



## Bosnian chardaklia house: The kasumovic family house in vrnograc

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### 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 chardaklia 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.

The Kasumovic family house in Vrnograc was built at the end of the 19th century, northwest of the medieval fortifications and the present-day town of Vrnograč, on the level terrain of the slope with exposure to the southeast (Geographic coordinates: 45°09'52.85"N, 15°56'57.89"E, Elevation: 221 m). From the house there are wide and beautiful vistas in a 180° field of vision.

The house belongs to the distinguished Kasumovic family, which traditionally had a shoemaker's workshop in Vrnograc.

The Kasumovic family house in Vrnograc, according to the characteristics of the horizontal plan of the ground floor, belongs to the type of two-story bosnian chardaklia house with the specifics of the houses of the Bosnian Krajina. The house is vertically developed through the ground floor and first floor.

**Keywords:** Bosnian Chardaklia House, Vrnograc, Kasumovic family

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### 1. Introduction

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 Chardaklia 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-family<sup>[1, 2, 3, 4, 5]</sup>.

The house of the Kasumovic family in Vrnograc was built at the end of the 19th century, northwest of the medieval fortifications and the present-day town of Vrnograc, on the level terrain of the slope with exposure to the southeast (Geographic coordinates: 45°09'52.85"N, 15°56'57.89"E, Elevation: 221 m). From the house there are wide and beautiful vistas in a 180° field of vision (Figures 1-4).

The house belongs to the distinguished Kasumovic family, which traditionally had a shoemaker's shop in Vrnograc<sup>[1]</sup>.

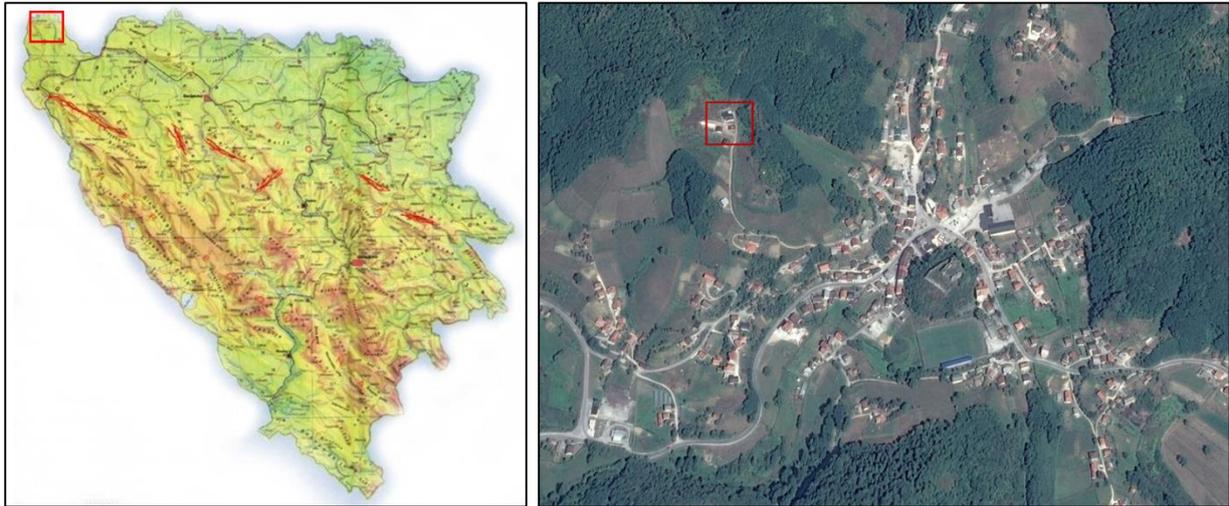
By presenting the physical structure of a bosnian chardaklia house, we learn many details about the social environment in which the house was created, about the man for whom the house was built and about the people who built it<sup>[6, 7, 8, 9]</sup>.

### 2. Spatial-shape characteristics of the house

The Kasumovic family house in Vrnograc, according to the characteristics of the horizontal ground floor plan, belongs to the type of two-story bosnian chardaklia house with the specifics of the houses of the Bosnian Krajina<sup>[3, 4]</sup>. The house is vertically developed through the ground floor and first floor (Figure 5).

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<sup>1</sup> The author visited this house on July 25, 2016 and made an architectural recording



**Sources:** <https://slidetodoc.com/regionalna-podjela-bosne-i-hercegovine-geografske-regije-bosne/>, Accessed 8/8/2022, (left)  
Google Earth: Accessed 8/8/2022 (right)

**Fig 1:** The Kasumovic family house in Vrnograc. Location



**Source:** Author (7.25.2016.)

**Fig 2:** The Kasumovic family house in Vrnograc. View from the southwest direction



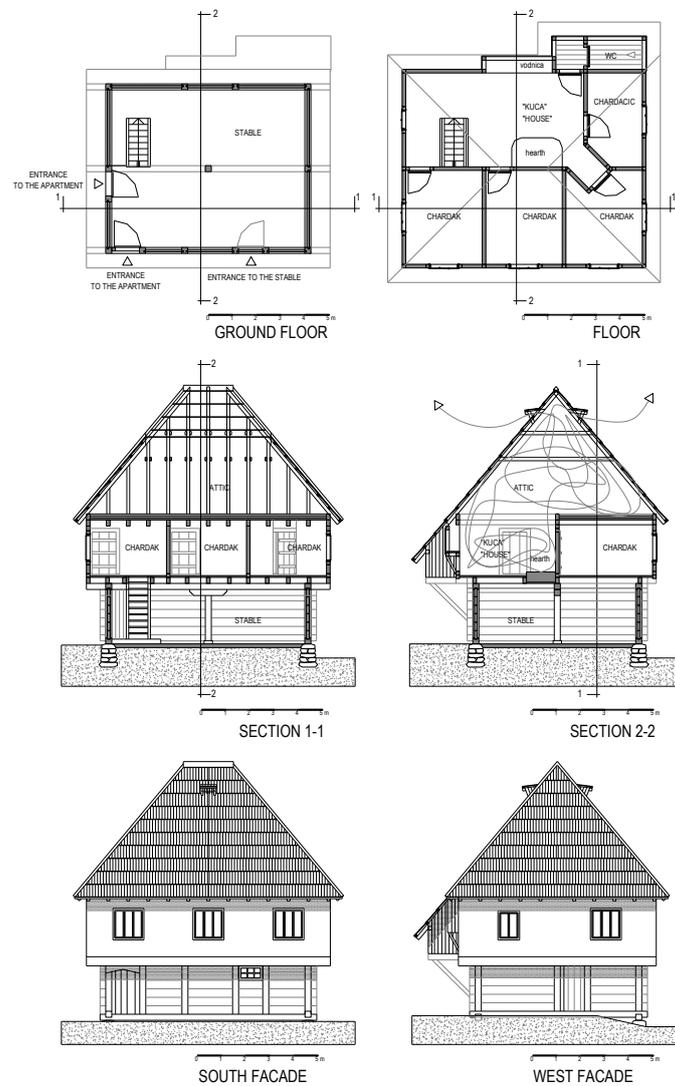
**Source:** Author (7.25.2016.)

**Fig 3:** The Kasumovic family house in Vrnograc. View from the northwest direction



Source: Author (7.25.2016.)

Fig 4: The Kasumovic family house in Vrnograc. View from the northeast



Source: Author (drawing, 2016.)

Fig 5: Kasumovic family house in Vrnograc. Disposition

The specifics of the Bosanska krajina house refer to the arrangement of the ground floor as a barn, and the arrangement of the first floor as a living space. Another

specific feature is the cantilevering of the first floor into the space outside the contour of the ground floor (in the case of this house by about 50 cm).

On the ground floor of the house, there is an entrance lot for the living space on the first floor, and a stable for cattle. It is interesting that in this house there are two entrances to the apartment, on the sides of the ground floor, which form an

angle of 90°. The door for the entrance to the barn is far from the door for the entrance to the living space, but it was placed on the same ground floor level (Figures 2, 6).



Source: Author (7.25.2016.)

**Fig 6:** The Kasumovic family house in Vrnograc. The ground floor is arranged as a stable. A column in the middle of the barn is a typical solution in the Krajina chardaklia house

From the entrance area on the ground floor (the hayat) a single-legged staircase leads to the floor where the apartment is arranged. First, the staircase leads to the relatively large

area of the 'house' with a fireplace, on which are oriented the four porches and the annex area with the toilet, on the northwest side of the first floor (Figures 7, 8).



Source: Author (7.25.2016.)

**Fig 7:** The Kasumovic family house in Vrnograc. One-legged wooden staircase from ground floor to first floor



Source: Author (7.25.2016.)

**Fig 8:** Exit of the staircase to the area of the 'house' on the first floor

In the wall of the 'house' towards the annex, there is a console of a 'vodnica' where clean water for drinking and cooking was

stored, and a wardrobe (Figures 9, 10).



Source: Author (7.25.2016.)

**Fig 9:** 'Vodnica' with a door leading to the cantilevered annex of the house where the sanitary facilities were arranged



Source: Author (7.25.2016.)

**Fig 10:** Detail of the 'vodnica' with a view from the outside: a console with access from the 'house' area, the door to the annex with the sanitary facilities. The annex with the sanitary facilities was removed after the traditional use of the house ceased. In view is the newly built contemporary of the Kasumovic family house

Four verandas and the space of a 'house' in one residential building was a rare case in Bosnian Krajina (Figures 5, 11, 12). In this case, it is a house of economically well-off and numerous families <sup>[2]</sup>.



Source: Author (7.25.2016.)

**Fig 11:** The Kasumovic family house in Vrnograc. The space of the 'house' ('kuca') on the first floor



Source: Author (7.25.2016.)

**Fig 12:** Access to the end chardak from the area of the 'house' ('kuca')

### 3. Construction and materialization

The foundations of the house are made of raw stone. On top

of the stones is a foundation beam made of hewn oak logs, on which are placed columns and posts into which the logs of the ground floor walls are attached (Figure 13). In the middle of the base of the ground floor, a double column is placed on a stone foundation, which, along the length of the base, carries a strong wooden beam. This beam and the two crown beams that go along the top of the outer longitudinal walls are cantilevered over the contour of the shorter sides of the ground floor. On these beams, transverse to their direction, the ground-floor ceiling beams are placed, which are also cantilevered over the longer sides of the ground floor contour. Thick, hewn wooden planks were placed on these beams as floors. In this way, the horizontal plan of the floor was formed, along the edges of which the beams were given as a base into which the columns, columns and beams of the wooden skeleton (bondruka) of the walls of the floor were attached. At the tops of the outer columns, there are wooden beams-cornerstones that support the roof structure of the type 'horns with a crucifix' ('rogovi sa raspinjacom'), (Figure 17). The corbels of the longitudinal walls of the floor and the wall that divides the space of the floor into two tracts (between the 'house' and the row of three verandas) are the supports of the beams of the floor-attic mezzanine structure, which are placed at a distance of about 1 meter from each other (Figure 16).

Figure 13 shows a detail of the construction of the house: stone wall and oak wedding dress foundations, ground floor walls made of oak logs inserted into oak pillars and columns, mezzanine construction with an overhang over the contour of the ground floor, first floor walls made of wooden skeleton with wattle and rammed earth filling.



Source: Author (7.25.2016.)

**Fig 13:** The foundations of the house: a wedding dress made of hewn oak logs on a stone-walled foundation

<sup>2</sup> During a visit to this house, its tenants informed the author that 'their grandfather' Osman, Mehmed's father (1960), the current owner of the house,

had four wives, that is, two wives each (after the death of his two wives, he remarried two women).



Source: Author (7.25.2016.)

Fig 14: Structural assembly of the house



Source: Author (7.25.2016.)

Fig 15: Detail of the external wall of the floor: wooden skeleton, wattle with packed soil, window.



Source: Author (7.25.2016.)

Fig 16: Interfloor construction ground floor-floor made of hewn beams and hewn planks-floors

The construction of the roof, 'rafters with a crucifix' ('rogovi sa raspinjacom'), was preserved thanks to its 'conservation' by long-term fumigation, and effective protection (by adding

sheet metal over the existing shingles) after using the house in a traditional way (Figure 17).



Source: Author (7.25.2016.)

Fig 17: Kasumovic family house in Vrnograc. The roof

**4. Doors and windows**

The opening elements, doors and windows, follow the solutions we encounter on the chardaklia house in other parts of Bosnia and Herzegovina. The doors on the house, which

have been preserved to this day, have an archaic design characteristic of all old Bosnian chardaklia houses (Figure 18).



Source: Author (7.25.2016.)

Fig 18: Two doors access the living space, on two sides of the ground floor

The windows of the house that the author found during his visit to this house are not the original ones that the house had at the time of its construction (end of the 19th century),

casement windows from the 1950s - single, triple-paned with single glazing (Figure 19).



Source: Author (7.25.2016.)

Fig 19: Window on the chardak (left) and in the staircase area (right)

### 5. Surface treatment

Surface treatment is typical for the bosnian chardaklia house: plastering of the interior wall surfaces of the walls with milk

of lime, wooden floor covering with mats (bosnian kilim), wooden ceilings ('shishe'), (Figures 20-23).



*Source:* Author (7.25.2016.)

**Fig 20:** Ceiling beam in the place where there was a partition between two chardaks. You can see two chimney exits (one in the ceiling of the conservatory)



*Source:* Author (7.25.2016.)

**Fig 21:** Treatment of the surfaces of the 'house' ('kuca') on the first floor



Source: Author (7.25.2016.)

**Fig 22:** Hewn beams and sub-floors in the floor-attic construction



Source: Author (7.25.2016.)

**Fig 23:** The ceiling in one of the chardaks on the first floor

## 6. Space equipment

Not much has been preserved in the Kasumovic family house in Vrnograc from the elements of space equipment characteristic of the Bosnian čardaklija house: there is a flour chest, which today has the function of a 'not so important storage room' for things that are rarely used (Figure 9).

## 7. Current condition and purpose of the house

The Kasumovic family house in Vrnograc is not used for its primary purpose today, but as a space for servicing the secondary needs of housing (storage of various household equipment, tools...). The physical structure of the building is relatively well preserved. The current owners of the house made a new roof covering (galvanized sheet) over the existing wooden shingles and in this way protected the roof for a long time from the adverse effects of the weather. The current owners of the house have recently built a new building, but they still keep the old house as a confirmation of the longevity of their family and as a 'guardian of its future'.

During the war, the house was a refuge for many people who were driven from their homes by the war (1992-1995). And that is one of the reasons why the current owners keep this

house.

## 8. Conclusion

The Kasumovic family house in Vrnograc was built about 150 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 Kasumovic family house in Vrnograc is an example of a traditional bosnian chardaklija 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 chardaklija house in the area of the Bosnian Krajina, but with its characteristics typical of the Bosnian Krajina. Features of the bioclimatic architecture of this house are <sup>[5, 10]</sup>.

- 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)<sup>[5,10]</sup>;
- Thanks to its relatively stable physical structure, the house still stands in its place, although it is not in use;
- The '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 Kasumović family for 150 years.

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