BOSNIAN VALLEY OF THE PYRAMIDS- THE ANALYSES OF THE LANDSCAPE AND TOPOGRAPHY

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INTRODUCTION

In a expansive area of Visoko where Fojnica flows upstream into the Bosnia River, and downstream to the village of Topuzovo Polje (an area encompassing approximately one kilometer of the right bank and approximately two kilometers of the left bank), there is a landscape abundant with unusual formations in which three particular formations stand out:

1. The Hill GRAD, and recently VISOČICA,*: coordinates Y=6514550, X= 4870291, and H=767 mnm (rectangular coordinates in the Gauss-Kruger's Projection and Bessel ellipsoid are F= 43 degrees 58 min 36 sec and L: 18 degrees, 10 min 35 sec; also the geographic coordinates in UTM projection and according to wGS-84 ellipsoid).
   *the toponym derived after the first aerophotogrametric survey of Visocica conducted by the Yugoslavian Army in the mid-1960s

2. An unnamed elevation on the maps over PLJEŠEVICA* on the right bank of the Fojnica: coordinates Y= 6516538, X= 4869791, and H= 660 mnm (rectangular coordinate in the Gauss-Kruger's Projection and Bessel ellipsoid)
   *the toponym HRAŠĆE

3. The elevation BUČKI GAJ on the right bank of the Fojnica above the village Buci: coordinates Y= 6515007, X= 4868156, and H= 582 mnm (rectangular coordinate in the Gauss-Kruger's Projection and Bessel ellipsoid)

The subject of this analysis is primarily the Hill GRAD. While the other two objects have the same elements as the Hill GRAD, currently there is no planned research. Topographic analysis will be conducted at a later date.

Topography and Geography:

The slope on the north side of the Hill GRAD in the ground plan represents almost a perfect equilateral triangle. When the proposed edges of the angle are extended to the point of intersection, they equal 60 degrees; and in any other hypothesis of the sea level, the foundation of the Hill GRAD and the other two angles also equal 60 degrees. Therefore, all sides of the triangle are virtually identical. The northern slope from top to bottom represents four equidistant surface areas with varying inclines; the differences of the three inclines are horizontal with minor local deviations. The eastern is identical to the northern side although it is oriented to the south and extends into a bulge with softer slopes. According to these observations, this extended bulge on the southern side at 45 degrees towards the west was additionally constructed over time. On the eastern and southern sides is erosion measuring approximately 4.5 meters. The western slope leading to the plateau is also identical to the northern triangular surface in the sense of its equidistant and nearly perfect slopes. The continuation of the slope below the plateau visibly suggests a surface crossing through the southern leaning plateau.
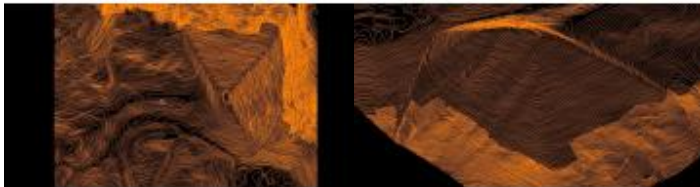
ORIENTATION:

The Army's topographic map TK25 was used for the analysis of the orientation of Hill GRAD. Because of the fixed edges of the frontal northern triangle, the erosive parameters of the slopes larger than 35 degrees are the possible horizontal whirlpool from ancient times including the other parameters which secondarily influenced the

formation of the landscape.   The intersection of such defined edges align with graphic precision with the trigonometry of the Hill GRAD, and the horizontal angle between the left and right edges equal 59 degrees 50 minutes. The symmetry of this angle aligns with a line that materializes trigonometer of GRAD, which is like the dome of a mosque in Rosulje with the deviation of approximately one meter and the western edge as the largest house in the village of Šaćići. The group of the geodesists from Geodatic Institute B & H in November 2005 and in March 2006 was led by Enver Buza; and they conducted materialized analysis of this symmetry, concluding after direct measurements that it aligns with the Northern Star with a + (right) 12 second deviation. The measurement was conducted by the Total Station, TS 600-Topcon.

It is confirmed that Hill GRAD is oriented to the north with a perfect precision; taking into consideration its shape, it is also oriented towards the east and west.

Conclusion:

Geodetically and geometrically observed, Hill GRAD in described coordinates represents imperfect pyramid of a truncated type and perfectly oriented towards the cardinal points.

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Analysis, elaboration and conclusion:
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