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VOL. XVIII

Actas da II Mesa-Redonda

Artes Rupestres da Pré-história e da Proto-história:

Estudo, Conservação e Musealização de Maciços Rochosos e Monumentos Funerários

Rock Arts of Prehistory and Protohistory:

Study, Heritage Conservation and Musealization of Rock Art Massifs and Funerary Megalithic Monuments

10, 11 e 12 de Novembro de 2011

Faculdade de Letras da Universidade do Porto

Maria de Jesus Sanches | Domingos Cruz

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FRAGA DA PENA ARCHITECTURE OF A GRANITIC TOR IN THE 3RD MILLENNIUM BC

FRAGA DA PENA.
ARQUITECTURA DE UM TOR GRANÍTICO DO III MILÉNIO A.C.

*António Carlos Valera**

Abstract

This paper presents an interpretation of Fraga da Pena (Fornos de Algodres, Guarda) as an example of an architecture that brings together a granitic tor and walls to build a scenario of strong cosmological meaning. The human modulation of parts of the tor itself is suggested, as a way of produce angles of visibility connected to specific astronomic events and use the sets of light and shadow.

These circumstances are related to the special distribution of specific artefacts and with the internal paths of circulation induced by the architectonic design. The possibility that the enclosures simultaneously operated as a local stage and a backstage for a balcony hanging over the valley is questioned, suggesting that the “building” could be a ceremonial place, of specific social practices played at different local spatial scales.

Finally, the ways in which these kinds of sites and knowledge can be displayed to the general public is discussed. Events and experiences that were developed in the site are presented as a way of transforming an unknown place into heritage.

Keywords: cerimonial centre, Calcolithic, Beira Alta.

Resumo

Este texto desenha uma interpretação da Fraga da Pena (Fornos de Algodres, Guarda) como exemplo de uma arquitectura que conjuga um tor granítico e estruturas muralhadas para a edificação de um cenário de forte carga cosmogónica. É sugerida a modelação antrópica de partes do próprio tor, de forma a proporcionar ângulos de visão com orientações astronómicas concretas e aproveitamento dos jogos de luz e sombra, onde pontos específicos do recinto podem ganhar protagonismo.

Estas circunstâncias são cruzadas com a distribuição espacial de alguns artefactos específicos e com os caminhos internos induzidos pela organização arquitectónica do sítio, questionando-se a possibilidade de os recintos funcionarem simultaneamente como palco de um pequeno anfiteatro local e bastidores de um outro palco “suspenso” sobre o vale, permitindo que o “edifício” funcionasse a diferentes escalas espaciais locais como um centro cerimonial.

A comunicação aborda finalmente a forma com este tipo de conhecimento pode ser comunicado através de experiências de espectáculos realizados no local, transformando um local desconhecido em património socialmente activo.

Palavras-chave: centro cerimonial, Calcolítico, Beira Alta.

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1. AN ANTHROPOLOGICAL ARCHITECTURE

The idea of Architecture that underlies this paper is based on an anthropological perspective of space, where, in human construction, natural and artificial are cast, as proposed by ecological approaches (INGOLD, 2000). Thinking architectures is thinking their contexts, the global social environment from which they emerge and simultaneously help to fabricate: sets of actions, meanings and materiality through which the human dwelling of time and space occurs. It reflects experiences and perceptions of space; it is relative to technological stages and options; satisfies specific practical needs while expresses and acts over ascetics, ideologies and current social relations; functions as a communication device of explicit and implicit meanings. It does so through the physical structures but also through the ways space is organized and associated activities are performed. Corresponds to the construction of active scenarios, conditioned (because they transport tradition and respond to social needs) and conditioning (because they actively interfere in social relations, enabling and conforming them), in the context of human agency in a given time and space.

Architecture inevitably involves a space organization through the imposing of meanings and by doing so goes further than the simple notions of occupation and construction. Furthermore, it deals in a meaningful way with forms but also with the emptiness, with the positive and with the negative, with the added features but also with the previous categorized “natural” elements of a given space. In this sense, as a process of building and organizing meaningful spaces, Architecture is not linked, in a restrictive way, to the human material construction and it is here that we may start to frame the social role of the granitic *tor* present at Fraga da Pena. But let us begin with the description of the context recorded there.

2. FRAGA DA PENA: A BRIEF SYNOPSIS

The site was identified as a place of archaeological interest only in 1991 (VALERA, 1997), excavated from 1992 to 1998 and studied in the context of the research of the local settlement network (Fornos de Algodres area, central Portugal) during the 3rd millennium BC (VALERA, 2007). Today, is a site of reference for the studies and reflexions related to Portuguese architectures of Recent Prehistory, namely in the cosmological dimension that architecture might assume.

It is a magnificent and huge granitic *tor*, located near the top of the right slope of the Ribeira da Muxagata valley, but already in a strong inclined topography. Its geological origin can be related to recent tectonic activity and differential erosion processes that modulated the *tor*, giving it the appearance of a “castle of rocks”. This topographic location (altitude of 750 m), over a deep valley (altitude around 400 meters), provides a significant highlight in the landscape when seen from the lower lands and, in the inverse direction, a spectacular view over those same lands, almost as a “bird fly”.

The *tor* develops longitudinally from NE to SW forming a natural high wall with 50 meters long, about 10 meters thick and 12 meters of maximum high. From the side of the slope (western side) it forms two small platforms (PL. II: A), while in the other side (Eastern one) forms a long cliff, looking like a cyclopean construction with large blocks of rock when seen from the valley (PL. II: B).

In the west side, using the two platforms, two enclosures were built (PL. III) by adding two thick stone walls (3 meters thick) to the *tor* and incorporating some large blocks of rock that were deposited there as a result of the earlier erosion process of this natural formation.

The internal enclosure (E1), which uses the small platform located at a slither higher altitude next to the *tor* “wall”, presents a reduced area of 110m² and is defined by a wall with three semi circular bastions in the outside face (two of them hollow and one massive). These bastions were functioning basically as buttresses but also as architectonic communicative devices. The access was made from the external enclosure, through a stone ramp and a gate orientated to NE, using a corridor between two large blocks of rock incorporated in the wall, to which vertical lintels were added. Inside only one structure was recorded, corresponding to a stone alignment that prolongs the entrance almost to the middle of the internal area.

The external enclosure (E2), with 100 m², is attached to the former, in a lower platform that makes the connection with the slope. It is defined by another thick wall with one gate that has the same orientation of the gate of E1.

In both enclosures a relatively simple stratigraphy was recorded, with occupation layers corresponding to a moment dated from the last quarter of the 3rd millennium BC (transition from Late Chalcolithic to the Early Bronze Age). The archaeological materials collected are mainly pottery shards, with particular highlight for the bell beaker assemblage (the biggest known in the region for beaker pottery), a copper awl, few knapped lithics and rare polished tools (a small part of these lithics may correspond to a brief and stratigraphically invisible occupation from an Early Neolithic phase), some pendants, an anthropomorphic figurine and a set of weathered yellow rocks from local veins, used as pigments for paintings like the one still preserved in a gap in the *tor*.

Outside the enclosures, and in several platforms in the slope at higher altitudes with visual control over them, evidences of contemporaneous occupations were detected (but without bell beakers).

3. THE TOR AS A SIGNIFICANT PREVIOUS ELEMENT

In an Anthropological perspective there is no undifferentiated space in human dwelling. Space is always categorized, classified, and only the ways of doing so are contingent. Before interfere through construction, man architects the space using its elements, the experiences and perceptions that they provide and the associated meanings. Frequently, Architecture is a simple recognition and categorization of previous natural forms that are connected to stories, myths, and transformed in active storage of memories and experiences. When building Man tends to use these previous features with their symbolic meanings and associated experiences, incorporating them as architectonic elements in the space organization.

In this context, the *tors* volumes and shapes might be associated to sculptures or architectures of ancient times, mythic times, ancestral or divine (TILLEY, 1996; BRADLEY, 1998). We can hardly assume that, in Prehistory, these formations were taken as “natural elements”, explained by tectonic and differential erosion. On the contrary, they probably had associated legends that contributed to the entity of the place, making it a meaningful mark in the landscape, through which space was organized and experienced.

That must have been the case of Fraga da Pena. Stories and myths were probably attached to the *tor*, explaining and justifying its origin, and transforming it in a special place for local communities. The site provided magnificent views over the landscape during the day and it would be animated by shadows and lights from fireplaces and stars at night, stimulating the imaginary and reinforcing the “magical” status of the place.

In fact, the scarce evidences from previous occupations suggest that the site was already meaningful before the end of the 3rd millennium BC, when the enclosures were built. They were not simply made in a place where a certain strategic potential was recognized. Meanings rooted in tradition must have played a decisive role in the preconditions that stimulated that construction, which was performed in an already active place in social and ideological terms.

4. MODELING THE TOR AND ASTRONOMIC ORIENTATION OF THE “BUILDING”

Space organization at Fraga da Pena seems to have been more than simply adding wall structures to the *tor*. The natural structure itself was slightly physically configured. In the inside enclosure, more or less at the middle of the *tor*, exists a small “tunnel” that allows the access to the other side of that mass of rock, to a flat platform at the edge of the cliff, that functions like a balcony over the valley. That passage, due to its location (middle of the *tor*) hardly can be attributed to natural origin, since there is no way the missing part of the rock could have disappeared through erosion or tectonic activity. More probably, it was

the result of human action that took profit of existing diagonal and horizontal fractures that exist all over the *tor* (PL. II: A) to remove the blocs, opening the passage. The presence of small fractured blocs near the entrance of the passage and the specific orientation that it presents seem to confirm intentionality of its origin.

In fact, this passage that perpendicularly crosses the granitic *tor* is orientated to 120°, what in general corresponds to the winter solstice sun rising. Due to its morphology and orientation, the *tor* forms a vertical wall that, at sun rising, is illuminated in the cliff side, but generates a long shadow over the enclosures (PL. III: B), and only by the end of the morning the sun light starts to hit the internal enclosure, that only at noon is totally illuminated. This means the passage allows the sun light through in winter solstice at sun rising, hitting a rock located more or less in the centre of the shadowed enclosure, precisely in front of the only existing gate (PL. III: A). In addition, the alignment between that specific block of stone and the summer solstice (57°) forms a tangent to the NE extremity of the *tor*, which means that, in that date and at sun rise, the limit between light and shadow would also hit that same central stone, located in front of the gate that was prolonged towards it by the only stone alignment found inside, that had a bell beaker pot deposited at the end.

These circumstances, taken together with all other characteristics of this context, suggest that Fraga da Pena was a scenario that played with light and shadow as elements of performances that, associated to specific moments of the solar calendar and to specific social practices, would have given to the place a highly symbolic role, similar to what has been identified and suggested in some ditched enclosures in south Portugal.

In the last few years, there has been a proliferation of new discoveries of ditched enclosures in Alentejo hinterland, where they have their higher concentration in Portugal. The majority of those that have known general plans, namely with the location of entrances, presents orientations related to summer and/or winter solstices (VALERA & BECKER, 2011; VALERA & BECKER, in press; VALERA 2013). Repeating a common situation in central and northern Europe, these contexts show that their architectures present unquestionable ideological basis shared by many Neolithic and Chalcolithic sites in the relations they establish with the terrestrial and celestial space. And in this context is frequent to observe the election of natural features and circumstances, like topography, visibility, shadow/light, as elements of meaningful relationships and of landscape organization.

In the case of Fraga da Pena, the natural element was modeled by small physical alterations in the *tor* and by the adding of the stone walls, forming a building that seems to be articulated with central aspects of the cosmologies of those communities.

5. BUILDING TWO STAGES

The space organization operated at Fraga da Pena in the last quarter of the 3rd millennium BC generated two stages. One of them is constituted by the two enclosures. These, although defined by thick and probably high walls and functioning as spaces of restricted access, behave as stages for the near outside slope, where several platforms at higher altitude allow perfect visibility over the enclosures. In fact, due to topography, the slope in front of the *tor* looks like a sort of natural amphitheatre, from where all the activities carried on inside the enclosures would be seen. They could be participated, in an indirect way, by an outside audience spread over the immediate slope, with the benefit of an outstanding sonority, as we were able to recently testify (see point 7). Contemporaneous archaeological evidences recorded in those outside platforms seem to reinforce this interpretation.

In the opposite direction, through the passage to the other side of the *tor*, the balcony over the cliff and valley provides another stage, functioning like a pulpit for who was in the valley, allowing a variety of ceremonial social practices and giving the “building” the capacity of function at different spatial scales. A sort of duality of scenarios is created, back to back, but connected by the passage, almost as reproducing the relations stage/backstage and perfectly adapted to the light/shadow duality that the “building” provided (see point 4).

6. A CEREMONIAL CENTRE

In Fraga da Pena there are pre existing natural elements that were modelled and architectonic features that were added. Both function as merged modules and cannot be read separately. The human construction reorganized that space by adding it monumentality, but also withdraws meaning from an already significant natural formation and no less monumentality. Considering this, we are driven to the conclusion that reducing the relationship architecture/natural formations to a simple adding of walled structures in the context of a strategy of adaptation and use of favourable natural conditions is a compromising simplification. The specificities of Fraga da Pena put in evidence the complexity that may be involved in those relations and the fact that, frequently, analysis isolates the different structures and natural features, breaking the significant relations between them. It is clear that we have a construction where all volumes, natural and artificial, are merged in an interdependent way. Natural formation (with its meanings), walled structures, defined spaces and social practices that were taking place there, all participate in the perception of this “building”, of its “spirit” and social role.

In this particular situation the preponderant element might very well have been the natural feature. It is the *tor* that is the real landmark. It is “him” that is visible at a distance. It would have been “his” configuration, previous meanings and social roles in the organization of the local landscape that led to its architectonic “reconfiguration”. We must remember that some archaeological materials document a previous faint occupation and that only in the late 3rd millennium all that architectonic investment was done. And the building techniques adopted then recovered models already present at the local building tradition, at the neighbour walled enclosure of Castro de Santiago dated from the first half of that same millennium. So, what was locally innovation in Castro de Santiago, was already tradition in Fraga da Pena. The building would have breathed memory.

It is also relevant to notice that inside the enclosures no evidences of huts, fireplaces or other housing structures were recorded. The material culture reveals what might be seen as selection of artefacts manipulated there, with great preponderance of pottery and rarity of lithic knapped instruments, polished tools (axes or and mills) and loom weights. On the contrary some differentiated objects were collected, like some adornment beads and pendants, a anthropomorphic figurine and a copper awl. In the pottery, bell beaker vessels have a significant representation and they show particular patterns of deposition. Some were broken *in situ*, sometimes with two half separated by a couple of meters. Others were just represented by a few shards that were deposited along the path that leads from the outside enclosure to the inner one. There was also an accumulation of weathered yellow rocks from local veins, possibly used as pigments for painting the rocks (as one preserved painting attests).

So, to a strong architectonic investment that defines quite small spaces without internal housing structures, but monumentalizes the place, we can add an assemblage of selected materials, supporting the idea that what was going on inside these enclosures had little to do with daily life. More than a fortified settlement, this place seems to have been built as a scenario for ceremonial practices that found in this “building” a particular place to be carried out, given and retrieving meaning.

About the practices in concrete in can only speculate. But if we start by the pre existing *tor*, and bring in mind that the place was known and visited in previous times, it is acceptable to assume that it had stories associated, related to its origin and to what happened there before. The stories, the experiences that the place provides (contrast light/shadow, the animation of rocks by fire light during the night, the passage through a narrow tunnel to vertiginous position over the valley) and the impressive highlight in the local landscape, all must have concurred to generate a place of highly symbolic meaning and symbolic power, able to attract the construction of a “ceremonial building”.

The idea of the existence of “specialized” ceremonial places in Portuguese enclosures of Recent Prehistory has been questioned, on the basis that we are dealing with societies that had a highly sacralised daily life, with a correspondence between local and global, where the local reproduces metaphorically a world vision (JORGE, 2002; JORGE, *et al.*, 2003). The ability to distinguish domestic and ceremonial would be, therefore, compromised because possibly it wouldn't have really existed. The use of categories like

profane settlement and ceremonial centres would need contextual revaluations based on new theoretical frames, so the “contextual heterogeneity” of a place wouldn’t be voided by the classification process.

But that is precisely what can be seen in Fraga da Pena. The interpretation as ceremonial centre combines natural monumentality, architecture, topography, relation with landscape, astronomic relations, experiences provided, presences and absences in the contextual relations and distribution of elements within the site. Independently of the possible cosmological metaphor, the site can be recognized as corresponding to a place with “personal” meanings, where practices occurred that established some contrast to daily life activities, retrieving meaning from that contrast. The contextual record does not reproduces what can be seen in other enclosures, namely in the neighbour one of Castro de Santiago. It appears to have been a special place for special social practices.

7. STRATEGIES FOR PUBLIC DISCLOSURE

As I have put it before, heritage (in this case of archaeological sort) only exists when is socially activated and lived. Knowledge and fruition are constitutive dimensions of heritage, not something exterior that we want to associate to it (VALERA, 2008).

In the case of Prehistoric enclosures, their constitution as heritage can assume a double role. In one side, they need to be known and valued by the general public as an emblematic architectonic expression of Neolithic and Chalcolithic societies. In another, as so many of them were in the past, they can be used as places for reunion, generating aggregation, reinforcing identities and stimulating a shared sense of heritage preservation, of its value and social role.

Taking these ideas in mind, a strategy was designed for “building” Fraga da Pena as heritage for local communities.

As the scientific research saw it, this huge and magnificent granitic *tor* must have had stories, myths, associated to its existent and majestic domain over the local landscape. When the two walled enclosure were built, some 4200 years ago, this was already a “place”: a local with a name and a history (not a modern geological one, but a mythological one), part of the local landscape semantics. It was not used as a residence place, but rather as ceremonial one, used for social practices and experiences that bring people together there, possibly for identity management and reproduction of social and cosmological order.

How to pass this view of a group of rocks and stone walls to common rural local people and general public?

In the absence of a real one, a legend was created and published in 2005 (PL. IV), using other local myths and the scientific discourse displayed about the site. The legend, in a more pleasant way, makes people understand that this was a special place for special social practices and important for past world views. Furthermore, it adds meaning to the present monument, generating a sentiment of membership of local memory and history.

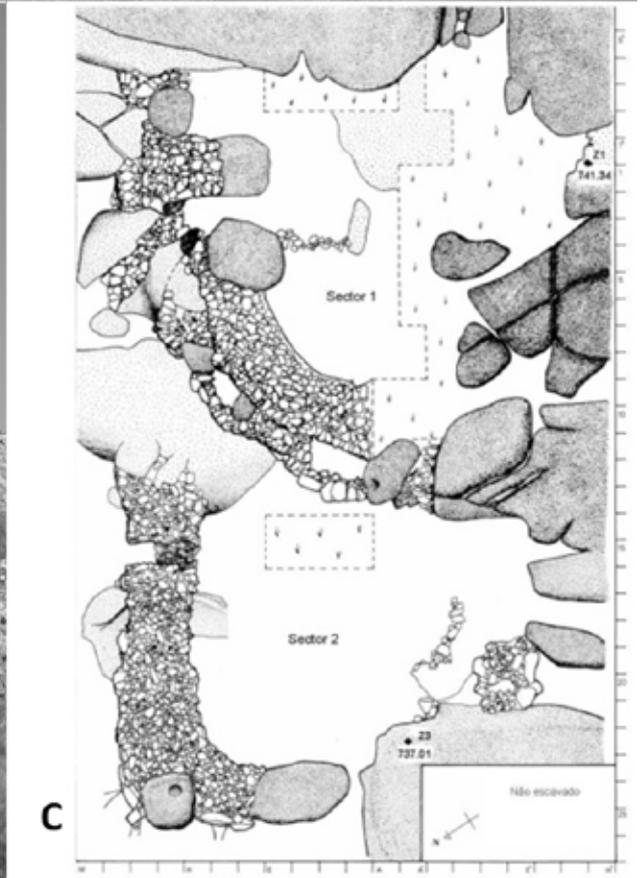
In that same year the legend was theatrically played at Fraga da Pena, for local community, together with a concert, bringing more than 400 persons to the place, most of them for the first time (PL. IV). Since then, the local communities organized more three events of this kind in Fraga da Pena, all of them with significant public adherence.

As a result, Fraga da Pena emerged from an unknown status as place recognize as important, used as an emblematic image of the history of the municipality and, in a way, restored its earliest social function: aggregating people in social practices that reinforce identities and a sense of territoriality, developing a consciousness of common memories and senses of belonging. In summary, it became heritage.

Lisboa, Março de 2013.

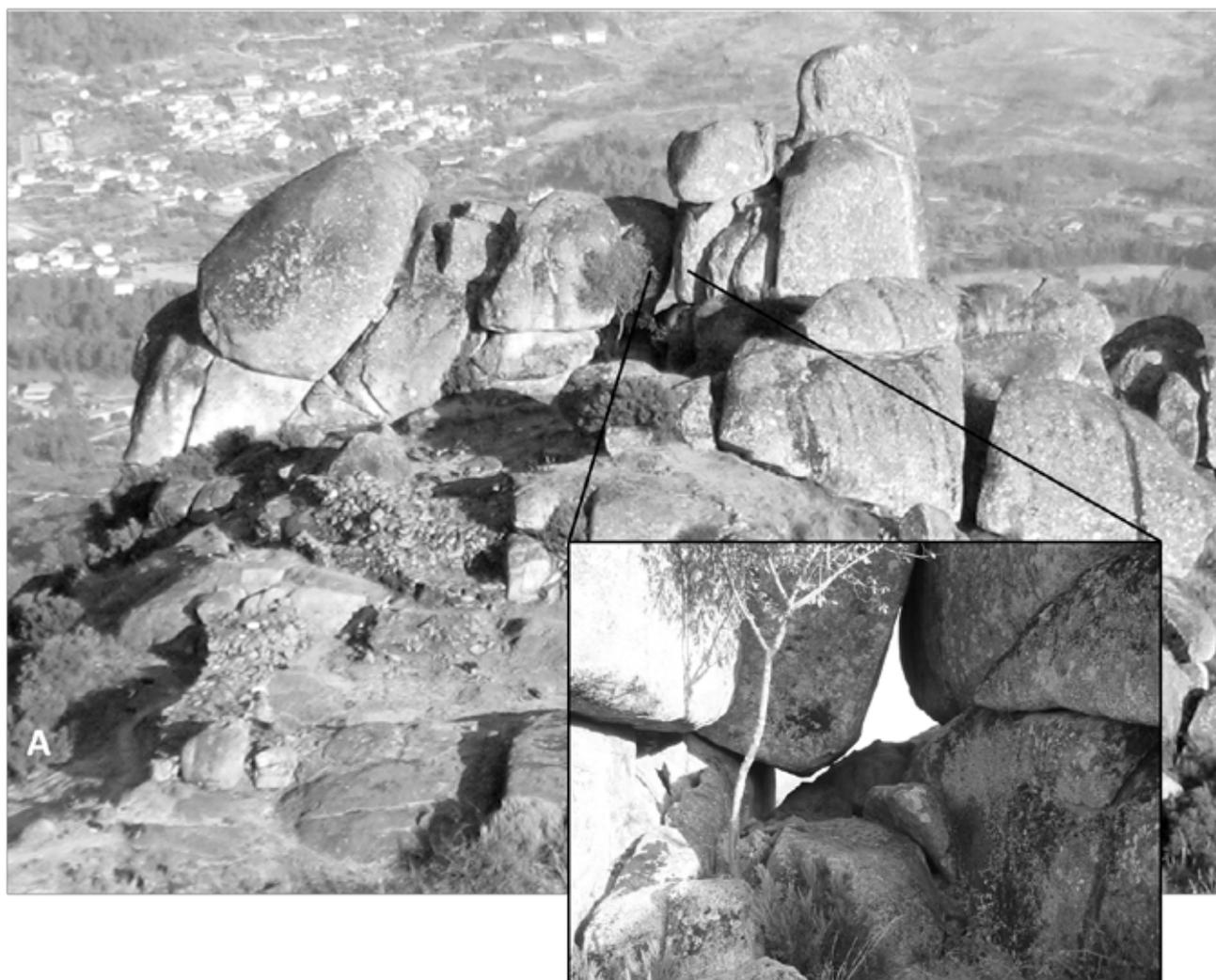
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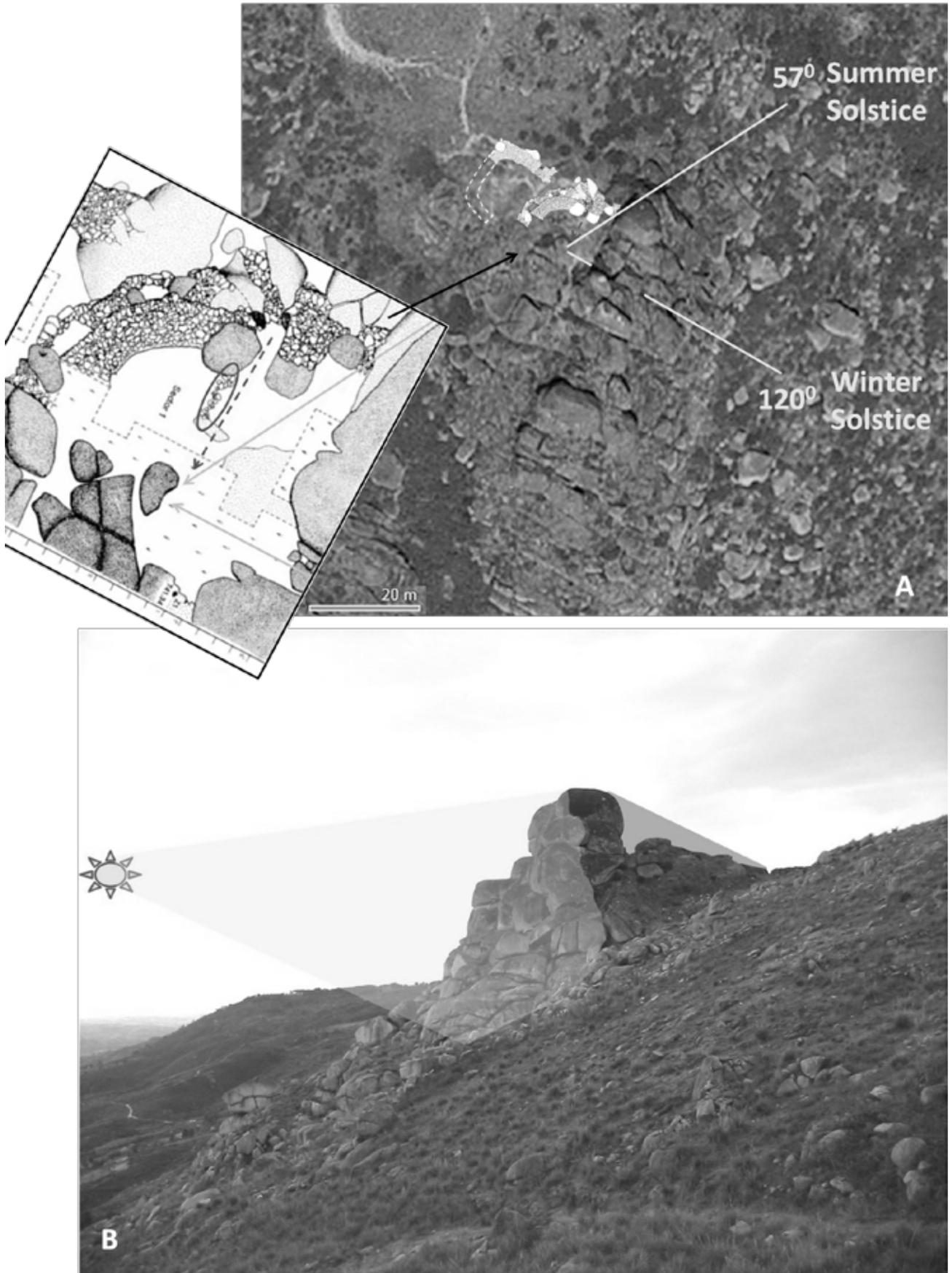


Fraga da Pena.

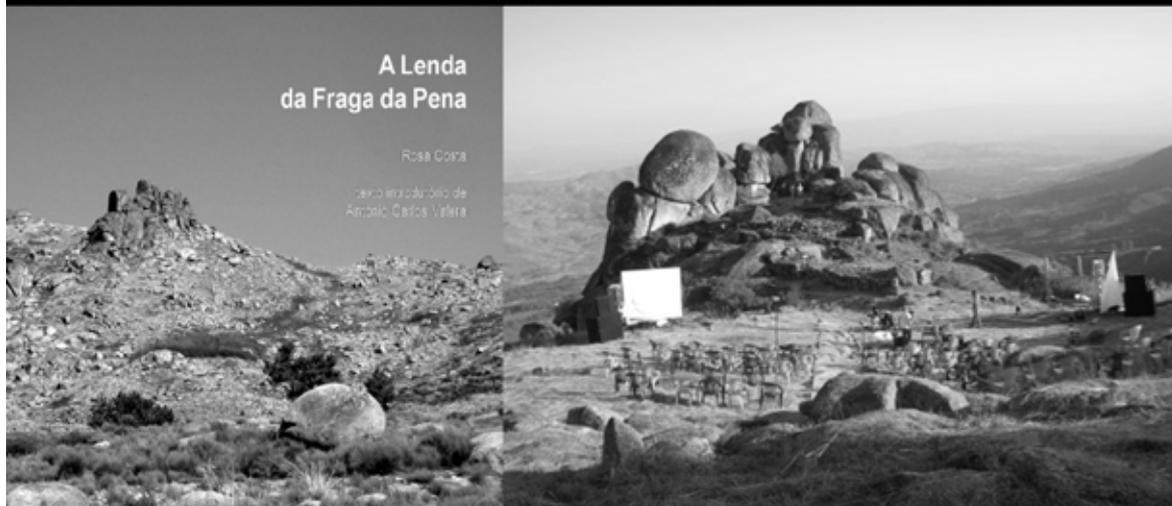
A - Seen from the top of the slope ; B - Seen from the valley ; C - Plan of the two enclosures.



A – Passage through the *tor* ; B – View over the valley from the “balcony” ; C – Location of the “balcony” on the *tor*.



A - Orientation to the solstices ; B - Circumstances of light and shadow.



A Lenda
da Fraga da Pena

Rosa Cora

Ilustração de
André Carlos Valera



Publication of the Legend of Fraga da Pena and its performance in the place.