic planning structure can be indicated.

For example, a modern development that will have:

1. consideration for its location in the context of historic place significance,
2. will preserve the scale and building patterns inherited to the urban tissue and
3. will abide to the historic urban ordering of the ground plan,

possible have the potential to conserve and even enhance the value of historic urban form, regardless of its architectural style.

One of the most urgent issues is to preserve the significance of place through design guidelines that can retrieve the meaning of historic main Center. Even though the main Mosque is lost, the location can be redesigned with new public facilities to take on the function of community center (Community hall, school, restaurant, ext.).

Moreover, the locations of the periphery points of urbanization must be included in the contact zones of Skopje's bazaar and their visibility from the bazaar preserved in order to provide orientation and comprehension of the Bazaar's location in the city and in the region. The facility complexes can include some new designed facility buildings or annexes to strengthen their functions as beacons of community life.

The segments of primary road network that still exist in the city must also be preserved and its significance enhanced by appropriate signage and streetscape design. In this way the main urban structure of the historic center can be conserved and can enhance the value of the whole area.

Further, design guidelines for shop rebuilding are necessary to define the framework of three main shop types that will conserve the scale and size of Bazaar's tissue while allowing modern architecture for the design of individual shop elements. The design guidelines that will conserve the historic relationships between the facility-shop-street can allow preservation of the internal structure of Bazaar's blocks regardless of the design of individual buildings.

Thus, the compliance to the values inherited in the historic urban form, does not necessarily demand the compliance to the historic design style of object buildings in order to conserve the historic urban form. The historic urban form can be conserved in rebuilding and renovation of structures under the conditions that the values, derived from the original urban strategy, are conserved.

The value based planning approach resulting from the values of the historic form clarified through this research, can be an essential tool for preserving the historic and cultural resources in the form of historic planning structure. This approach has the capability to manage Skopje's Bazaar sustainable future, where developments within the context of preserving the values of the historic urban form can be planned. In this way, the Bazaar's unique form that had survived from the 15th century can be conserved while allowing modern developments to address the current needs of the community.

Therefore, to address the urgent issue of integration of modern developments in the historic centers of developing regions, we assessed that the approach demonstrated through this study of analyzing the historic urban form from the aspect of value and significance, has the potential to manage the sustainable conservation of historic centers. The identification of value in the historic urban form can facilitate creation of value based planning approach that has the capacity to conserve the city's identity and authenticity while allowing modernization.

The significance of the results can be multifold. On one hand, the unique character of our historic urban centers could be conserved. On the other, the natural evolution of the city as a result of the continuous changes in the socio-economic development can be facilitated. This can have favorable impact on the conservation of historic urban centers, especially in developing countries, where the historic form and modernization could be integrated without the loss of the valuable historic landscape.

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