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Heritage stones from RN. Macedonia

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Abstract

The territory of R.N. Macedonia, with its geological and tectonic structure, has a prerequisite for the creation of various rock formations. Some of them have been used as resources for human needs, but others have 'fallen victim' to our superstitious beliefs and imagination.

The photolog in this paper will guide us through diverse rock formations that have, over the years, evolved into shelters or symbols of folklore and beliefs, or extractive sites that are fuelling the constant drive for large-scale consumption. It is a fact that humans have sculpted and transformed the landscape throughout the years and have made not only physical modification on the surface, but on the subsurface as well.

My journey explores small part of our heritage stones in quarries and natural outcrops and their utilization in human culture.

Keywords

Rock, Formations, Folklore, Symbolism, Utilization.

1 Introduction

I started this exploratory journey about rocks and landscape changes under human influence for my first artistic book. Most of the places that will be mentioned in this paper are documented in my book "Raw Breathing - Traveling through rockscapes". What I was looking for, in these places, is to delve deeper into the complexities of the human-nature symbiosis and reveal its layers of interdependence (Krsteska 2023). I had the need to find explanations for the meaningful, natural and ethical aspects of the complex 'layers' of the rocks, in which we humans have wrapped them.

I chose various places that have cultural, historical or symbolic significance of selected rock formations and quarry sites (Fig. 1). With choosing these various locations I wanted to explore and show the different approach that humans have with rock formations - some of them we use in mass consumption relentlessly while others we cherish and pray to. Rocks, often perceived as silent and inert elements of nature, hold stories that reflect both natural processes and human intervention.

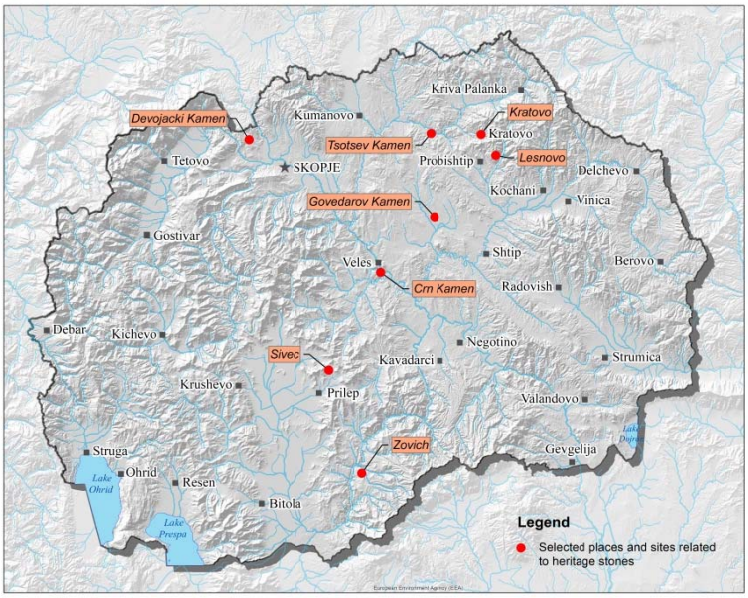


Fig. 1 Geographical position of selected places.

2 Rocks used for exploitation and utilization

2.1 Prilep area

The white saccharoidic dolomite marble from Prilep is well known for its use throughout the history. It has been used since the ancient period for monumental objects and sculptures. Many traces of ancient mining have fallen victim to a big modern quarrying operation in this area, which for decades has produced high-quality blocks of marble ('Macedonian Carrara') and exported them all over the world (Prochaska 2013). The concession area showed in Fig. 1 is the largest white marble quarry in the country, occupying area of 2.19 km². SIVEC® is a registered trademark of the fine-grained white dolomitic marble extracted from this quarry and it is exported internationally. Fig. 2 shows how the extraction has increased over 20-year period.

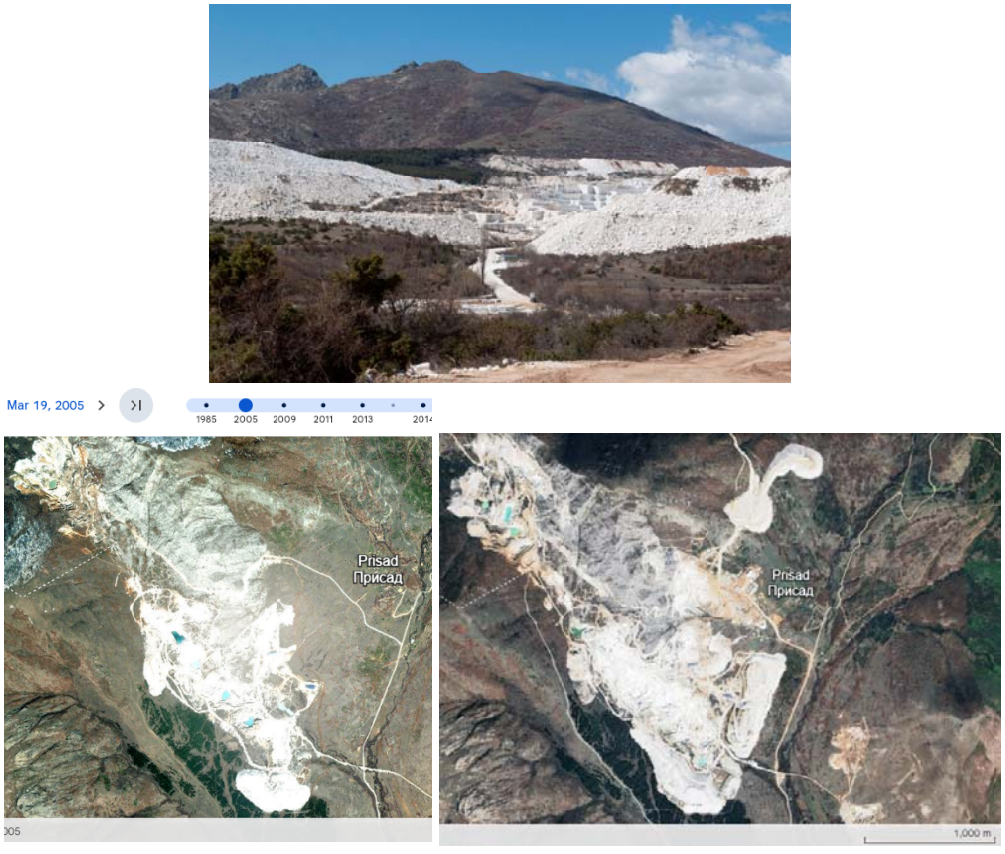


Fig. 2 Upper image – Marble quarry operated by Mermeren Kombinat, near Prilep. Lower left – Historical image fromm google earth. Lower right – situation from the last 3 years.

2.2 Zovich

Around 74 km south from Prilep and 50 km east from Bitola, in a very isolated area is the village Zovich. It is located in the central part of the Mariovo district, on a rocky plateau just above the left bank of the Gradeshka River (Petrovski 2015). Once flourishing with life, now very few people live there. The rocky surroundings of the village allowed for rich stone architecture visible even today. Fig. 3 shows the traditional stone tile roofing characteristic in the village, typically made from slate or schist. Houses and other historical structures were built almost entirely from locally sourced stone. Zovich is renowned for its preservation of this rustic, traditional aesthetic. Some leftover from this old architecture using locally sourced and found stones is shown in Fig. 4.



Fig. 3 Roofing of a mill in Zovich.



Fig. 4 Remnant of a house wall in Zovich.

2.3 Lesnovo

The village Lesnovo lies in the middle of a clearly preserved volcanic crater. It is an area that used to have strong volcanic activity. Fig. 5 shows segment of the surrounding when travelling from Probishtip to Lesnovo. The well-known Lesnovo caves are human made caves with centuries-old extraction of ignimbrites for producing millstones, which in the past was an important occupation of the village residents. High-quality stone slabs and millstones used to be produced here, and they were sought throughout all the Balkan countries. Fig. 6 shows millstones that have been left in the caves.



Fig. 5 View from the road near Zletovo.



Fig. 6 Inside the Lesnovo caves.

2.4 Kratovo

Kratovo is a small town situated in the same volcanic area as the village Lesnovo. It has rich mining history and the architecture of the town is mostly from locally extracted stones. The most remarkable palaeovolcanic area in Macedonia and one of the most characteristic on the Balkan Peninsula is the Kratovo-Zletovo area (Milevski 2010).When walking the streets of Kratovo you can see wall fences, roads and bridges from different types of stones, as shown in Fig. 7. It is worth mentioning that the quartzite rock from Kratovo area, also known as “Sileks” is the strongest non-metalic rock with highest compressive strength on monolithic scale in R. N. Macedonia (~250MPa).

The local population have also used the so-called ‘volcanic bombs’ that can be found around this region. These ‘volcanic bombs’ are natural phenomenon that were created during the time when the volcanoes on the Balkan were still active, 20 - 30 million years ago. Now, as part of the soil erodes, they can be found around in more places of the Kratovo-Zletovo area. The biggest ones are found in the village Gorno Kratovo and they are with a diameter of up to 80cm and weight up to 20kg. Fig. 7 (far right) also shows the ‘volcanic bombs’ in-situ, near the village Gorno Kratovo.



Fig. 7 Wall fences made from locally found stones in Kratovo. and ‘Volcanic bombs’ near Gorno Kratovo

2.5 Tsotsev Kamen

15km west from Kratovo lies the remarkable Tsotsev Kamen. It is built in andesitic ignimbrites with numerous denudation landforms on the surface and around. Except this natural forms, different anthropogenic interventions like steps, basins, pools etc. are clearly visible in the rock. (Milevski and Dimitrovska 2011) (Fig. 8). It is the clearest example of utilization of the rock, where man have treated nature as his place for living, not only a place for exploiting. It is believed that it had been used in different periods, as a temple from prehistoric times, through Roman times, until the Middle Ages.



Fig. 8 Leftover of some kind of roof and carved pool on Tsotsev Kamen.

3 Rocks used for superstitious beliefs

3.1 Crn Kamen

Crn Kamen (The Black Stone) is located near Veles. Numerous guests come here who have heard about the healing power of this place (Pechkov 2012). The story about this place says that nearby there used to be a large monastery where monks lived, but were executed by the Ottomans on the top of the rock. The black marks on the rock, shown in Fig.9, are believed to be the “blood” of the monks. Because of this “miracle” people say that the rock has healing powers and come here to seek relief from their afflictions. So, they bring piece of some clothing and tie it to the trees around the rock, as shown in Fig. 9.



Fig. 9 The surrounding of Crn Kamen.

3.2 Govedarov Kamen

Another place that is believed to have healing powers is Govedarov Kamen (The Catleman's Stone). Here, married couples come, looking for cure for infertility. There are rituals that are performed, such as knitting a red and white belt (shown in Fig.10), choosing godfather and if the woman becomes pregnant that year, a sacrificial lamb is brought the following year. The rock is in the middle of huge field that doesn't have any other rocks nearby. Because of this, some people have been telling the story that the stone was thrown here from a superhuman, long time ago.



Fig. 10 Govedarov Kamen, near Ovche Pole.

3.3 Devojachki Kamen

In the vicinity of the capital Skopje lies Devojacki Kamen (The Maiden's Stone). No other rocks can be seen nearby, the stone is rising in the middle of forest area. There is a legend about this place, which led people to believe that if you scrape powder from the rock, mix it with the water from the spring under the rock and drank it - mothers would have milk from breastfeeding. There are visible scraping marks on the rock itself and there's even a knife left for use, sown in Fig. 11.



Fig. 11 Visible scraping marks and a knife found at Devojachki Kamen.

4 Conclusion

The exploration of rocks and landscapes shaped by human activity reveals a complex relationship between nature and culture. Rocks, often perceived as silent and inert elements of nature, hold stories that reflect both natural processes and human intervention.

Large quarries, terraced rock faces, and abandoned extraction sites demonstrate how humans modify the land to obtain raw materials. The visual impression of such places can be powerful: the original geological formation is interrupted by sharp cuts, geometric shapes, and mechanical traces. These modifications represent a direct encounter between natural geological time and the accelerated pace of human industry. At the same time, other rock formations are treated very differently. Across cultures, certain stones and cliffs are revered as sacred or symbolic sites. In these locations, rocks are not viewed as raw materials but as meaningful presences within cultural traditions. Communities may build shrines near them, create rituals connected to them, or preserve them as landmarks that embody spiritual or historical narratives. Such places reveal a contrasting attitude toward the same natural material. Rocks themselves remain fundamentally unchanged in their physical essence, yet the meanings attached to them vary greatly depending on human perception.

As global demand for construction materials continues to grow, quarrying and resource extraction increasingly transform natural landscapes. While such activities are often necessary for economic development, they also raise questions about sustainability and environmental responsibility. Observing these sites from an artistic and reflective perspective allows us to consider the long-term consequences of our actions. How much transformation of the landscape is acceptable? What responsibilities do humans have toward the natural environments they depend upon?

References

Krsteska Hristina (2023) Raw Breathing - Traveling through rockscapes. PrivatePrint Studio. Skopje

Prochaska Walter (2013) A sculptural marble of prime quality in antiquity—the dolomitic marble of the Sivec mountains in Macedonia. Archaeometry55 (University of Oxford):179-197

Petrovski Stefan (2015) Зович. https://web.archive.org/web/20211201024955/https://mojrodenkraj.com.mk/village.php?id=120 . Accessed at 20.03.2026

Milevski Ivica, Dimitrovska Vasilka (2011) Geographical Reviews. Macedonian Geographic Society. Skopje.

Milevski Ivica (2010) Geomorphological Characteristics of Kratovo-Zletovo Palaeovolcanic Area. Scientific Annals, School of Geology, Aristotle University of Thessaloniki Proceedings of the XIX CBGA Congress. Thessaloniki, Greece.

Pechkov Petar (2012) Легенда за Исцелителната моќ на Црн Камен. http://tirekovmirece.com/Novost/Легенда-за-исцелителната-моќ-на--Црн-Камен .Accessed at 23.03.2026