

HUMAN
CHALLENGES
IN A CONTEXT
OF CHANGING
LANDSCAPES

BOOK OF ABSTRACTS

LANDSCAPE
ARCHAEOLOGY
CONFERENCE



LAC 2024

10-14 JUNE
ALCALÁ UNIVERSITY
SPAIN





ALCALÁ UNIVERSITY
COLEGIO DE SAN ILDEFONSO- RECTORADO

Plaza de San Diego, s/n
28801, Alcalá de Henares, Madrid

COLEGIO DE MÁLAGA
FACULTAD DE FILOSOFÍA Y LETRAS

Calle Colegios, 2
28801 Alcalá de Henares, Madrid



WEB EVENT

The images appearing in this book were generated by AI based on the keywords for each session.



MESSAGE FROM THE ORGANIZING COMMITTEE



Dear participants,

Under the title 'Human challenges in a context of changing landscapes', LAC2024 attempts to explore some of the most important challenges facing Landscape Archaeology in the 21st century within the context of the following themes:

- Mobility, settlement and people: an environmental approach.
- Places, people and identity: a conceptual challenge for Landscape Studies.
- Space vs site: human dynamics in landscape.
- Cutting-edge technologies and theories: a new perspective from Landscape Archaeology.
- Knowledge transfer and local communities in Landscape Studies.
- Landscape heritage values.
- Climate change and ancient natural and human-shaped landscapes: interdisciplinary approaches.
- Landscape Archaeology: visual and virtual perceptions.
- Landscape Archaeology and Landscape Ecology.

The importance of the field of Landscape Archaeology cannot be underestimated. The discipline not only allows us to understand how past civilizations adapted and modified their landscapes, but also offers valuable lessons to help us face contemporary challenges such as climate change and the sustainable management of natural resources. In a world increasingly affected by extreme weather events, research in landscape archaeology takes on a new dimension. Understanding how past societies faced environmental challenges can inspire innovative solutions to today's problems.

We would like to stress the importance of the role of the session chairs in proposing such interesting sessions and reviewing and accepting the papers. The LAC2024 organizing and scientific committees have tried to ensure that the papers presented meet high academic standards and address relevant and urgent questions. The review carried out by the session chairs has contributed to the validity and reliability of the findings presented during the congress. This process is essential for maintaining scientific integrity and ensuring that the research is rigorous and of high quality.

We are confident that LAC2024 will be a success and we can only wish all the participants an enjoyable and productive congress.

With our warmest wishes,

The Organizing Committee



ORGANIZING
COMMITTEE



Dr. Pilar Diarte-Blasco

Spanish National Research Council (CSIC)

Scientific and Organizing Committee Coordinator

Dr. Almudena Orejas

Spanish National Research Council (CSIC)

Dr. Brais X. Currás

Spanish National Research Council (CSIC)

Dr. Manuel Castro Priego

University of Alcalá

Dr. Primitiva Bueno Ramírez

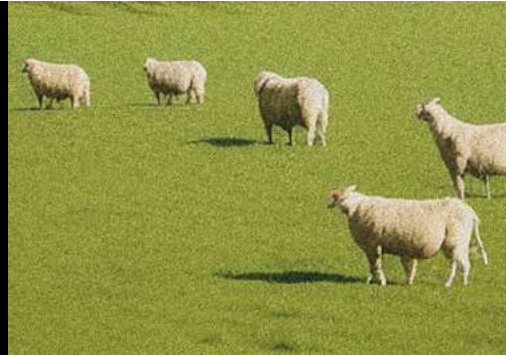
University of Alcalá



SCIENTIFIC
COMMITTEE



1. *LUIS ARBOLEDAS MARTÍNEZ*- Universidad de Granada
2. *ENRIQUE BAQUEDANO*- MAR
3. *GIOVANNA BIANCHI*- Università di Siena
4. *LAURA DE MIGUEL RIERA*- Servicio de Patrimonio Mundial. Ministerio de Cultura y Deporte
5. *PEDRO CARVALHO*- Universidade de Coimbra
6. *ALICIA CASTILLO*- Universida Complutense
7. *CRISTINA CORSI*- Università degli studi di Cassino e del Lazio Meridionale
8. *RAMON FABREGAS VALCARCEL*- Universidad de Santiago de Compostela
9. *GRAHAM FAIRCLOUGH*- Newcastle University, LAC2018 organization
10. *SILVIA FERNÁNDEZ CACHO*- Instituto Andaluz del Patrimonio Histórico
11. *SOPHIE GILOTTE*- Centre National de la Recherche Scientifique
12. *IGNASI GRAU MIRA*- Universidad de Alicante
13. *AVELINO GUTIÉRREZ*- Universidad de Oviedo
14. *VASILIKI KASSIANIDOU*- University of Cyprus
15. *SJOERD KLUIVING*- Vrije Universiteit Amsterdam
16. *PAUL J. LANE*- Uppsala University, LAC2016 organization
17. *ELÍAS LÓPEZ-ROMERO GONZÁLEZ DE LA ALEJA*- CSIC
18. *PATRICIA MURRIETA-FLORES*- Lancaster University
19. *LAURO OLMO-ENCISO*- Universidad de Alcalá
20. *HÉCTOR A. ORENGO*- ICAC-ICREA
21. *CESAR PARCERO*- CSIC
22. *LEONOR PEÑA CHOCARRO*- CSIC
23. *JUAN ANTONIO QUIRÓS CASTILLO*- Universidad del País Vasco
24. *CARMEN RUEDA GALÁN*- Universidad de Jaén
25. *JULIA SARABIA BAUTISTA*- Universidad de Alicante
26. *CATERINA TENTE*- Universidade Nova de Lisboa
27. *SAM TURNER*- Newcastle University, LAC2018 organization
28. *FRANK VERMEULEN*- Universiteit Gent
29. *GIULIANO VOLPE*- Università di Foggia
30. *MAR ZARZALEJOS PRIETO*- UNED
31. *MIRIAM CUBAS*- Universidad de Alcalá

INAUGURAL
CONFERENCE I

MIKE PARKER PEARSON

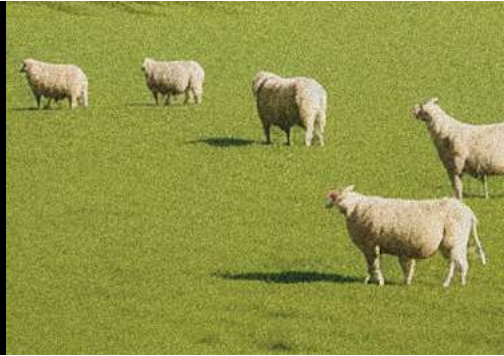
Institute of Archaeology, University College London (UCL)

The Stonehenge landscape: new insights

The management strategies associated with domesticated farm animals in the past (e.g. sheep, cows, goats, pigs, horses) has taken different forms; from on the farm management, to the seasonal, year-on-year movement between pasture areas, to the daily-rote from farm to shieling, or the temporary emplacement of animals across the summer months within or out of the farm. But the extent to which these forms were dependant on particular environments has yet to be widely discussed. In exploring the landscape environment with different elements such as farm, fold and shieling locations, or through the lenses of movement to and from the pasture areas, or in terms of changes in practices of maintenance and their temporalities, this session will examine the generation and maintenance of transhumance systems across the North Atlantic region. From field survey and excavated archaeology, to scientific approaches, and to historical and archaeo-ethnographic studies, we hope this will be an inter-disciplinary session, involving specialists from across North-west Europe, Scandinavia and UK. In doing so, and from a comparative basis, we hope that a broad discussion will occur on the relationship between environment and other elements that will lead to several topic points that will explore differences and similarities in the systems of animal management, and the intersections of 'environmental' and what 'human-induced' aspects in the past from prehistory to the early modern periods.



INAUGURAL
CONFERENCE II



HELENA KIRCHNER

Universitat Autònoma de Barcelona

Building a new agrarian landscape in al-Andalus

The Arab Berber conquest of the Iberian Peninsula from 711 AD onwards brought about a profound transformation of the agricultural landscape. Extensive research on irrigated, rainfed and even drained cultivation areas, both rural and urban, allows us to describe this process of transformation in considerable detail, with significant regional variations. The so-called Islamic Green Revolution, first identified by Andrew Watson on the basis of Arabic written sources, has been associated, in the case of al-Andalus, with the spread of plants and hydraulic techniques, as well as with urban development from the 10th century onwards. However, a broader view, which seeks to identify the impact of this process on the landscape and settlement organisation, reveals that Berber and Arab peasants made technical choices determined by the different conditions of the settlement sites in al-Andalus. This selection process followed new criteria compared to the Roman and Late Antique agrarian tradition.



INAUGURAL
CONFERENCE III



PEDRO DÍAZ-DEL-RÍO

Instituto de Historia, Consejo Superior de Investigaciones Científicas

Funding Landscape Archaeology Research at the ERC

The European Research Council is the most prestigious funding agency in Europe. Its funding scheme (Starting, Consolidator, Advanced, and Synergy grants) supports excellent curiosity-driven science that is open to applicants at different career stages, from post-doctoral researchers to well-established professionals. ERC panel SH6, 'The study of the human past', has been a key factor in the transformation of the Archaeology of the 21st century. It has fostered a genuinely interdisciplinary approach to the materiality of the past and has promoted a sweeping change in the scale of observation. Between 2007 and 2022 the ERC funded 209 archaeological projects, with over 490 million euros invested in archaeological research. Understanding past landscapes has been a key part of this research, exploring the historical aspects of the climate, environment, and ecology of our human past. These aspects will be illustrated with some relevant ERC projects.

SESSION	PAGE
1. Farm, fold, shieling: environments, animal management and the transhumant systems in the North Atlantic región	11
2. Surveying through changing landscapes	21
3. Ecology and archaeology of forest land use legacies: charcoal analysis as analytical tools of human-induced changes	31
4. All Watched Over by Machines of Loving Grace - Challenges and opportunities in the application of machine learning in landscape archaeology	38
5. Community in the mining landscape: analysing human environment interactions through a multidisciplinary approach	48
6. The noble landscape and its residence: The powerful intersection of art, architecture and environment	59
7. Computational Approaches in Landscape Archaeology: Exploring Human-Environment Dynamics and Settlement Patterns from Prehistory to Recent Times	65
8. What are you doing here?	81
9. Mobility, settlements and Archaeology: How ancient movements have shaped the Landscape?	89
10. Archaeology of the Uplands: searching for models and methodology in high altitude human-shaped landscapes	97
11. Challenging landscapes and hunter-gatherers' subsistence and mobility	109
12. Exploring the interaction between humans and their environment: The Roman road network and associated structures through Landscape Archaeology	122
13. Tracking (in)visible states and Domestic Spaces through Microarchaeology from Protohistory to Roman times: Iberia and North Africa	133
14. Questioning ruins, defining townscapes. late roman urban centers at the sight of new, high-resolution, integrated archaeological methods and theories	138
15. Integrated approaches to heritage landscape studies	145
16. Landscapes of Desertions. Social memories, political practices and identities in a long-term perspective	160



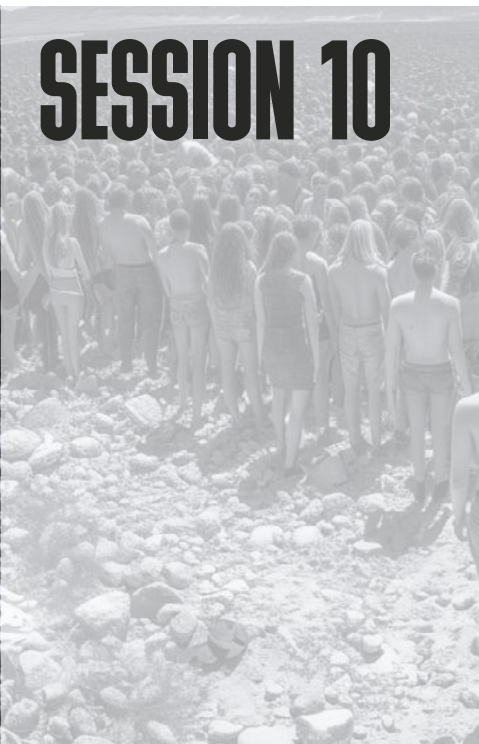
SESSION	PAGE
17. Bridging historical landscape ecology and landscape archaeology: common questions and challenges in a rapidly changing world	169
18. Landscapes of equality: Decentralization, complexity and resistance in the political construction of space	184
19. Desert and fluvial landscapes. Lights and challenges of landscape archaeology projects in the Theban area (Egypt)	192
20. Ideology, production and social change. Forms of territorial organization during the 3rd to 1st centuries BCE	201
21. Crisis? What crisis? New perspectives on the crisis of the Late Roman Empire	211
22. Memoryscapes: Monuments, materiality, and the memorialisation of the landscape	219
23. What is next? Methodological solutions for the study of archaeological landscapes: Comparative perspectives	231
24. Lost in the landscape. Abandoned Towns between Late Antiquity and the Middle Ages in the Mediterranean Area	242
25. Historical responses to environmental change: rethinking riverine-coastal landscape archaeology through interdisciplinary approaches	247
26. Three-dimensional Landscapes'. Current Applications on Survey, Analysis, and Visualization of Archaeological Landscapes	259
27. No-man's Land? Debating borders, boundaries, and frontiers as areas of interaction, connection, and exchange in Western Europe from the Chalcolithic to the Iron Age	270
29. An evolving landscape. An analysis of the Iberian relationship between built space and material culture (4th-11th centuries)	275
30. Water uses in rural economic activities: evidences for the Roman period in Hispania and the Roman West	284
32. Rock art and megalithic monuments as key elements to understand the Late Prehistory landscapes	292
33. Maritime Frontiers: insular landscapes, agency, and identity	299
34. Open Session	307
35. Poster	316



LAC 2024

ARCHAEOLOGY
OF THE
UPLANDS:
SEARCHING FOR
MODELS AND
METHODOLOGY
IN HIGH
ALTITUDE
HUMAN-SHAPED
LANDSCAPES

SESSION 10



ARCHAEOLOGY OF THE UPLANDS: SEARCHING FOR MODELS AND METHODOLOGY IN HIGH ALTITUDE HUMAN-SHAPED LANDSCAPES

SESSION ORGANIZERS

ENRICO GIORGI

Università di Bologna,

CRISTIANO PUTZOLU

Università di Bologna

FEDERICO ZONI

Università degli studi di Bergamo

Upland archaeology is a field that has gained increasing attention in recent years due to its potential to uncover unique insights into the lives of communities, living in mountain landscapes and environment. Anyway, there are certain models that scholars tend to repeat uncritically: Is there greater resilience in the uplands that makes the mountains more suitable for times of crisis? Why so often in Italian mountains Middle Ages sites insist over bronze age occupations? Is it possible to trace the network of late prehistoric ephemeral pathways? Is it true that the importance of the uplands is decreasing over the classical age and the Early Middle Ages? Can we really talk about cultural backwardness for mountain regions in the Middle Ages?

Starting from a common geographical framework, the proposed session will focus on the peculiarities of mountain landscapes compared to lowland ones. The aim is to bring together researchers to explore the multifaceted aspects of upland archaeology. We invite diachronic contributions, from late prehistoric times, through the classical age, to the Middle Ages, that delve into the various aspects of archaeological research in upland regions, spanning from methodology and technology to interpretations and implications.

SESSION OBJECTIVES:

- **Methodological approach:** This section will focus on methodologies and technologies that have enhanced our ability to investigate upland archaeological sites. Presentations on cutting-edge remote sensing techniques, GIS applications, and interdisciplinary approaches are encouraged.
- **Cultural Significance:** Explore the cultural and historical significance of upland regions. How do upland communities adapt to their environments, and what can we learn about their cultural practices and traditions from the archaeological record?



- **Environmental Context:** Investigate the impact of climate change and natural processes on upland landscapes. How have these factors shaped the archaeological record in these areas, and what insights can we gain into past environmental adaptations?
- **Community Engagement:** Discuss community involvement and stakeholder collaboration in upland archaeology projects. How can we effectively engage with local communities, and what are the ethical considerations in conducting research in these regions?
- **Interpretation and Synthesis:** Share case studies and findings from upland archaeological projects, emphasizing interpretations, and synthesizing data to develop comprehensive narratives about the past.

WHO SHOULD ATTEND

This session is open to researchers, practitioners, and PhD students interested in upland archaeology, as well as those from related disciplines, such as anthropology, geography, and environmental science.

BENEFITS TO THE FIELD:

By exploring the unique challenges and opportunities associated with upland archaeology, this session aims to advance our understanding of human-environment interactions in elevated landscapes. It will also foster collaboration, knowledge exchange, and methodological innovation in the field.



ID: 90365

The language of living mountains: livestock settlements and occupation dynamics in the Puigpedrós massif, Duran, Vallcivera and Llosa valleys (eastern Pyrenees, Spain)

ARNAU CARBONELL- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain, **LÍDIA COLOMINAS**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain, **VALENTINA PESCHINI**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain, **ALFREDO MAYORAL**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain; GEOLAB (UMR 6042 UCA-CNRS), **ABEL GALLEGO-VALLE**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain, **JESÚS MARTÍNEZ**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain; Universitat Rovira i Virgili (URV). Tarragona, Spain; Universidad de Alcalá (UAH), **HECTORA. ORENGO**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain; Catalan Institution for Research and Advanced Studies (ICREA), Barcelona, Spain, **JOSEP MARIA PALET**- Landscape Archaeology Research Group (GIAP)/Catalan Institute of Classical Archaeology (ICAC-CERCA). Tarragona, Spain

KEYWORDS: Landscape archaeology, archaeological survey, cultural landscapes, high mountain areas, c14 dating

Due to the increase in research on the main European mountain systems, many of these spaces are currently recognized as cultural landscapes with historical significance. From a theoretical perspective of landscape archaeology, the Landscape Archaeology Research Group (GIAP-ICAC) has conducted archaeological surveys on the Puigpedrós massif, Vallcivera, Duran, and Llosa valleys (la Cerdanya, Spain) since 2018. This survey aimed to characterize human occupations in these highlands throughout history and integrate the data into the framework of the team research in the Eastern Pyrenees.

As a result, 240 structures at 66 archaeological sites have been meticulously inventoried in the area. Test pits were made in 27 of these structures, between 2300 and 2500 m, to specify their functionality and obtain reliable dating material. Almost all of these studied structures were livestock occupations, dry-stone huts, and enclosures. There were also settlements surrounded by dry-stone walls with differentiated occupation phases in an excellent state of conservation.

With the data provided by the radiocarbon datations, we reconstructed a chronological model reflecting the variations in long-term occupation of the different valleys of the area. Additionally, the individual study of these structures provides a greater understanding of the mountain exploitation in this section of the Pyrenees throughout history, showing the importance of livestock activities in terms of the anthropization of high mountain spaces and the subsequent reconstruction of mountain landscapes.



ID: 90607

“There are Prehistoric cities up there”. Methodological insights on fortified hilltop sites in southern Albania

FEDERICA CARBOTTI- University of Bologna; University of Salento

KEYWORDS: **hilltop fortified sites; survey; spatial analysis; Albania.**

Analyzing settlement dynamics and land use in southern Albania, the region that during classical antiquity took the name of Epirus, necessarily requires dealing with the geomorphological peculiarities of the area. The mountain reliefs branching from north to south for almost the entire extent of the territory, combined with the scarcity of lowland plains, have major implications on the study of these areas from a theoretical, methodological as well as a practical point of view. These elements become particularly striking in the study of highland fortified sites. Accessibility to these sites is often reduced due to their location on uneven surfaces at high elevation and along steep hillsides. Moreover, archaeological visibility is reduced as a result of slope erosion and runoff activities, which also increase the scattering of archaeological artifacts. All of which makes the intra-site survey and interpretation of these contexts in the broader regional framework further challenging and sometimes lacking.

The presentation aims to expose the problems faced and the solutions applied during field surveys of three such sites, Badhra, Karos, and Kukum, located along the rocky coast between Porto Palermo and Borsh. These were investigated in 2023 as part of the activities of the FortNet Project, which aims to reassess these sites by implementing the available documentation with non-invasive methodologies to better understand their function and development dynamics from a diachronic perspective.

ID: 90638

The Method of Archaeological Analysis of Architecture applied to Rural and Mountain Contexts. The case of Seppiana

CHIARA RIBOLLA- Specialist in Medieval Archaeology at the Archeology Specialization School

KEYWORDS: **Ossola, Archaeology of Architecture, Mountain Archaeology, Interdisciplinarity, Global Archaeology**

The results and reflections derived from a two-year study are presented, which examined the construction culture of Seppiana, a mountain village in the center of the Antrona Valley, one of the valleys of the wider Ossola Valley (northern Piedmont, in Northern Italy). The study involved 70 buildings, one of which was ecclesiastical, for which architectural, planimetric and stratigraphic analysis of the relevant elevations were carried out.



From the outset, the study was conducted with an approach based on principles from global archaeology; starting, therefore, from the assumption that each building is the outcome of a complex system of knowledge and techniques, connected to the historical context and social structures, I chose to conduct the study with an interdisciplinary research method.

The study has highlighted the urgency of documenting a heritage of material culture that is disappearing due to the abandonment of mountain contexts or, on the contrary, invasive modernization interventions; furthermore, it highlighted the need to reconsider and implement the application, to mountain contexts, of the archaeological analysis method of the construction and the consequent interpretation of the data.

The investigations have, in fact, highlighted how the homes were designed according to a predominantly functional scheme, linked to an agricultural economy, and built based on the knowledge transmitted from generation to generation by local labour, who used local materials.

Read in this light, the different wall typologies identified can be interpreted not only as the product of a chronological evolution, but also as coexisting walls, the result of a reasoned choice by the bricklayers who, over time, apply a construction method identified as effective, in relation to the location and the construction material available.

ID: 90446

The Emilian Apennines in the 2nd millennium BC: new perspectives on the settlement pattern

CRISTIANO PUTZOLU- Università di Bologna, *JORGE CALVELO ALVAREZ*- Università di Bologna, *SILVIA FIORIN*- Università di Bologna, *ERIK ZANOTTI*- Università di Bologna, *CLAUDIO CAVAZZUTI*- Università di Bologna

KEYWORDS: Upland Archaeology, Bronze Age, Settlement Pattern, Viewshed Analysis, GIS

In the past decades, several works have attempted to reconstruct the Bronze Age settlement pattern in the mountain regions of Emilia (Northern Italy). These studies have provided a fundamental basis for drawing general historical trajectories and highlighted the existence of at least two territorial districts, characterized by different aspects of the material culture that seems to reflect distinct regional networks east and west of the Taro River valley. However, most of the previous achievements relied on surface finds, chrono-typology of materials, and limited methods of topographic analysis.

By recalling the theoretical approach of David Clarke three analytical scales, we will present the preliminary results of our ongoing research at the micro, semi-micro and macro scales, carried out in the upland areas of four river valleys (Reno, Panaro, Secchia and Taro). The application of different methods, such as extensive surveys, manual coring, detailed photogrammetric surface modelling from drone, spatial analyses in a GIS environment (viewshed analysis, LCPA, percolation analysis), and



the results of the excavation at Monte della Croce, dated at the 13th-11th century BC, are currently providing new data about the settlement pattern, the internal morphology of the fortified sites and their differentiated territorial functions.

ID: 89852

Architecture in and on the mountains: adaptation and innovation of the historic built environment

FEDERICA MATTEONI- Università Cattolica di Milano, *CHIARA PUPELLA*- Università Cattolica di Milano

KEYWORDS: historical building archaeology; mountain architecture; construction techniques; topography; GIS.

The role played by the mountain reality, as a context characterized by an extraordinary variety and wealth of heritage, not only environmental and relating to the landscape, but also historical-cultural and therefore architectural, has become central in recent years. In particular, historic buildings constitute a fundamental component of the present-day mountain communities, and have a significant impact on them, both in quantitative and qualitative terms: they represent a resource that proposes settlement models that are still relevant today, but also offer ideas for contemporary urban planning with a view toward protection and enhancement.

Studying mountain architecture thus makes it possible to outline a very precise profile not only from a historical-architectural point of view, but also from a socio-economic one, since it is, to all intents and purposes, intelligent and sustainable architecture: it is realized, today as in the past, by exploiting local raw materials and natural resources, thus respecting the environmental and landscape context in which they are inserted, with the awareness that they are neither unlimited nor infinite. It is an architecture capable of rationally and consciously "choosing" the best place for construction, an indicator that over the centuries has allowed the survival and preservation of this heritage. The technologies employed are based on a precise knowledge of materials (stone, wood) and construction processes, coming from knowledge passed down through generations and defining the distinctive features of a building, which becomes "traditional", with an important cultural, technological and architectural continuity.

The focus of the presentation will be on the territory of the high valleys of Bergamo (Brembana Valley): through the methodologies proper to the archaeology of architecture, functional case studies will be presented to grasp the occupational dynamics of this wide context, which data will be managed through GIS for a clearer understanding of the landscape transformations.



ID: 89969

“What are [humans] to rocks and mountains?” Some self-reflective notes about archaeological practice in mountainous and upland landscapes

FRANCESCA CHELAZZI- University of Glasgow, KRISTEN HOPPER-Durham University

KEYWORDS: **upland archaeology, landscape archaeology, geoarchaeology, theoretical approaches, methods**

There is a growing recognition of the need for bespoke landscape archaeology methodologies for upland and mountainous environments. The archaeology of these landscapes is traditionally seen as ephemeral (read less important), due to the seasonal nature of many of the activities taking place here. Survey methodologies honed and tested in plains and valleys are not always suitable, not only in strategy (i.e., cost, time, labour), but in the types of archaeology they are focused on locating (e.g., permanent settlement). Therefore, to undertake surveys and investigations that are more sensitive to the specific geographies and ecosystems of these environments, it is crucial that we adapt our methodologies to focus on activities, or the material remains of the interactions between humans and their resources. We would also argue that we need to revisit our theoretical approaches. Mountainous environments are still often seen in either/or terms. They are either a barrier or a corridor, dividing or unifying – but they may be one or the other, both or neither at different (or even the same) time. Therefore, to generate more sensitive understanding of past landscapes in these environments, we need to take into consideration the variables of time, space, and place, and adapt our methodologies to consider these variables from multiple perspectives (ecological, human). Using examples from our own surveys and projects, we will reflect on these questions, and on the value of multidisciplinary approaches (landscape archaeology, ethno-anthropology/archaeology, geoarchaeology etc.) to investigating these landscapes.

ID: 89332

A place for gods and men: Tor dei Pagà (Vione, Valcamonica - Italy)

GIOVANNA BELLANDI- Università Cattolica del Sacro Cuore, Comune di Vione, Alessandro Bona- Università Cattolica del Sacro Cuore, Comune di Vione, CHIARA BOZZI- Università Cattolica del Sacro Cuore, Comune di Vione, DENEB CESANA- Soprintendenza Archeologia Belle Arti e Paesaggio per le province di Alessandria Asti e Cuneo Ministero della Cultura, Università Cattolica, Comune di Vione, DELIA FANETTI- ARCO Società Cooperativa di Ricerche Archeobiologiche Como, Comune di Vione, Riccardo Valente- Università Cattolica del Sacro Cuore, Comune di Vione

KEYWORDS: **Brandopferplatz, Iron Age, Fortification, Later Middle Ages (13th/14th century AD)**



Since 2011 annual archaeological excavation campaigns have allowed us to reconstruct the historical events that occurred at the site known as Tor dei Pagà, situated in upper Valcamonica at elevation of 2250 m asl. The site was frequented during two distinct phases: the first in the Iron Age when ritual fires (Brandopferplatz) were lit there and the second in the Later Middle Ages (13th/14th century AD) when the site became a fortified refuge for men-at-arms. The selection of the site was not random in either period: a prominent rise made the Iron Age fires visible from the valley floor while the location would have been difficult for potential attackers to reach during the Middle Ages. Unique cases of use or part of a network in one or both cases? What reasons drove the choice of this place and caused its abandonment?

A possible reason in both cases – although much more likely in the case of the Middle Ages – is that climatic conditions became unfavourable to human habitation at higher elevations.

We address these issues using both traditional archaeological tools and also bioarchaeological data.

ID: 90617

An analysis protocol for mountain areas and rock structures: preliminary results on post-medieval landscapes in the Underlandscape project

LETIZIA CHITI-University of Pisa, *MARCO SERRADIMIGNI*- University of Pisa, *ANTONIO ALBERTI*-University of Pisa, *MONICA BALDASSARI*- University of Milan, *ENRICA SALVATORI*- *ANDREA BERTACCHI*- University of Pisa, *MARIA GRAZIA DERI*- University of Pisa, *AUGUSTO CIUFFOLETTI*-University of Pisa, *VINCENZO PALLESCHI*- CNR Pisa, *ENRICA LEMMI*- University of Pisa

KEYWORDS: rock structures, mountain landscape, non-invasive techniques, environment studies, postmedieval archaeology

Over the last two years, the University of Pisa and the CNR conducted a multidisciplinary and diachronic study on the mountain landscapes as part of the PRIN; project, aimed to the fine-tuning of an analysis protocol to be used for hypogean structures and based on non-invasive scientific techniques, operating mainly in situ. The territory selected as a sample to test and implement this methodology corresponds to the area of Lunigiana, Garfagnana and Mediavalle del Serchio (north-west Tuscany): this present several examples of caves and rock shelters in different landscapes and historical contexts, which can be studied by acquiring a deeper knowledge of these structures and the environment where they were and are currently located.

The experimented methodology intends to integrate the technical-scientific and historical-archaeological approaches through the application of non-destructive diagnostic methods and digital and multimedia technologies for archaeological, geo-historical and palaeobotanical research, including 3D modelling and aerial photography from drones. Part of the project involves also the collection of oral sources and the sharing of the research progresses with the local population.



On this occasion we intend to present the research strategy adopted in the UNDERLANDSCAPE project, together with an initial analysis of the data collected, introducing the first result of the study about the use of these hypogean structures and their landscapes in Modern and early Contemporary Age. For these chronological ranges, written and cartographic sources combined with archaeological and botanical surveys and 3D reliefs, have provided some interesting insights into the possible connection between the use of the caves with road system and transhumance, as well as with specific productive uses of the forest that changed over time, between the 16th and 20th centuries.

ID: 90068

Testing survey strategies in marginal and remote areas in the Apennine uplands. The case of the MoLuLaP project

MARTINA BERNARDI- Roma Tre University, *MARGHERITA BOTTONI*- Roma Tre University, *EMERI FARINETTI*- Roma Tre University, *MATTEO ROSSI*- University of Rome "Tor Vergata"

KEYWORDS: Archaeology of Uplands, Landscape Archaeology, Mobile GIS, Artifact surface survey, Apennine Landscape

The Monti Lucretili Landscape Project (MoLuLaP) explores an Apennine upland landscape northeast of Rome from a diachronic perspective. The main goal of the project is to examine the range of socio-economic and cultural activities that have defined and shaped the historical rural landscape over the centuries, as well as to assess the impact of human activities on the environment.

The upland areas are difficult to investigate and are hardly accessible due to geomorphological characteristics that inevitably impact field research. Consequently, archaeological surveys in mountainous contexts require special attention to methodology, as evidenced by the growing number of survey projects focusing on upland regions in the past decade.

The aim of this paper is to emphasize how surveying diverse forested and rocky landscapes can offer an opportunity to reconsider and reframe survey strategies, with the goal of establishing best practices for upland archaeology.

On one hand, on-field research is complemented by laboratories aiming at community engagement, which is particularly essential in contexts where the archaeological record is scarce or hardly visible and/or accessible. On the other hand, considering the environmental challenges, survey activities in marginal contexts require continuous experimentation, testing new strategies daily to select survey areas and overcome critical issues, primarily related to visibility. In this respect, we will discuss the self-critical approach developed, which enables reflection on the challenges and potential of the various strategies employed. For instance, in addition to the traditional line walking survey, we experimented with the point sampling method as well as with the combination of extensive and intensive survey along mountain routes and paths. Moreover, we will discuss the benefits and limitations of using a GIS mobile application in these remote contexts.



ID: 90272

An innovative approach to the mapping, characterisation, and dating of Hong Kong's terraced upland landscapes.

MICK ATHA- Newcastle University, UK, *SAM TURNER*- Newcastle University, *TIM KINNAIRD*- St Andrews University, CERSA Luminescence

KEYWORDS: **Terraces, LiDAR, HongKong, OSL-PD, Geoarchaeology**

The research presented in this paper is using an innovative GIS-based interdisciplinary approach combining historical research, geoarchaeology, aerial remote sensing, and geoscientific dating to elucidate the character and evolution of pre-colonial land use in Hong Kong's mountainous uplands.

Of particular note are the thousands of boulder-faced cultivation terraces, which despite modern afforestation are clearly imageable in LiDAR data and were prominent features in high-resolution 1960s' aerial photos on the then denuded slopes. The cultivation terraces are conventionally associated by local historians with ancient tea growing on the mountains of the central New Territories (NT) and Lantau Island, which was mentioned in 17th-to-19th-century (Qing dynasty) documentary sources. However, until recently the terraces had remained uninvestigated, undated, and poorly understood by archaeologists. Moreover, they were also uninventoried and unmapped by the heritage authority and therefore potentially at risk.

In order to address this archaeological gap in knowledge, a programme of systematic mapping and characterisation of the terraces was initiated by the writer, but ground-truthing, sampling and dating were also clearly desirable. To that end, a campaign of fieldwork in late 2023 targeted four blocks of cultivation terraces identified in remote sensing data: three in the central New Territories (NT) between Tai Mo Shan (957m) and Grassy Hill (647m), and one block on Nei Lak Shan (751m) on Lantau Island. In total, sixteen terraces were sampled using optically stimulated luminescence profiling and dating (OSL-PD). Based on the OSL field profiles, further samples were collected for OSL dating back in the lab at St Andrews.

The paper presents the results of the recent geoarchaeological fieldwork, explores the OSL dating results in light of the morphological contrasts between terraces in the NT and on Lantau Island, and for the first time offers a scientifically dated chronology for upland land use in Hong Kong.

ID: 89581

Sacred Landscapes: Cairns in Hills and Highlands of Uruguay

MOIRA SOTELO- Universidad de la República, Uruguay, *CAMILA GIANOTTI*- Universidad de la República

KEYWORDS: **cairns, indigenous people, hills, sacred places, Uruguay**



A variety of archaeological sites are located in the highlands of Uruguay, in prominent areas with expansive visibility over the landscape. Within this record, we have chosen for this study a particular type of site composed of cairns and ringcairns. Based on previous research, our interpretation is that these elevated locations and their mounds were sacred hills for the indigenous people. Archaeological interventions, European documents from the conquest of the Río de la Plata, indigenous oral tradition, and place names form the foundation of our record.

Through surveys, we have identified spatial organizing aspects of the sets of stone mounds. Prominent summits of the topography were selected for their placement. These locations have visual connection over wide and clear horizons, as well as over valleys and other mountain ranges. They are not characterized by immediate access to resource concentration zones and productive areas, although they visually control them. The cairns, spatially integrated with outcrops and other physiographic features, are located at the highest point of the hill and at other points resembling balconies.

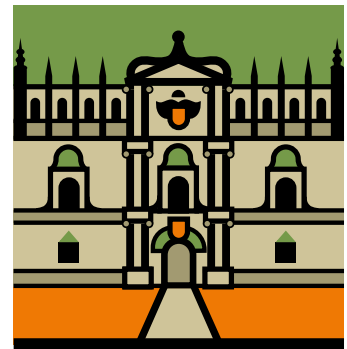
Despite the absence of detailed chronologies, these sites were constructed by indigenous peoples as funerary spaces, ritual and ceremonial sites, places of worship, and periodic gathering places for communities. The constructions reveal forms of spatial organization reflecting territorial appropriation by a kinship group or community, serving as indicators of social relations. The desire for longevity and their broad spatial scale suggest a worldview that constructed a sacred landscape through an extensive network of hills and highlands. The sacred nature of many of these hills persists and reaffirms itself today under different modalities.



HUMAN
CHALLENGES
IN A CONTEXT
OF CHANGING
LANDSCAPES

BOOK OF ABSTRACTS

LANDSCAPE
ARCHAEOLOGY
CONFERENCE



ORGANIZERS



COLLABORATORS



LAC 2024

10-14 JUNE
ALCALÁ UNIVERSITY
SPAIN