

Received: 06-09-2022 **Accepted:** 16-10-2022

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Bosnian Chardaklia House: Brkovic Family House in Vares

Ahmet Hadrovic

Faculty of Architecture, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

Corresponding Author: Ahmet Hadrovic

Abstract

The Bosnian Chardaklia House occupies a prominent place in the wide variety of architectural programs of the traditional architecture of Bosnia and Herzegovina. With regard to its spatial organization, construction, materialization and equipment of its interior spaces, the Bosnian čardaklija house is the most authentic expression of the natural and social environment of Bosnia and Herzegovina and the complex phenomenon of its man and his primary social community - the family. Built from natural materials taken on site, carefully situated in the natural environment, designed according to the conditions of

the natural environment, this house is an example of bioclimatic architecture. In the wide range of her architectural-spatial solutions, her most developed type anticipates the 'family in its growth and development', from numerous 'nuclear' families to several families 'under one roof' derived from the nuclear family.

The house of the Catholic Brkovic family in Vares, in terms of its spatial organization and equipment, is a transitional form of the Bosnian Chardaklia House towards the oriental-type town house in Bosnia and Herzegovina.

Keywords: Bosnian Chardaklia House, Vares, Brkovic family

1. Introduction

The Brkovic family house is located in the street Nikovac no. 7 in Vares (Fig 1 and 2). Together with three other houses in its vicinity, this house forms an architectural-urbanistic ambient unit of exceptional value [1]. Although over time there have been some interventions in its original state (where the replacement of the wooden cover with salonit corrugated panels is the most noticeable), its fundamental values have been preserved, both in disposition and materialization. With the exact overhang of the ground floor and first floor towards the street and the divanhana from which the views are directed down Nikovac Street and the slope on the left bank of the river Stavnja, this house inherits some of the spatial and form values of the oriental-type townhouses that we meet in the larger cities of Bosnia and Herzegovina. The house was built in the middle of the 19th century¹. The Brkovic family house is located in the city quarter ('mahala') Nikovac, about 500 m from the Vara Cathedral and the old church of St. Mihovil (geographic coordinates: 44°09'54.74"N, 18°19'44.92"E, Elevation: 853 m). Church of St. Mihovil was built at the beginning of the 16th century, certainly before 1516 [2]. After that, it was repaired several times, and on October 9, 2003, it was declared a national monument of Bosnia and Herzegovina [3]. This church is the "headquarters" of the Catholic population of Vares and, as such, cannot be bypassed from any story (including the story about the Brkovic family house) that deals with the human being of the city of Vares.

The house he designed and built, in which he lives in the complexity of his overall being, is the most concrete tangible image of a man, his family, and the immediate and wider community in which he lives. By getting to know the Bosnian house of čardaklia, one can also get to know those dimensions of the being of the Bosnian man, which are not directly written about here [4, 5, 6, 7, 8, 9, 10].

¹ The author visited this house several times, in different seasons. The house has been out of use for a long time, so it was difficult to find its interior plan and equipment. The architectural recording of the object was done by architecture students Sonja Brkovic, Nejra Basara and Samira Sukanovic (June 2016), based on whose sketches the Author made drawings in CAD. Student Sonja Brković belongs to the Brković family - the owners of this house.



Source: https://slidetodoc.com/regionalna-podjela-bosne-i-hercegovine-geografske-regije-bosne/ (left) Google Earth: Accessed 7/4/2022 (right)

Fig 1: The Brkovic family house in Vares. Location



Source: Author (4.2.2016.)

Left: View of the house from the east, Right: View of the house from the northwest

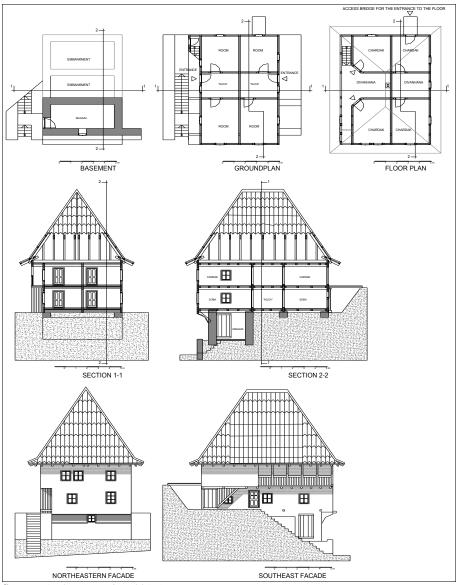
Fig 2: The Brkovic family house at 7 Nikovac street, Vares. Exterior

2. Spatial-shape characteristics of the house

According to its layout and architectural physiognomy, the house of the Brković family in Vares belongs to the type of three-story house with a terrace, which is vertically developed through the basement, ground floor and first floor (Fig 3). The house is situated on an extremely steep terrain, so its spatial development through three floors perfectly corresponds to the terrain. The basement of the house is a large storage room (storage), a developed outcrop of one tract of the ground floor. The walls are made of rough stone and are about 80 cm thick. The walls are plastered on the outside with rough cement mortar and whitewashed. The ground floor with its two tracts is developed on the ground, while one tract is developed above the basement. The houses were initially built in such a way that they could be used by three separate families: one residential unit consists of the northwest half of the ground floor (with the entrance

on the northwest side of the building), the second unit consists of the southeast half of the ground floor, while the third residential unit is developed on the floor of the building, which is accessed by wooden stairs. by the staircase from the ground floor.

The residential units on the ground floor consist of one access room ('house'/'kuca') in the central section of the base, where there used to be a fireplace, and two rooms each, in the other two sections of the horizontal plan. The residential unit on the first floor consists of an access staircase with a sofa bed and four rooms (garage). It is interesting that over time the need for a fourth independent residential unit was expressed, and it was realized in the northwest half of the floor, where the benefits of the steep terrain were used to ensure easy access - a bridge on the southwest side of the building (Fig 4).



Source: Author (Drawing, 2016.)

Fig 3: The Brkovic family house in Vares. Disposition



Source: Sonja Brkovic, architecture student (June 2016)

Left: Divanhana In the middle and on the right: The subsequently arranged entrance to the floor level (for the fourth residential unit)

Fig 4: The Brkovic family house at 7 Nikovac street, Vares. The main divanhana and subsequently built access (bridge) for the "new" residential unit

3. Construction and materialization

The construction and materialization of the house of the Brković family in Vares is typical for the most developed type of Bosnian čardaklia house: the walls of the basement are made of stone (Fig 5, left), and the walls of the ground floor and first floor are made of a double skeleton (bondruk) with adobe and wattle infill with rammed earth (Fig 6). The staircase and divan are made of wood, which especially underlines the idea of the appearance of a classic čardaklia

(Fig 5). The mezzanine structure is made of wooden beams with a floor made of massive wooden planks (Fig 7 and 8). In the structure of the mezzanine structure towards the attic, a layer of compacted earth with the addition of sawdust, straw and chaff was incorporated, which improved the heatinsulating properties of this fence surface (from low temperatures in winter and overheating in summer). The roof is voluminous, high and steep, structurally simple ('rafters with crucifix'/'rogovi sa raspinjacom'), (Fig 9).



Left: The Brkovic family house at 7 Nikovac street, Vares. Treatment of the outer surface of the stone wall, **Right:** Wooden staircase (basamacs) ground floor-floor

Fig 5: The Brkovic family house in Vares. Some elements of the physical structure of the house



Source: Author (4.2.2016.)

Fig 6: Physical structure of the house



Source: Sonja Brkovic, architecture student (June 2016)

Fig 7: Floor-attic construction



Source: Author (4.2.2016.)

Fig 8: Construction in part of the divanhana console



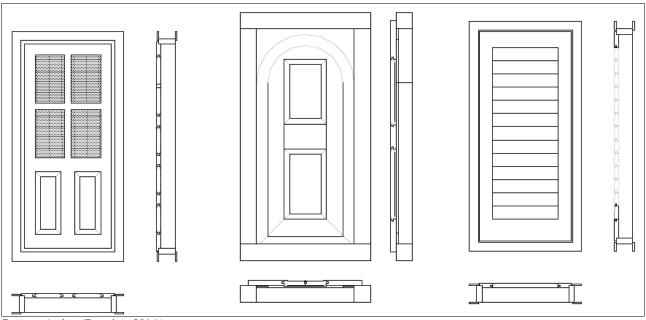
Source: Sonja Brkovic, architecture student (June 2016)

Fig 9: Roof (rafters with crucifix)

4. Doors and windows

The opening elements, doors and windows, follow the solutions we encounter on the čardaklia house in other parts

of Bosnia and Herzegovina. Some doors of archaic design have been preserved (Fig 10 and 11), while some of them have been replaced by doors of newer design (Fig 12).



Source: Author (Drawing, 2016.)

Fig 10: Different door designs



Source: Sonja Brkovic, architecture student (June 2016)

Fig 11: Doors in chardaks



Source: Nejra Basara, architecture student (June 2016)

Left: Entrance door on the ground floor, Right: Subsequently activated residential unit in the northwestern part of the floor

Fig 12: Different door designs

The original wooden windows have been preserved. The windows are single, usually double-hung, with single glazing. The windows are placed flush with the outer

surface of the wall. Some windows have a protective grid made of wrought iron (Fig 13 and 14).





Source: Author (4.2.2016.)

Fig 13: Windows on the ground floor



Source: Author (4.2.2016.)

Fig 14: Two-leaf (double) window on the first floor and a window with iron bars

5. Surface treatment

Surface treatment is typical for the Bosnian čardaklija house, with some specifics of the houses in Vares: stone

wall painting, colored painting in the rooms (chardaks), wooden floor covering with mats (Bosnian kilim), wooden ceilings ("shishe"), (Fig 15, 16).



Source: Samira Sukanovic, architecture student (June 2016)

Fig 15: Wall surface treatment with painting, wooden ceiling, window curtains



Source: Nejra Basara, architecture student (June 2016)

Fig 16: Wooden floor (floors)

6. Space equipment

Among the elements of space equipment characteristic of

the Bosnian čardaklija house, the most interesting are brick ovens (furuna) with ceramic "pots"/"loncici" (Fig 17).





Source: Sonja Brkovic, architecture student (June 2016)

Fig 17: Brick oven with clay "pots"

Some elements of household furniture have also been preserved, where a wooden chair of "european design" was a matter of prestige at the end of the 19th and the beginning of the 20th century in Bosnia and Herzegovina (Fig 18, left). It is interesting that this type of chair (or one similar to it,

from the same historical period) can also be found in other Bosnian čardakli houses whose owners are members of the Roman Catholic religion ^[1]. Examples of "home treasuries" ("chests", "sehare") in which family valuables were kept have also been preserved (Fig 18, right).



Source: Sonja Brkovic, architecture student (June 2016)

Left: Wooden chairs, Right: Wooden chest (sehara)

Fig 18: Some elements of home equipment

7. Current condition and purpose of the house

The Brkovic family house in Vares, although ruined, still has a relatively well-preserved physical structure. This building is about 200 years old, and in itself represents an exceptional historical-architectural and ambient value that should first be legally protected, and then included in everyday functional life.

8. Conclusion

The Brkovic family house in Vares was built about 200 years ago and from then until today it survived the conditions of turbulent social threats (Ottoman Empire-Austro-Hungarian Monarchy-Kingdom of Yugoslavia-Socialist Federal Republic of Yugoslavia-Sovereign Bosnia and Herzegovina) where the transition from one phase to another was marked by wars. This fact was the Author's main motive for this house to be the subject of a scientific review. The house of the Brković family in Vares is an example of a traditional Bosnian čardakli house and an example of bioclimatic architecture. In accordance with the natural and social environment, this house is an example of a richer version of the Bosnian čardakli house, which has some characteristics suitable for an oriental-type town house: the development of the vertical plan of the house through the basement, ground floor and first floor, polyvalence of the main rooms, semi-open areas (sofa rooms) that have a function communication areas and spaces for rest in contact with nature (and rich urbanism vistas). The features of the bioclimatic architecture of this house are [11].

- Construction and materialization of the house, where traditional construction methods and many years of

- experience are used and the use of all materials taken from the immediate natural environment. In this way, this house looks like a "natural environment created by man";
- Ensuring comfort in the house (in all seasons) is achieved by adequate design of the house, the materialization of its envelope and the use of energy from the immediate environment (firewood) [12];
- Thanks to its relatively stable physical structure, the house still stands in its place, although it is not in use;
- "Embodied spiritual energy of the house" (memory of childhood, parents and relatives, precious events) relaxes people and makes them especially convinced of their loyalty to their ancestors. Although this house has not been used for a long time, it stands in its place as a "family museum" that preserves the memory of the Brkovic family for 200 years.

9. References

- 1. Hadrovic A. Bosnian Chardaklia House: The Colic Family's House in Vares. SEE J Archit Des. 2022; 10062:1-6.
 - https://seejad.eu/index.php/seejad/article/view/6026/552 1, Accessed 7/5/2022
- 2. Kresevljakovic H. Vares as the main center of iron craft in BiH, Gazette of the National Museum of BiH 54, Sarajevo, 1942. (In Bosnian)
- 3. Commission for the Preservation of National Monuments of Bosnia and Herzegovina, Decision No. 08.2-6 971/03-5 of October 9, 2003, Sarajevo. (In Bosnian).

- http://old.kons.gov.ba/main.php?id_struct=6&lang=1&a ction=view&id=1855 Accessed 7/4/2022
- 4. Hadrovic A. Bosnian Chardaklia House, Sarajevo, Faculty of Architecture, University of Sarajevo, 2017, 319-339. (In Bosnian)
- 5. Deroko A. Folk Architecture, vol. II, Belgrade, Science book, 1964, 28, 69. (In Bosnian/Serbian)
- 6. Kadic Dr M. Old country house in B&H, Sarajevo, Veselin Maslesa, 1967, 113. (In Bosnian).
- 7. Klaic V. History of Bosnia, phototype edition from 1882, Sarajevo, Svjetlost, 1990, p345. (In Croatian),
- 8. Imamovic M. History of Bosniaks Bosniak, Sarajevo, Community of Culture Preporod, 1997, p636. (In Bosnian).
- 9. Malcolm N. Bosnia, short history Buybook, Sarajevo, Memory Library, 2011, p29. (In Bosnian)
- Hadrovic A. Defining Architectural Space on the Model of the Oriental Style City House in Bosnia and Herzegovina, Serbia, Montenegro, Kosovo and Macedonia, Booksurge, LLC, North Charleston, SC, USA, 2007, 9, 14-15 + 16-18.
- 11. Hadrovic A. Bioclimatic Architecture, searching for a path to the Heaven, Booksurge, LLC, North Charleston, SC, USA, 2008, 4-8 + 132-133.
- 12. Hadrovic A. Architectural Physics, Sarajevo, Faculty of Architecture University of Sarajevo, 2010, 116-120.