Doctoral Thesis Proposal title: "STUDY, 3D DOCUMENTATION AND GEOMETRIC ANALYSIS OF THE MAIN ARTIFICIAL CAVES WITH RUPESTRAL MANIFESTATIONS OF THE CULTURAL LANDSCAPE OF RISCO CAÍDO AND THE SACRED SPACES OF THE MOUNTAIN OF GRAN CANARIA"

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Abstract:

In 2019, the Cultural Landscape of Risco Caído and Los Espacios Sagrados de Montaña is declared and inscribed on the World Heritage List. This cultural landscape, located mainly in the Caldera de Tejeda (Gran Canaria - Canary Islands), houses a set of well-preserved manifestations and works belonging to a disappeared insular culture that evolved in isolation from the presence, at the beginning of the Era, from the first Berbers or Amaziges of North African origin, until its conquest by the Crown of Castile at the end of the 15th century.

This set of archaeological sites and rock manifestations provides a unique and exceptional testimony of the island culture. Therefore, a study on the geometric and spatial analysis of the main archaeological forms and spaces is necessary: caves, engravings, rock manifestations, niches, bowls, applying different documentation techniques and appropriate methodology in each case, guaranteeing the parameters and standards geometric-radiometric quality, such that allow us to study these shapes in a particular and general context.

Although the scope of the cultural landscape covers around 18,000 ha, the geometric documentation study will be carried out on the main caves with rock manifestations, focusing on caves C6 and C7, as well as their possible spatial and geometric relationship with the rest of the area of UNESCO, so it will be necessary to study certain elements of the proposed catalog that are outside the scope of the main caves studied (C6 and C7).

Taking as a first approximation the works carried out by Khairulazhar, Zulkepli, Mohd Farid and Khairulnizam, (2019), a methodological advance in the flow and analysis of the different scenarios to document will be proposed

Available Means:

RGB sensors (non-metric cameras), 3D laser scanner (phase difference and structured light), Double Frequency GNSS, total station, multirotor drone with RGB sensor.

The thesis could be associated with a collaboration with the "Instituto Risco Caído", dependent on the Cabildo de Gran Canaria. From an economic point of view, most of it will be paid for by the author of the thesis, without this being conditioned and supported by funding from the Institute or another public organization.

Other economic sources could be paid directly by the Instituto de Risco Caído, in the form of contracts.

References:

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