

The Lukavac village on the plateau of the Bjelasnica mountain: life in the way of sustainability

Ahmet Hadrovic

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

ABSTRACT

The Lukavac village (Geographical coordinates: 43°40'50.42"N, 18°15'59.81"E, about 1335 m above sea level) is a village located on the southern slopes of the mountain Bjelasnica, about 2.6 km away from the river Rakitnica by air. The village belongs to the municipality of Trnovo (it is about 14.6 km away from Trnovo by air).

The Lukavac village is one of the twenty villages on the plateau of the Bjelasnica mountain which, since its founding in the Middle Ages until today, has survived a turbulent history. It has always been renewed in accordance with new social circumstances thanks to its rich natural resources. As there are Olympic arenas near it (where the 14th Winter Olympics were held in 1984), this fact is his „embodied energy“ that largely generates life in the village today.

„*The Lukavac village on the plateau of Bjelasnica mountain: life in the way of sustainability*“ is one of numerous studies by which the author analyzes and „checks“ his theory „*Defining Architectural Space*“ (founded in 1987) where he monitors the emergence of architecture („Boundaries“) in synergy with the other two essential elements of architecture – „Environment“ and „Man“. Also, this paper is a concrete contribution to the affirmation of „sustainable life“, in Bosnia and Herzegovina and in the world.

Keywords: *Bjelasnica, Lukavac, water, pastures, traditional architecture, sustainability.*

Citation: Ahmet Hadrovic (2022). The Lukavac village on the plateau of the Bjelasnica mountain: life in the way of sustainability. *International Journal of Arts, Humanities and Social Studies*, 4(2), 09-19.

INTRODUCTION

The Lukavac village (Geographical coordinates: 43°40'50.42"N, 18°15'59.81"E, about 1335 m above sea level. Source: Google Earth. Accessed: 10/15/2021) is located on the southern slopes of the Bjelasnica mountain (Figure 1, Figure 2). The village belongs to the municipality of Trnovo, about 14.6 km by air [1, 2].

Following the Theory of Architecturally Defined Space (ADS) developed by the author in 1987, the Lukavac village will be considered in this paper as a system through consideration of its four basic elements: environment, man, boundaries and perspectives [3]. The paper monitors the relationship between the basic elements of Architecturally Defined Space (ADS), ie the „appearance of architecture“ (Boundaries) as a „framework of life“.



Figure 1: The Lukavac village. The location
Source: Google Earth. Accessed: 10.15.2021.



Figure 2: The Lukavac village in winter (Above the village is the top of the Bjelasnica mountain)
Source: Helifilm (2/8/2021)

Environment

The environment is one of the four basic elements of Architecturally Defined Space (ADS) [3].

Natural environment. By natural environment we mean all those data provided by nature, on which man (mostly) has not exerted his influence: geographical location, geomorphology, watercourses and water reservoirs, game, available soil, climate [3, 4]

The Bjelašnica plateau is a vast geographical area in the central part of Bosnia and Herzegovina, with the top of the Bjelasnica mountain as the central point, framed by the Igman, Ivan-planina, Visocica and Treskavica mountains [1]. The plateau is located about 25 km southwest of Sarajevo. This plateau (along with Mount Igman which is part of it) stretches for about 30 km in a northeast-southwest direction, perpendicular to the Dinaric massif and about 10-20 km wide. The northernmost part of Bjelasnica (also its highest ridge) stretches from east to west for about 12 km. At the extreme eastern edge of this ridge is the highest peak of Bjelasnica with a meteorological station (observatory). The boundaries of this plateau are the course of the river Zujevina and the mountain Igman in the north, the ridge Hoyta and the mountain Treskavica in the southeast, the 25 km long canyon of the Rakitnica river (which divides the plateau Bjelašnica and the mountain Visocica) in the south, the valley of the river Neretva) in the southwest and the Ivan-mountain saddle (which connects the Bjelasnica plateau with the Bitovnja mountain) in the west.

The main resources of the Lukavac village are water [4], gardens next to the houses (which can be irrigated for a good part of the season from streams flowing from the foothills of Bjelasnica), arable land and meadows, pastures (around the village and on the slopes of Bjelasnica) and forests near the village (Figures 3- 5) [5, 6, 7, 8, 9 & 10]. The mills were installed on the river Rakitnica. Horses were the main means of transport until the 1992-1995 war.

The Bjelasnica plateau (Figure 1.) is a vast physical space (about 30 km x 10-20 km) that can be represented through various aspects: geographical, geopolitical, socio-economic, socio-cultural-anthropological [1]... The Bjelasnica plateau, given its geographical position and geomorphology, is perhaps the most important part of Bosnia and Herzegovina in general as it appears in the role of „catcher“ of rain and snow (water) which are one of the basic prerequisites for life (plants, animals and people) of this area and the starting point from which many watercourses will be generated and more or less abundant springs. It generates the water of *Vrelo Bosne*, the most important river in Bosnia and Herzegovina, which is the „backbone“ of the whole of Bosnia and Herzegovina throughout its history. Water for the Neretva River, the most important watercourse in Herzegovina, is also largely generated on this plateau.

If the plateau of Bjelasnica could be imagined without its current settlements and roads (without everything that is the work of man), therefore, as a „natural pattern“, the researcher can not escape the impression that it is „the perfect base for life“. In that sense, every inhabited place is a small system with all the necessary natural conditions for generating life: water, flat and slightly fertile fertile terrains for growing vegetables, cereals, meadows and vast pastures around the village and on the wide plateau of Bjelasnica (Figures 3.-5.).

All settlements are interconnected by communications. It used to be caravan tracks, once narrow trails, and today they are (in most cases) paved roads (macadam roads). Each village is a system for itself, with certain specifics derived partly from the natural environment, partly from the social environment, and partly from the ethnogenesis of man. The Bjelašnica plateau, with its natural and social environment as a common denominator, connects all villages and its people into a unique natural-anthropomorphic whole.

The main resources of the Lukavac village are water [4], gardens next to the houses (which can be irrigated for a good part of the season from streams flowing from the foothills of Bjelasnica), arable land and meadows, pastures (around the village and on the slopes of Bjelasnica) and forests near the village (Figures 3- 5) [5, 6, 7, 8, 9 & 10].



Figure 3: Gardens and fields along the seasonal stream in the Lukavac village (left). Gardens next to the houses (right)
Source: Author, 2019.



Figure 4: Lokavac village (summer)
Source: Author, 2016.



Figure 5: The Lokavac village. Resources
Source: Author, 2016.

The social environment is determined by the elements of human activity, which could be called society by one name. Thus, it is a matter of „man-made nature“, which as such is changeable, which man enters by his birth, to which he obeys, but also which he changes in accordance with his system of needs.

The social environment is the subject of research in the humanities (sociology, philosophy, psychology, anthropology, economics, linguistics, demography ...), and special forms of human consciousness such as morality and religion.

Architecture can be realized on Earth (air, soil, water) and probably on other celestial bodies and in free cosmic space. In any case, all dimensions of the natural environment in question must be well known, because only in this way can adequate solutions be found for the boundaries of architecturally defined space (ADS).

The social environment in the function of factors and elements of architecture appears as a kind of corrector that determines the final appearance of the ADS boundary. Depending on the strength of the elements of the social environment (science, technology, technology, economics ...), the effects of the natural environment can be more or less

respected in the implementation of ADS. In other words, ADS can be a more or less autonomous system in the natural environment.

This fact is extremely recognizable in the history so far and could be reduced to the parallel existence of two approaches: organic and international (worldly). An organic approach to architecture is appropriate to the so-called, autochthonous, folklore architecture, whose authors are anonymous masters of the people, and pan-world - architecture as the official representative of the era, and it was created by educated authors - architects.

These two approaches are seldom pure in their expression and in reality are always more or less permeated. According to previous research, part of today's villages on the Bjelasnica plateau can be traced back to the 14th century, when they were still used for summer grazing by Herzegovinian nomads [8, 9, 10 & 11]. However, there was life on the mountain before, as evidenced by numerous necropolises of stecak tombstones, as well as archaeological finds from earlier historical periods (Neolithic, Illyrian period, such as Gradina, fortifications near the village of Umoljana). There is also the site of Crkvina, located not far from the river Rakitnica on a hill above the medieval cemetery [2].

Man

With a wide range of questions about the Universe, about oneself, and especially questions about one's essence and place in the Universe, man has been engaged since its inception. Hence, the arrangement of the Universe, ma whatever it is objectively, from the point of view of man it makes sense only in relation to man. How much is a well-researched question of the „origin of man“ (evolution of the living world), science has established the time of the origin of the living world on Earth, where the appearance of man as we know it today located at the very end of the evolution of the living world. However, how, something “cannot arise from „nothing“ or turning into „nothing“, the biggest question remains: what is „something“ in the beginning of life? People, rare individuals who have achieved enormous power during their lifetime (power and influence on lives of a large number of people), they had a pronounced need to be „immortal“ and they are in need expressed in a visible, material, way, and their efforts have remained visible to this day. Other people, on the other hand, achieved their „immortality“ by the power of their spirit and immaterial deeds which will be useful and as a source of spiritual wealth to generations of people yoji will still live on Earth. Hence, over time, the question of „something“ and „nothing“ has become so complicated that it used to be, something“ (materially visible and physically stable) has become „nothing“, and the former „nothing“ (values of the human spirit) have become „something“, and this is increasing as time passes.

Of great importance in the life of the people of the Lukavac village (and the Bjelasnica plateau as a whole) is the religious gathering of people, where in addition to the religious act it is extremely important to get to know each other, communicate and socialize, both in mosques and outdoors [13, 14]. There is a weekly collective prayer (Friday prayer), and a seasonal gathering - mevlud, prayer and celebration to celebrate the birth of the Prophet Muhammad, s.a.v.s. Apart from religious gatherings, the Bjelasnica plateau is also known for holding summer teferica, usually at the end of summer, whose significance is multidimensional in people's lives: relaxation and fun, shopping, meeting people (especially young people who are married).

Until the 1992-1995 war, the village lived in the traditional way (Figure 6), with rare individuals also working in state-owned companies (such as Hadzici Forestry, for example).



Figure 6: The Lukavac village (1970s)

Source: https://m.facebook.com/OdKulinaBanaDoDanasnjihDana/posts/4123981430973728?locale2=sw_KE, accessed 10.15.2021. (left),

Boundaries

Boundaries are those places in the environment where the existing conditions are controlled according to quite specific human needs. Conditions are all those detected and undetected phenomena in space that has a stimulating or degrading effect on humans. Boundaries, therefore, have a task to enable the selection of influences. In the architectural sense, they enclose, but also include man in the state of a particular environment [3].

If you look at the Bjelasnic plateau (from the top of the mountain), you can easily see that each village has its own space (area) in which it acquires its identity as a micro-social community. Each village has its basic resources that make it sustainable: a water source (with a public fountain), some villages and their streams where mills were arranged (where the Rakitnica river is a common resource for all villages), orchards, fields, pastures, and let the villages and their forests. The wide open areas of the Bjelašnica mountain (both Visocica and Treskavica) are their common resource where large flocks of sheep graze during the summer (Figure 1, Figures 3-5) [12].

In such a network of settlements, close social relations develop: within individual families, at the level of an individual village and at the level of an agglomeration as a whole. Mutual ties are realized through established marriages, teferićs, meetings in mosques, shops, meetings on open pastures, mills on the central river Rakitnica ... It seems that this ensures a sufficiently rich social life that generates the integrity of the individual and his social collectives.

During the 1992-1995 war, the Lukavac village was set on fire and its physical structures destroyed (Figure 7). After the war, the village was quickly rebuilt, with the reconstruction mostly not based on old structures but completely new buildings were built, on new locations or in the immediate vicinity of earlier structures (Figure 8). Even the restored buildings on the foundations of earlier structures do not follow the patterns of shaping traditional architecture [15]. New houses are made „according to the project“, modern disposition, design and materialization (Figure 9).



Figure 7: Remains of the structures of former buildings in the Lukavac village
Source: Author, 2019.



Figure 8: Restored building on the remains of the structures of previous buildings (left) and a new barn (right)

Source: Author, 2019.





Figure 9: Today's appearance of the Lukavac village
Source: Author, 2019.

The traditional way of life (where cattle breeding and farming were the main occupations of the people) after the 1992-1995 war gave way to modern patterns. Livestock and agriculture are sporadic, and new ways of doing business have been established: broiler farms (Figure 10), healthy food restaurants with boarding houses and accommodation (Figure 11).



Slika 10: Dvije farme pilića u selu Lukavac
Source: Author, 2019.



Figure 11: Accommodation (left) and a healthy food restaurant with accommodation in the Lukavac village (right)
Source: Author, 2019.

A memorial fountain with a marble slab was erected on the site of the former village public fountain, in which the names of the fallen soldiers (martyrs) in the 1992-1995 war were engraved (Figure 12).



Figure 12: Memorial fountain (on the site of a former public village fountain) in the Lukavac village
Source: Author, 2019.

After the war, the village mosque next to the cemetery was rebuilt. The age of many nisan tombstones testifies to the age of this village (Figure 13).



Figure 13: Mosque with a cemetery in the Lukavac village

Source: Author, 2019. (left)

<https://www.ins.ba/bs/article/6398/mevlud-na-bjelasnici-ef-drkic-mevludi-cuvaju-nase-duhovne-vrijednosti>, accessed 10/20/2021. (right)

CONCLUSION

The presentation of the Lukavac village on the plateau of the Bjelasnica mountain is one of a series of works in which the author examines the „reaction“ of Boundaries (the appearance of architecture) of Architecturally Defined Space to important inputs - Environment and Man. The Bjelasnica plateau and the Rakitnica river are the main natural resources for a group of about twenty villages that have generated life from the Middle Ages to the present day. Physical traces of the past (such as the necropolises of stecak tombstones, for example) testify to the continuity of life. Devastating historical sequences (wars, for the most part) only briefly interrupted the continuity of life, while major events (the 14th Winter Olympics held in 1984) provided special incentives not only for the renewal of life but also for its emergence with new content.

Most of the inhabitants of the Lukavac village today have apartments and jobs in Sarajevo (in a wide range of professions, including engineers of various specialties, lawyers, economists and university professors). They all have houses (cottages) in the village of Lukavac where they come for vacation and seasonal work in agriculture. Several families in the Lukavac village still live in (conditionally speaking) the traditional way, raising sheep and cattle and preparing meat and dairy products.

Some residents have started completely new businesses: „healthy food“ restaurants, accommodation, boarding houses ... There are abundant natural resources (Olympic mountain Bjelasnica and canyon of the Rakitnica river) and cultural and historical heritage (necropolis of stecak tombstones, old mosque in the neighboring village Umoljani) strong „magnets“ that attract many visitors from Sarajevo, Bosnia and Herzegovina and around the world.

A special „spiritual thread“ that connects the inhabitants of the Lukavac village (wherever they live) are prayers in the local mosque and in the open space, which are (mostly) held in August. Thus people thank God that they are alive and that they continue the tradition of their ancestors.

REFERENCES

1. Popovic, J. (1931), „Ljetni stanovi (mahale) na planini Bjelasnici“, Glasnik Zemaljskog muzeja, Sarajevo, sv XLIV, p. 83, 89.
2. Hadrovic, A. (2020). *Plato Bjelasnice: zivot na nacin samoodrzivosti/Bjelasnica Plateau: life in a way of self-sustainability*, Arhitektonski fakultet Univerziteta u Sarajevu, p. 118-128
3. Hadrovic, A. (2007), *Defining Architecrural 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, p. 9
4. Hadrovic, A. (2014). *Water and man in autoshtonous symbiosis in Bosnia and Herzegovina*, Sarajevo, Avicena, p. 1064
5. Klaic, V. (1990), *Povijest Bosne*, fototip izdanja iz 1882. god., Svjetlost, Sarajevo, p. 345
6. Imamovic, M. (1997), *Historija Bosnjaka*, Bosnjačka zajednica kulture Preporod, Sarajevo, p. 636
7. Malcolm, N. (2011), *Bosna, kratka povijest*, Buybook, Biblioteka Memorija, Sarajevo, p.29
8. Celebija, E. (1996), *Putopis. Odlomci o jugoslovenskim zemljama*, Sarajevo-Publishing, Sarajevo, p. 478
9. Cvijic, J. (1922), *Balkansko poluostrvo i juznoslovenske zemlje*, Knj.I, Beograd, p. 281- 282
10. Beslagic, S., *Stecci-kultura i umjetnost*, “Veselin Maslesa”, Sarajevo, 1982., p. 87

11. Chabbouh Aksamija, L. (2015), *Tradicija između autentičnosti i falsifikata-aktivna zaštita integralne batine Bjelasnice*, Arhitektonski fakultet u Sarajevu, Sarajevo, 2015., p. 23
12. Soldo, S. (1932.), *Tipovi kuća i zgrada u predjarnjoj Bosni i Hercegovini*, Drzavna stamparija Kraljevine Jugoslavije Beograd, p. 22
13. Alic, H. S. (1976), *Arapsko-islamska filozofija; definicija i značaj u istoriji*, Orijentalni institut u Sarajevu, POF XXIV/1974., Sarajevo, p. 120
14. Grozdanic, Dr S. (1976), *Uvod u arapsko-islamsku estetiku*, Orijentalni institut u Sarajevu, POF XXIV/1974., Sarajevo, p. 56
15. Hadrovic, A. (2017). *Bosanska kuća cardaklija/Bosnian chardaklija house*, Sarajevo, Arhitektonski fakultet Univerziteta u Sarajevu, p. 42