

Skriveni Zid Zemun

Zemun Hidden Cliff: Revealing the Nature Monument

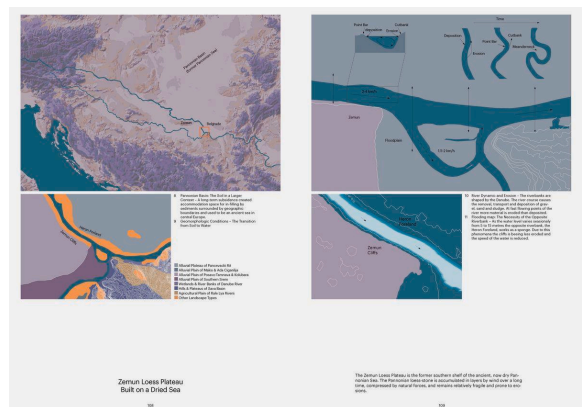
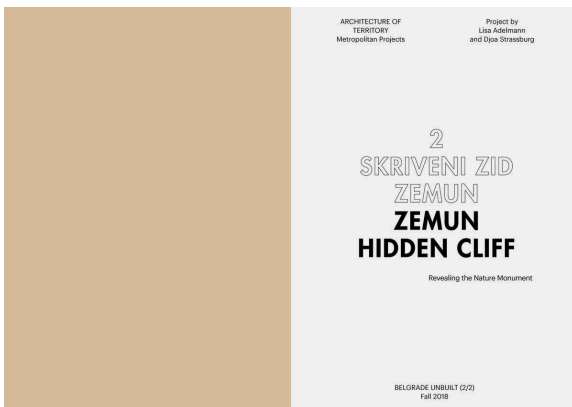
Lisa Adelman and Djoa Strassburg




West of the Gardoš Hill in the historic core of Zemun, the Danube River cuts a steep cliff through an elevated alluvial plateau. While most of the Danube's shore is made up of low-lying floodplains, here the loess of the Srem Plain forms a high barrier to the river's currents. The northern outskirts of Zemun have stretched along this embankment since the early 20th century, but few measures have been undertaken to fortify the underlying clay and sand sediments that the river's current washes away. After centuries of erosion, some of the loess coastlines have turned into cliffs with up to 90 % vertical gradient, leaving them vulnerable to mass wasting from precipitation and river currents. In the previous centuries, settlers dug vertical shafts into the ground to ventilate a vast underground network of tunnels and storage spaces, which kept the soil dry and compact. With the rapid expansion of the town of Zemun this system was neglected or used as an illegal dumping site. In the last three decades there have been a number of landslides, which endangered buildings and roads and claimed human lives.



Nevertheless, this embankment—which can reach up to 25 metres in height—has become an attractive but unstable ground for informal settlements. As the demand for housing increases, single-family homes are being replaced by multi-storey apartment buildings. These informal structures creep ever closer to the eroding cliffs in search of a river view. Down at the river’s edge, informal shipyards and barrack settlements have nestled into the steep slopes, hidden away from view of the authorities. The recent construction of the Mihailo Pupin Bridge, which connects Zemun and New Belgrade with the agricultural plain and Third Belgrade, has made this area increasingly attractive for housing and industry. Simultaneously, the Belgrade General Plan partly protects this fragile coastline as a natural monument.




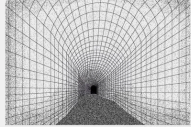




**1. Shaping of Cliff Morphology
Flood and Erosion**

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In contrast to the steep cliffs in Danube, the left bank of Danube, the recent landscape has the character of a plateau, for a number of. The feature of great importance is a narrow strip of the "steep" river, which would keep the remains from the plateau along the river.

**Treasures of Loss Landscape
Lagoon Corridors and Unique Formations**

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Large concrete wall was to build on, but the morphology of the ground has also been used to determine the approach. Along the Danube Delta, the landscape is a series of lagoon corridors, which are formed by the Danube Delta. The landscape was changed and reinforced with the aid of sand and gravel ground.






**Claiming the Plateau
Illegal Constructions and Eroding Grounds**

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In order to secure the form of the plateau, the situation shows a lack of full legal and urban control. The main goal is to create a series of small-scale, low-rise buildings that are integrated into the existing urban fabric. The plan shows a grid of streets and various colored zones.


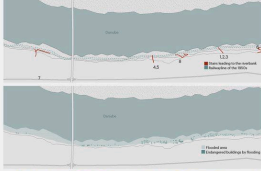
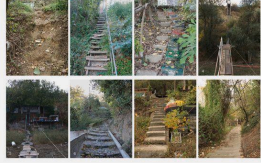



Cliff Façade and Vertical Landscape

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The vertical cliff face was designed. A series of floors and terraces were built on the face of the cliff. The design is a series of small-scale, low-rise buildings that are integrated into the existing urban fabric. The plan shows a grid of streets and various colored zones.

**Danube Water Banks
River Life Along with the Cliff Base**

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A new idea is to have a series of terraces, running along the cliff. The design is a series of small-scale, low-rise buildings that are integrated into the existing urban fabric. The plan shows a grid of streets and various colored zones.



Loess stone shaped by plant roots.

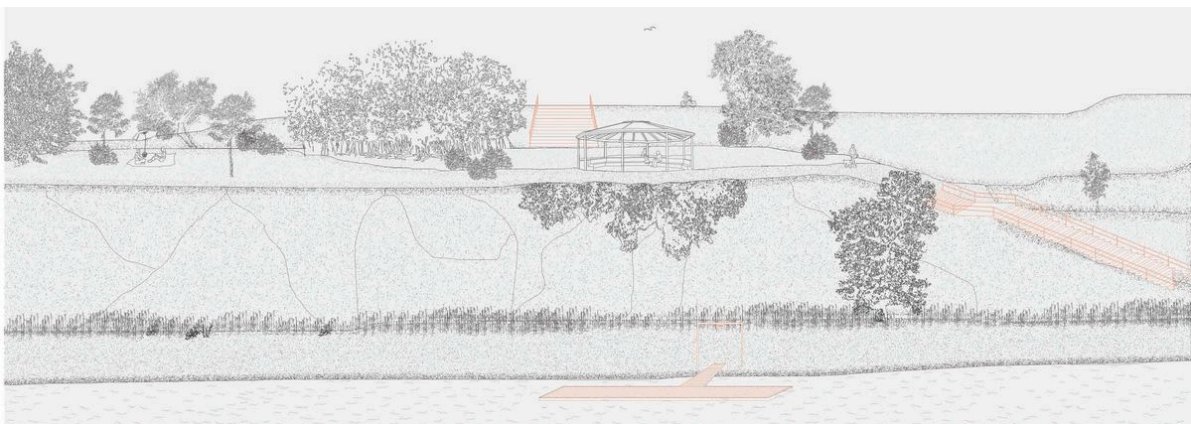
The project Zemun Hidden Cliff: Revealing the Nature Monument explores programs and conditions under which the unstable ground of Zemun could be protected. Even though the cliff area is a public good, it is not recognised as a landmark neither widely noticed as a public landscape. A set of strategic connections is proposed to reintegrate the Zemun Cliff into the panorama of Belgrade's metropolitan public landscapes, making it accessible and tangible. Additionally, the project highlights the different characteristics of a nature monument as it combines the focus and protection of the geological beauty and hidden man-made artefacts. Bringing more consciousness and visibility to the unique natural monument, intervening with light and punctual structures will reveal the site to the public, secure the fragile ecosystem of the river, and keep the shoreline intact so that it can perform as a safe recreational space for the neighbourhood.



Revealing the unique public landscape of hidden natural and man-made artefacts.



The old Brewery becomes a culture centre and curated gate to the cliff landscape.



A "Pavillion for Loess Stone" to observe the riverbank.

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