

HOUSING QUALITY IN THE CITY OF BERAT: AN ANALYTICAL APPROACH OF TYPOLOGY AND CONSTRUCTION

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Abstract

The city of Berat has a long urban history rooted deep down in ancient times. Different factors indicated the formation and development of the city itself during his existence. Berat is well known as a city that began as a city of fortification and churches, but as time went by, the city in his architectural layers had saved with jealousy layered a fortune of the domestic architecture. Being part of the Ottoman Empire for almost five centuries, it is obvious that traces of the previous eras will be 'covered' with the Ottoman presence, evident, especially in the vernacular architecture.

This article offers an insight into Ottoman-era patterns appearing in the town of Berat as a marvelous example of the Ottoman-era vernacular house in the Balkans.

Keywords: Berat Ottoman era houses, typologies, building materials, vernacular architecture

1 Introduction

Many scholars in their publications historically deal with the creation and development of Berat as a city, the time, and the different circumstances under which it was created, shaped, and formed since the 5th century BC. The authors point out that the history of cities in general also recognizes, from the beginning, the interweaving of different cultures that are formed, and this seems to be a point of research interest to clearly define the influence of different cultures on shaping the city during the time they culminated. Such a case study is Berat which was first recognized in the form of an Illyrian city, then as a Roman city, and later after the 14th century also as a renowned center of the Ottoman period (Mesi, Baçe, Riza, 2011).

Researchers are studying the development of the city after the 14th century to determine the factors that led to its new shape. They even think that cities that fell under the Ottoman influence knew, on the one hand, how to preserve the characteristics of their early Illyrian-Byzantine shape, and on the other hand, how to undergo a visible transformation and expansion when they fell under the Ottoman rule, always trying to fulfill new requests that appeared over time (Duka, 2001). Research by these scholars is mainly focused on the clarification of the basic characteristics of these cities before the Ottoman rule, but also to describe and interpret transformations that cities underwent while they were under Ottoman rule including the period between the 14th and the 20th centuries.

Berat as a city is connected to Osum Valley and it is located on the side of steep cliffs with neighborhoods full of windows known as Gorica neighborhoods, Figure 1. There was a road network connecting Berat with Apollonia, Dyrrah (Durrës), and Aulona (Vlora) since ancient times, and later with Skampini (Elbasan). The main road priority of the city was the road to Korca and Ohrid. Roads from Ohrid connected Berat with Thessaloniki and Constantinople, Figure 2. The city has a history of over 2000 years, and during Ottoman rule, it reached its peak both in size and architectural expression. Berat was an example of organic urbanism created over centuries with house plan typology and the use of basic construction materials (stone, soil, and wood) for the implementation of building systems which were considered the latest achievements in the entire empire (Riza, 1980).



Figure 5. Berat, Edward Lear, 1848

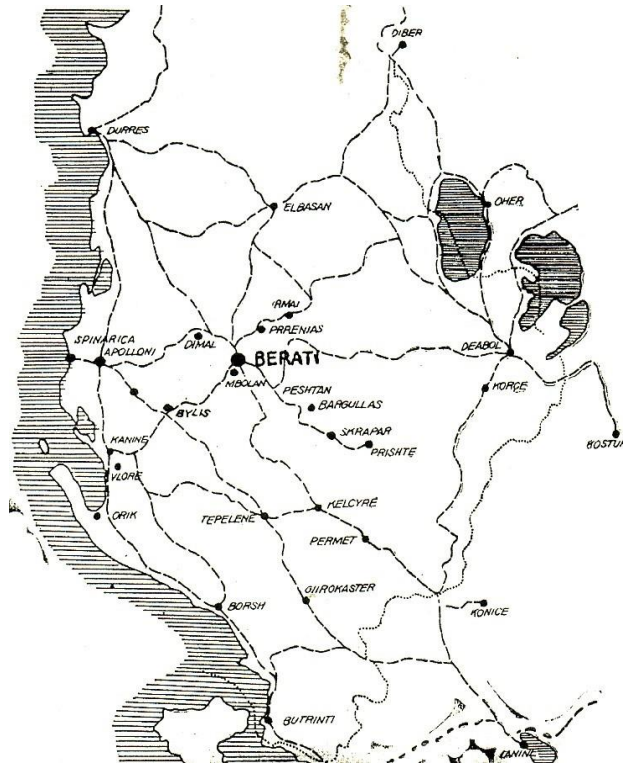


Figure 6. Berat and the streets (Meksi et al; 2011)

Outside the castle, through spatial development, Berat represents more or less a concept of an Ottoman city. Centers (squares) continue to be a collection of houses in neighborhoods that create the entire city through a well-developed organic scheme. The morphology of the terrain seems to have played an important part in creating the physical shape of the city itself. Other decisive factors that should be emphasized in developing its physical appearance are climate, geography, and historical circumstances.

2 Berat, the city of one above another window, under the Ottoman rule

Historiography notes that in 1417 ‘a large Turkish crowd took over the city of Berat, which due to its great strategic and economic importance, was treated with ‘care’. Christians have recognized the right to preserve the corporate system, rites, and customs, which made it possible for Berat to be fully included in the Ottoman administrative system, turning it into the capital of one of the 10 vilayets of the sanjak of Albania, the Berat vilayet.

Having a rich history as a city since Illyrian times, Berat had developed a high level of art and culture through which the nation was initially identified, followed by the place that was developed over centuries, Figures 3 and 4. A culture created early on and for a long time, after the fall of the city under Ottoman rule, was influenced by demands of the new culture, which the city recognized by the end of the 14th century. From this period onwards, we find Berat developing as a city with a mixed culture of pre-existing elements and the new culture brought by the new Turkish rulers. Found between these two cultures, Berat can now be analyzed as a city in which cultural dualism begins to emerge, a mix between the old and the new. Coexistence is a term that encapsulates mutual both in terms of culture, religion, and architecture.

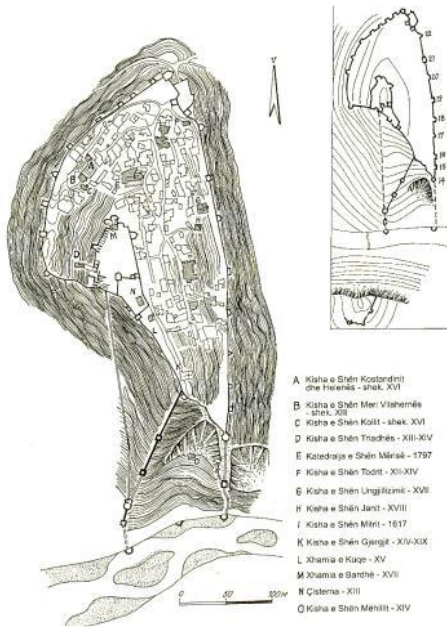


Figure 7. Berat, early stage of the castle (Meksi et al; 2011)



Figure 8. Berat, areal view of the castle (Meksi et al; 2011)

Based on descriptions from various scholars, when the Turks conquered the city, they encountered a developed city with a highly developed culture, so according to descriptions of the time, Turks did not have to build the city from scratch, Figure 5. This leads to the conclusion that the city would undergo the process of Ottomanization, instead of being built according to a new culture brought by the new rulers (Baçe, 1996).

It is a well-known fact that early Ottoman cities were characterized by the phenomenon that they were created and later developed without defensive walls (without fortifications) which, if they existed, would have forced city builders to develop within the surrounding walls (Cerasi, 2005). Ottoman invaders in Berat found a model of a city with surrounding walls and organization of all activities within them. These surrounding walls were ‘breached’ by the roads coming from outside the walls, whereas inside they represented the main arteries of the city, strategically positioned to connect the city with other administrative centers of the time.



Figure 9. Berat, the expansion of the city (Meksi et al; 2011)

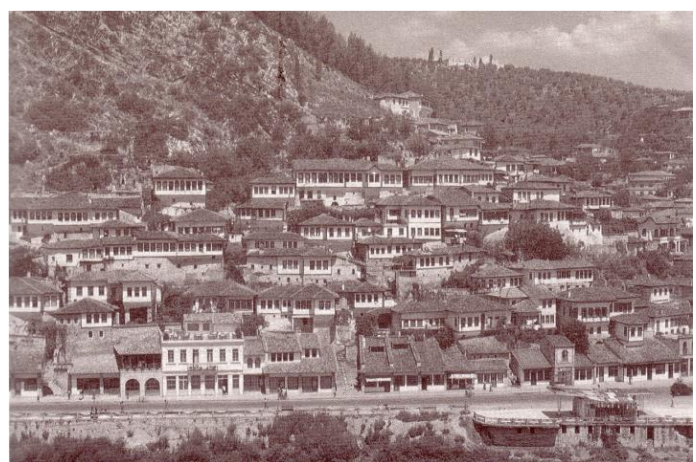


Figure 10. Berat, view after the city expansion (Meksi et al; 2011)

Berat is a city where houses are found in high density, one close to another, all oriented towards the sun, built one on top of the other to ensure good visibility and fascinating panorama. The division of plots has irregular shapes and this dictates the irregular way of the ground floor plan, which usually remains similar to the shape of the plot. Houses, even under the influence of the topography – large slope terrains – have relatively small ground floor surface area which expands and gains regular form on the upper floors. This was achieved by cantilevering the upper floors over the ground floor, mastering the most regular geometric shapes of the floor plan. The terrain dictates that all houses face good views and light. Surprisingly, despite their minimum ground floor dimensions, houses have a part reserved for gardens.

Built under these conditions, houses form a unit nucleus that is often repeated, thus creating urban similarity. Besides churches, which were early buildings connecting families and religion, the newly built mosques for the sake of the new religion constitute the new form of social life in the city. Religious objects on one side and residential houses on the other side create important unity in the city.

Under Ottoman rule, Berat managed to expand as a city with a rich architectural heritage, the influence of which can be traced in new creations until the 20th century. Through anonymous master craftsmen who passed down the craft of construction from generation to generation, the city created a residential architecture that best reflects the coexistence between the past and the present, Figure 6.

3 Houses – the pride of Berat

In his study on the typology of Ottoman houses, Sedat Haki Eldem suggests that there are three types of houses from the Ottoman period, which, apart from Turkey, are present in the wider Balkan territory, including Albania. According to Eldem, all three categories of houses have in common the chardak (open hall), as a part that connects with other spaces within the house. Similarities found between the types of houses in the Balkans and those in Turkey are a result of the shared geographical region (Eldem, 1954).

Houses in Berat represent a typological variation based on historical, climatic, economic, and topographic factors. Typical houses consist of a ground floor and one or more additional floors with a very small surface area because of the limited plot size or the morphology of the terrain. Ground floor plans often exhibit asymmetry and irregular geometric floor shapes. The upper floor area above the ground floor is extended with cantilevers, and the floors are usually improved, thus obtaining regular geometry. The construction materials used for the houses are stone, wood, and clay. The ground floor is made of stones, employing a massive construction system that transitions to a bondruk – construction system with a wooden skeleton. Bondruk has positive properties that craftsmen utilize to enhance flexibility and achieve high values in creating functionality and emotions within the created spaces. Berat, in addition to its architectural values in fortifications and religious objects, knows how to surprise with its urban residential constructions (Riza, 1981).

Houses are the most widespread construction category in Berat. Based on the above-mentioned factors, almost all scholars categorize Berat's houses into 4 main groups:

1. Houses with a chardak (hall)
2. Houses closed with half-floors and full floors
3. Houses with distinctive space connections
4. Residential compounds as a rare category

Each of these categories is a result of the influence of different factors over time on the compositional, architectural, volumetric, and aesthetic formation of the houses. Each house in Berat has two space categories that contribute to their formation: primary spaces, which include the fireplace (hearth area), room (guest room or 'oda' in Alb.), chardak, divan (closed sitting space), as well as secondary-auxiliary

spaces, including the cisterns (water tank, water pump), sanitary facilities, waiting room (strategically positioned for better visibility).

Houses with a chardak, were preferred by land owners, the wealthier class of the city. Large house dimensions, wide and open surfaces for seasonal use, their architectural shape, as well as interior and exterior decorations are clear indicators in this regard. This type of house takes its name from the presence of the chardak as a constituent element of the house. Depending on the position of the chardak in the house plan, we distinguish three types of houses with chardak: houses with a chardak on the front, Figure 7 (a), with a chardak on one side Figure 7 (b) and with a centrally-placed chardak, Figure 7 (c). They date back to the late 18th century and early 19th century (Lazimi, 1976). As they were used by the wealthy class, they were built on flat land with noticeable plot sizes and bigger houses to fulfill the functional requirements of their owners. The chardak serves as the central connecting element with the other spaces, and it is usually open. To facilitate movement between the rooms during cold weather, there were direct connections between them, avoiding the need for people to go outside to the chardak. The chardak was considered a representative space of the house, so it had a pronounced position, size, and decoration as a constituent element of the house. Its position and size within the house plan, as well as the effort given by anonymous builders for its decoration, speak of a pronounced dose of monumentalism in such typical Berat houses, Figure 8 (a), (b), and (c).

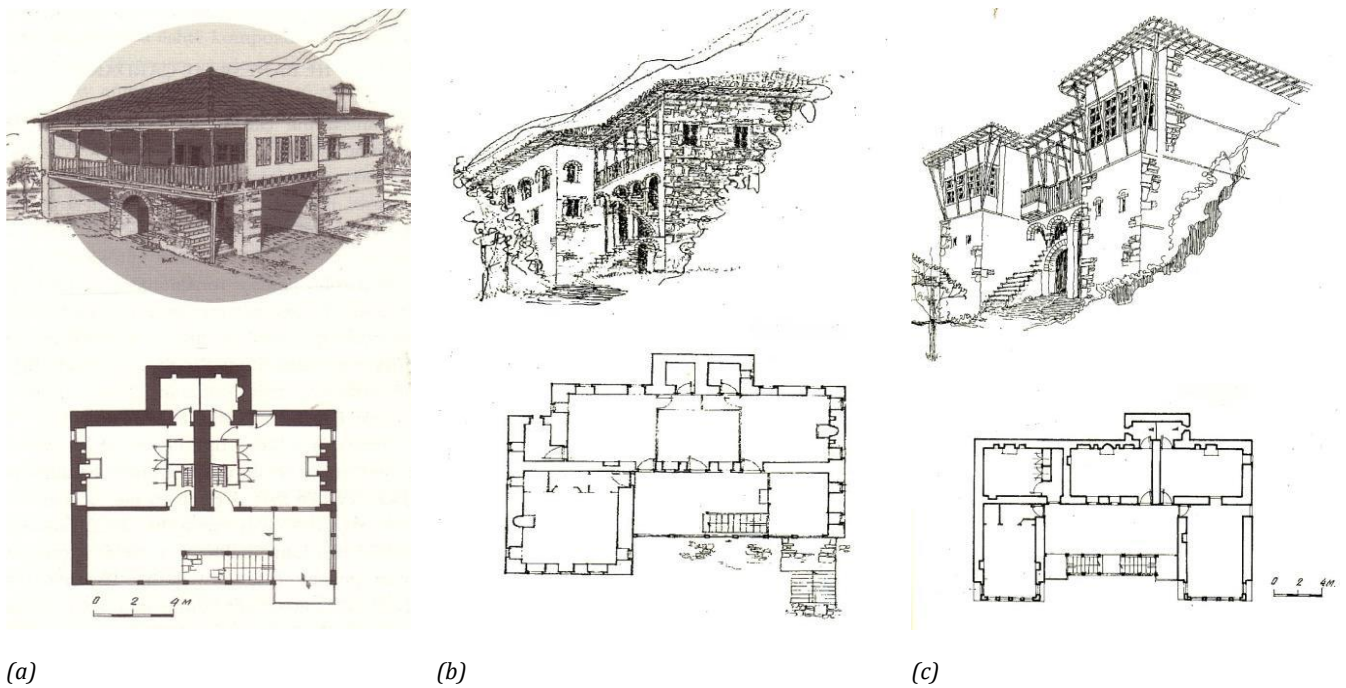


Figure 11. Houses with a chardak on the front (a), with a chardak on one side (b), and with a centrally-placed chardak (c). (Meksi et al; 2011)



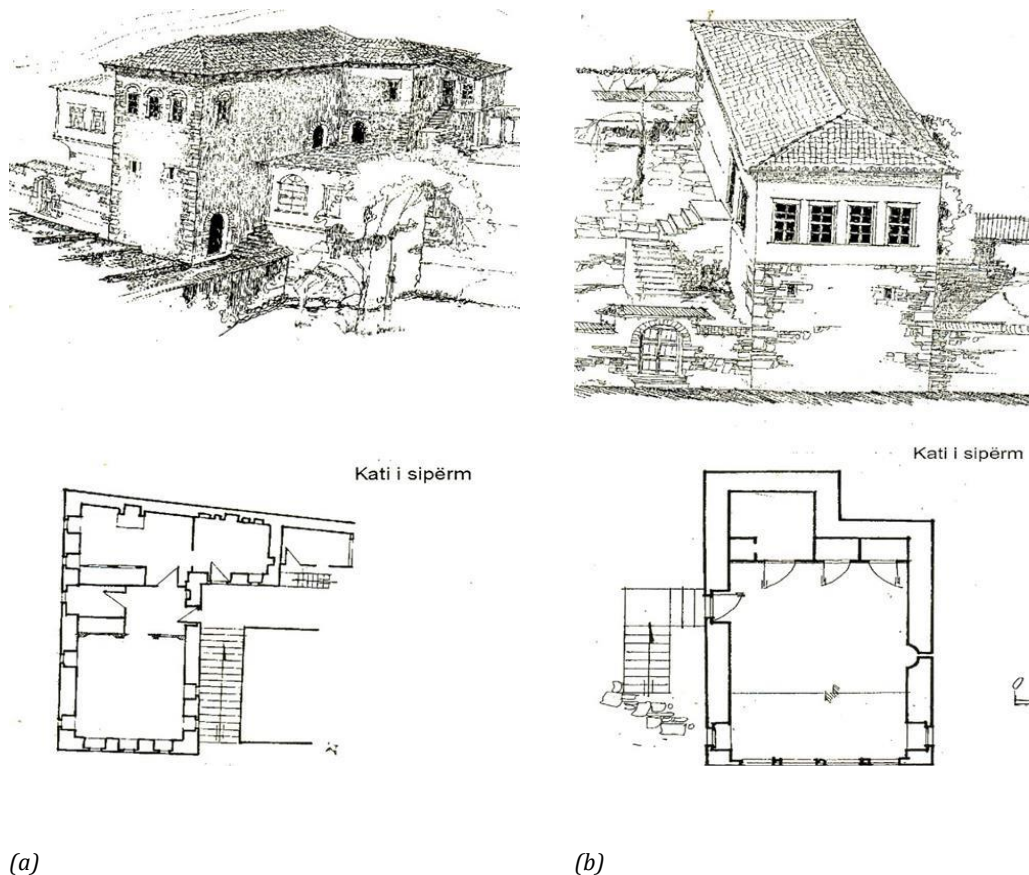
(a)

(b)

(c)

Figure 12. Houses with a chardak on the front (a), with a chardak on one side (b), and with a centrally-placed chardak (c).
(source: authors)

Houses closed with half floors and full floors, belong to a lower class and are located on steep terrain which dictates the size, shape, and functional distribution of the house itself, Figure 9 (a) and (b). In places where builders found a bit more space, they developed a type of house with an elongated extension, where different functions are placed along the longitudinal axis. In cases with terrains with no large surface area, builders would develop a vertical floor plan. These houses are usually enclosed with walls mostly made of stones, while on one side, the side towards which the houses are facing, the wall is made of wood. They have reduced size as a result of the morphology of the terrain, as well as the economic state of the owner, Figure 9 (a) and (b). They date back to the 17th century (Meksi et al. 2011).



(a)

(b)

Figure 13. Houses closed with half floors (a) and full floors (b). (Meksi et al; 2011)



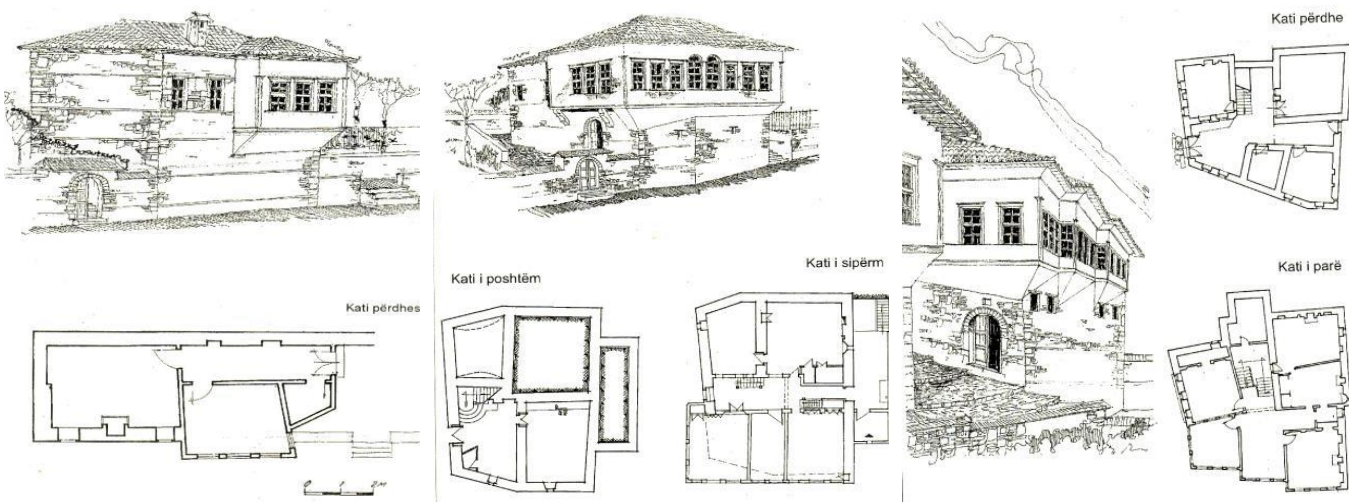
(a)



(b)

Figure 14. Houses closed with half floors (a) and full floors (b). (source: authors)

Houses with distinctive space connections, are buildings from the late 18th and early 19th centuries. They are characterized by distinctive compositional construction achievements based on their size, shape, and terrain where they are built. The genius of the craftsmen has managed to create compositions with no repetitions, which are not typical, and always feature new elements in terms of composition, functional arrangement, volume dynamism, surprising facade shapes, and rare expression of emotions. The genius of the anonymous craftsmen is seen in the perfect functional solution within very small spaces, an architectural composition of grandeur in such delicate situations, influenced by both the morphology of the terrain and the reduced space for action, Figure 11 (a), (b) and (c). These houses usually have irregular floor plan shapes, exhibiting dynamism and flexibility in their construction, buildings where the first floor above the ground floor corrects the floor plan shape as well as the surface area which increases as it goes up. Builders achieve this by using cantilevers, made possible by the bondruk system (Mesi, Baçe, Riza, 2011). These cases present unique solutions, with each case treated differently – adapting to all circumstances under which the house is built. In each situation, the builder manages to create great content in all elements of the house’s composition. Each house is a special case of study, Figure 12 (a), (b), (c).



(a)

(b)

(c)

Figure 15. Houses with a chardak on the front (a), with a chardak on one side (b), and with a centrally-placed chardak (c). (Meksi et al; 2011)



(a)

(b)

(c)

Figure 16. Houses with a chardak on the front (a), with a chardak on one side (b), and with a centrally-placed chardak (c). (source: authors)

Residential compounds, are considered to be very specific constructions in Berat. We find the owner's charm, wealth, image, and generosity intertwined in them. Therefore, such compounds are located in the city center, occupying a large space, having a grand entrance, and in the front yard there is a guest house (b) and a watchtower. The reason for this is for guests to feel safe, and for the rest of the house which is much bigger than the first one to be protected from the tower (c). Behind the watchtower, there is an entrance that leads to what we can freely be called the private part of the house (a). Behind a large yard and around it, there is a large number of rooms arranged around the chardak as the central element of the house. This way of living represents a complex version of houses with chardak that with their size, aesthetics, and functional distribution emphasize the image and generosity of the owner, and later the need for representation (image creation), housing, and fortification, a rare case where these three functions are brought together in a single building, Figure 13, (Meksi et al., 2011).

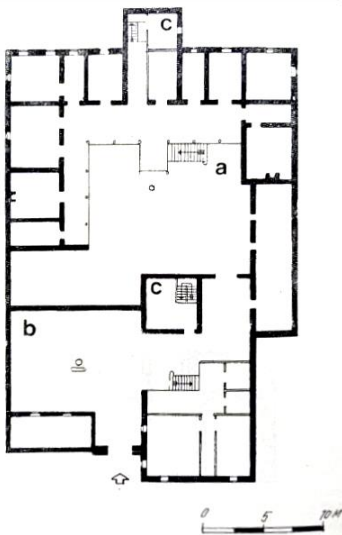


Figure 17. Residential compounds, private part of the house (a), guest house (b), and the tower (c). (Meksi et al; 2011)

4 Construction system, materials, and techniques

Based on field research, it results that craftsmen who initially built Berat were familiar with the construction systems and materials that were used in the Byzantine period buildings. Later, a construction technique was added – the Ottoman construction technique. The massive system was used for the walls in the first level, mainly on the ground floor, while the bondruk system was used on the other floors above the ground floor. While the former provided stability and durability, the bondruk system was known for the ease and flexibility it offered on the other floors above the ground floor. Stone and wood were the materials used for this purpose. Stone was primarily used for the construction of the first level, and wood for the other following floors. Such houses in Berat responded best to the annual climate changes in the region. Mud was usually used as a binding material when the stone was the main material, and in other cases as a filling material – in the bondruk system. Glass as a material was used later during the 19th century when it started being present in Balkan cities and was mainly used in window frames (Samimi, 1971).

Over time, there was a change in the techniques used for the construction of buildings of that time in Berat. For the construction of walls with a bondruk system, and the space between the wooden construction elements, instead of being filled with bricks or creating a wall with wattle wall, listello (wooden planks) were used on both sides. There is also a tendency for changes in the search for aesthetics both outside and inside the house. The supporting structure of the bay window is covered with planks, on top of which mortar is placed, and the construction of wide eaves is hidden in the same way. Wooden slats are used around windows, an aesthetic element of the window. Mortar is used for front walls in almost all houses, if not for all floor walls. Fixed furniture in rooms is replaced with new furniture, products of modern times.



(a)

(b)

(c)

Figure 18. The construction of walls with a bondruk system (a), stone used for the construction of the first level, and wood for the other following floors (b) and (c). (source: authors)

Conclusions

Based on the research on house types in Berat, the following conclusions can be drawn:

1. In the city of Berat, the ancient period of its establishment remains easily identifiable, while the rest reflects its Ottomanization under the new rule.
2. Under Ottoman rule, Berat had its specific urban development, which appropriately followed the morphology of the terrain during the creation of urban space circulation.
3. Physical manifestations of buildings were mainly influenced by climatic conditions, economic power, and specific characteristics of the terrain where they were built.
4. The street patterns directly influenced the house plan typologies, having limited space on the ground floors.
5. The chardak is an element that prevails in the domestic architecture of the Ottomans and was used as an element in all its territories, where Albania and its cities were no exception.
6. One thing that remains evident is the fact that houses were built under Ottoman rule by local craftsmen using local techniques and materials, thus leaving traces of the local art of building.

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