

Research Article

# Capturing Red Deer Alive in Post-Paleolithic Rock Art—Hunting, Taming, Symbolism

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## Abstract

The red deer is portrayed in Post-Paleolithic rock art from the Iberian Peninsula (10,000-4,000 BCE) as a liminal creature—positioned between wildness and domestication. Though never fully domesticated, its behavioral adaptability allowed for semi-captive management in open areas enclosed by natural or artificial barriers. Rock art and archaeological evidence from across Europe suggest early efforts at proto-herding practices with red deer, undertaken under semi-controlled conditions during the Late Mesolithic and Early Neolithic periods—comparable to strategies used by North Scandinavian groups with reindeer. A prerequisite for such management was the live capture of uninjured animals. Iberian Post-Paleolithic rock art offers crucial insight into this complex endeavor, illustrating non-lethal techniques designed not to kill but to subdue deer—often within highly structured or ritualized hunting frameworks. The images reveal specialized hunting practices employed by skilled individuals or organized groups. This study employs a combined iconographic and contextual methodology, integrating digital image analysis with archaeological and ethnographic data. The framework includes standardized visual analysis of motifs, spatial configuration assessment, comparative iconography, excavation reports, material finds, ethnographic parallels, and correlation with archaeo-zoological data. This interdisciplinary approach enables the identification of temporal and functional shifts in techniques, practices, and symbolic meanings over time. The analyzed corpus reveals a range of live-capture methods: lassos, snares, long and crossed bows, corral traps, throwing nets, rocket nets, drug-laced bait or darts, and persistence hunting. Evidence suggests that the capture of deer served diverse purposes beyond economic exploitation for meat, milk (noted for their excellent organoleptic properties), leather, prestige items, transport, and medicine. First, the live seizure of red deer held intrinsic ritual and social value. Levantine rock art depicts spectacular mass captures of male deer in ceremonial contexts, often involving entire communities. These events, performed with bare hands or rope implements, were staged in arena-like spaces with music, parades, and communal dances. Secondly, the preference for live capture respected cultural taboos, avoiding excessive bloodshed and aligning with beliefs that animals must return to the Earth. Persistence hunting—exhausting the animal to the point of capture—was one such method. Lastly, deer was involved in shamanic rituals, serving as spirit guides. These practices reflect the sacred and mythic significance of the stag in Mesolithic and Neolithic cultures. In sum, this multidimensional investigation reveals the deep entanglement between symbolic systems and subsistence strategies, highlighting the complex interrelation of ecological knowledge, ritual behavior, and cultural innovation.

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## Keywords

Prehistoric Rock Art, Levantine Rock Art, Prehistoric Archaeology, Mesolithic-Neolithic Transition, Religion in Prehistory, Archaeozoology, Domestication, Deer Capture Techniques and Rituals

## 1. Introduction

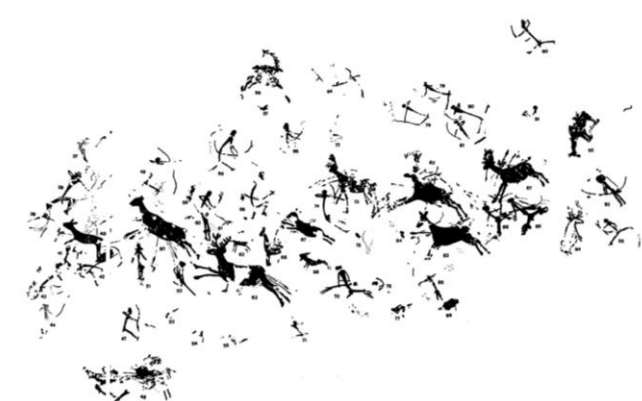
Post-Paleolithic Rock Art from the Iberian Peninsula (10000-4000 BCE) is traditionally renowned for its depictions of violent and bloody hunting scenes [1, 2]. Notable examples include the paintings concentrated in the Barranco de la Valltorta (T íg, Castell ón) [3, 4]. In the Cova dels Cavalls (T íg, Castell ón), a group of figures, resembling armed explorers, is represented [5]. At sites such as Cova Centelles (Alboc àsser, Castell ó), Cova Remigia (Ares del Maestre, Castell ó), and Cingle del Mas d'en Josep (T íg, Castell ó), emblematic hunters are shown wearing feathered headdresses [6]. Similarly, in the Coves de la Saltadora (Coves de Vinrom à Castell ó), various archers are depicted engaging in deer hunting. One notable scene features a naturalistic archer tracking his prey by following a trail of footprints or bloodstains left by a herd of deer, as he prepares for the shot [7, 8].

In the shelter of Arp án (Parque Cultural del R ó Vero, Huesca County), a stag in a static posture is shown accompanied by three other deer, alongside an archer poised for the kill [9]. Meanwhile, in Arag ón, at El Covacho de la T á Mo-na, archers and deer are separated by a peculiar figure seated on what appears to be a stretcher [10-13].

The prevalence of chase imagery in Post-Paleolithic rock art from the Iberian Peninsula has been systematically examined through archaeo-semiotic frameworks that document: (1) hunter postures, (2) movement dynamics, and (3) the sequential stages of the hunt [3, 4]. These stages typically include: (1) the identification of animal tracks or traces, (2) the pursuit, (3) stalking behavior, (4) the act of shooting or striking, and (5) the moment of capture. Our analytical approach combines iconographic analysis with spatial assessment, ensuring that interpretations are grounded in clearly defined and replicable methodologies.

A paradigmatic example is the central frieze of the Abrigo de Ermites I, located in the Sierra de la Piedad (Uldecona, Tarragona). Along the Levantine border, declared a UNESCO World Heritage Site in 1998, it is one among numerous strategic hunting enclaves located along clear migratory paths for deer herds, with other notable sites including La Vieja (Alpera) and the already-mentioned Cova de Cavalls, and Centelles. The main frieze, containing approximately 170 motifs painted in the Levantine style, depicts a dynamic and indiscriminate pursuit of herds of cervids, followed by the capture of various caprids and possibly a bull or wild boar [14, 15]. All other figures and scenic aspects

depend on this hunting nucleus.



**Figure 1.** Abrigo de Ermites I (Uldecona, Tarragona). The great deer hunting. [15] pg. 53, figure 4.

The spectacular deer hunt is depicted on the far right of the panel. In total, the scene features five deer, three hinds, three fawns, two goats, and three undetermined animals, all chased in a desperate and breakneck race fleeing from right to left. The deer are pursued with arrows by no fewer than 44 archers (6 to 10 cm tall), who drive the prey into a corridor-like trap. The hunters are accompanied by canids (nos. 60, 62). The preys are shown in various states, designed to highlight the intensity of the hunt. Some cervids are portrayed wounded, with arrows embedded in their posterior, abdominal, or frontal regions (nos. 40, 50, 73, 82, 83, 87). Others are depicted either lying on the ground or leaping off cliffs, attempting a futile escape from the inexorable trap set by another group of archers waiting in firing positions. It is a trap with no escape.

On the right edge of the panel, a separate group of notable figures of humans and stags is depicted (nos. 92, 93, 94, 95).<sup>1</sup> The most prominent figures are an archer (no. 93) and a stag

<sup>1</sup> A female human figure is depicted in an ecstatic pose (no. 92), suggesting a moment of ritualistic or spiritual significance. It is possible that this figure was added later in the painting process, as indicated by its distinct placement and features. The morphological and chromatic differences among the various figures—rendered in shades of black, purple, reddish, and brown—provide evidence of different stages of execution. These variations suggest a complex and layered artistic process, involving re-paintings and superimpositions of earlier motifs. This practice could reflect changes in the symbolic or ritual importance of the figures over time, or perhaps a continuous renewal and adaptation of the scene's narrative.

(no. 94). The archer, appearing to preside over massive the hunt, is portrayed with a large head and distinct facial features. He is holding a very long bow—taller than human size—and several arrows. He faces a stag with majestic antlers, indicative of its mature authority.

The stag appears to hesitate, turning its head and body toward the archer in a defiant posture.<sup>2</sup> The artist intentionally accentuates the stag's head, antlers, and neck, portraying them with naturalistic precision, while the rest of the body is rendered with deliberate roughness and disproportion, including atrophied extremities, ventral area and hindquarter contrasting an overly voluminous turning neck. The result is a compact and disproportionate figure, in which the narratively significant anatomical elements of the animal are emphasized: the massive trunk is not proportionally coherent to the small, withered extremities, the turning neck exhibits an excessive volume with respect to the other body components, and the antlers, extending beyond the rock's eroded edges, symbolize the powerful and mythical presence of the animal [16]. The anatomical disproportion is intentional, to highlight the abrupt and defiant movement towards the hunter by an animal full of power. Unlike other prey in the scene, the stag shows no arrow wounds and is the only rigorously silhouetted figure, painted in a blackish chestnut color. More significantly, it is the only rigorously silhouetted figure (in blackish chestnut color) in the panel [16].<sup>3</sup>

This artistic choice underscores the stag's mythical and authoritative role in the scene, possibly symbolizing a mythological confrontation between the leader of the hunters and the leader of the animals. The archer (no. 95) located just to the right of the stag reinforces this interpretation, as he runs toward the hunting nucleus, seemingly ignoring the prominent prey standing before him.



**Figure 2.** Abrigo de Ermites I (Uldecona, Tarragona). Confrontation between the leader of the hunters and the leader of the animals. <http://www.rutadelartrupestre.cat/>.

<sup>2</sup> See the next image, which contains a photo of the detail. The rendering of the stag in profile, as interpreted by Ramón Viñas et al. [15], is incorrect.

<sup>3</sup> Nevertheless, according to Hugo de Lara López, the deer is in a static position and exhibits a peaceful attitude, which contrasts with the tension and dynamism of the hunting scene. This is because it had already been killed.

The panel is a testament to the hunting practices of the time. It illustrates that a large group of hunters gathered in the Serra de la Pietat during a specific season to conduct a massive hunt in a certain period of the year. The depicted herd consists of males with large antlers and a few females, corresponding to the spring-summer period when stags form small herds before establishing individual harems at the end of summer.

This depiction of massive hunting of adult deer males in the Abrigo de Ermites I does not align with the specialized tactics evidenced by the archaeo-zoological record derived from related field studies. Bone assemblages and distribution show a highly selective approach to the sex and age of prey. The Levantine imagery often emphasizes the hunting of stags with impressive antlers (e.g., Llidoner, Cingle VIII, Roca dels Ermitans, Saltadora I, or Saltadora IV). In contrast, depictions of females and sub-adults are less frequent (e.g., Saltadora IX, Cingle III, VIII, IX, and X).

The mass slaughter described in the Abrigo de Ermites I is therefore part of a broader ritual and mythological framework that recreates and narrates this topical moment in the life of a tribal group, possibly with propitiatory functions [17]. This suggests that the site served as a hunting sanctuary, used during a specific phase of the hunting calendar. It was a space where emblematic paintings, mythic expressions, and ritual performances intersected [15]. They possibly aimed at ensuring not only successful hunts but also favorable environmental conditions. Artworks reflect a deep connection between humans, animals, and the natural world, emphasizing the symbolic, spiritual and even cosmological dimensions of hunting.

The Abrigo de Ermites I tableau was painted over multiple phases, as evidenced by the superimpositions and stylistic variations in the figures. Additional elements, such as new animals and hunters, were later incorporated, suggesting a continuous narrative. However, the typological affinity of the figures implies a relatively short chronological window for the original composition [14].

Along the Levantine border, the shelter d'Ermites I is one of the numerous shelters located in clearly strategic hunting enclaves for herds of deer. Other sites are La Vieja (Alpera) and the already-mentioned Cova de Cavalls, and Centelles [18].

Recent 14C AMS analysis of calcium oxalate coatings on the rocky supports and calcium carbonate layers covering the paintings provided the following chrono-cultural data: support sample (with oxalate coating): 7470-7050 cal. BCE; paint coating sample: 6370-5810 cal. BCE [19-21]. These results suggest that some Levantine paintings at Ermites I were executed between the mid-8<sup>th</sup> millennium BCE and the end of the 7<sup>th</sup> millennium BCE. This places them in a transitional period between the Epipaleolithic microlaminar substratum and the geometric Mesolithic. Therefore, the Levantine art of Uldecona predates the arrival of Early Neolithic groups by approximately one millennium [6, 21, 22]. This

naturalistic style, with a semi-schematic tendency to geometrize figurative components, inherited technical and stylistic traditions from the Final Paleolithic V Style (Final Magdalenian/Epipaleolithic transition), as evidenced elsewhere on the Iberian Peninsula [23-26].

Post-Paleolithic rock art from the Iberian Levantine rock art is traditionally renowned for its depiction of sharp and often bloody scenes of deer hunting, showcasing a coordinated pursuit of prey. Abrigo de Ermites I also highlights that large-scale deer hunting is among the most renowned and extensively studied topics. However, while sharp and bloody scenes are frequent in Levantine rock art, they are not the sole hunting depictions. This article explores the evidence of another hunting method: the capture of red deer alive. This practice served multiple purposes: conducting communal rituals centered on the capture of male deer; adhering to taboos and rituals that prevented disdain for life and aimless hunting of an animal with significant symbolic and sacred values; activating a semi-domestication process akin to that of North Scandinavian reindeer populations; and celebrating shamanic ceremonies performed with a stag or identifying oneself with this cervids. Above all, the rock art panels celebrate the confrontation with a majestic prey, subdued only through a heroic effort in which the hunter strives to emulate animal's agility and speed, ultimately surpassing these qualities [27].

Following the discussion of the problematic nature of historical and archaeological narratives on domestication, and of the red deer as a paradigmatic species inhabiting the transitional space between wild and domestic realms, this study is structured around thematic groupings that address the various hunting techniques used to keep deer alive. At the core of each thematic grouping is the representation of these techniques in Levantine rock art from the Iberian Peninsula. The rock art tableaux and figures are analyzed using data obtained from the available record, which includes digital image processing and spatial mapping of panels and motifs within each shelter or cave.

The iconographic analysis applies classification methods to distinguish iconographic elements, recurring motifs, and stylistic phases. These visual data are cross-referenced with archaeological excavation reports and material finds to establish both temporal and contextual frameworks, allowing the rock art to be interpreted not only in aesthetic terms but also as a reflection of underlying social and ritual structures. This approach enables us to move beyond descriptive accounts toward an interpretative model that considers artistic choices in their broader cultural significance.

Methodological transparency is ensured through the systematic use of both primary sources—such as field photographs and digital scans—and secondary literature, including scholarly analyses and established iconographic typologies. All sources are critically assessed and triangulated to construct a coherent interpretative narrative. Interpretations are explicitly linked to documented evidence, ensuring that all

conclusions remain traceable and verifiable.

Our analysis is further enriched by comparative visual studies with other regional rock art traditions, ensuring consistency and contextual alignment. The methodological framework integrates archaeozoological data on red deer behavior and domestication attempts, which supports the interpretation of depicted animals in terms of their biological plausibility and cultural roles. Additionally, ethnographic parallels from historically documented hunting and management practices provide a heuristic framework through which prehistoric scenes can be understood, especially regarding non-lethal techniques for pursuit and restraint. Selected case studies demonstrate the persistence and adaptation of some prehistoric practices into later periods of antiquity, offering a *longue durée* perspective on the management of deer.

This study is grounded in established frameworks from archaeo-semiotics and visual anthropology, which guide our interpretation of symbolic communication within rock art. Ultimately, the understanding of the images results from a multidimensional and integrated methodological framework based on data triangulation. This cross-validation minimizes subjective bias and ensures that conclusions are supported by multiple converging lines of evidence, showing the complex interplay between artistic expression, ritual behavior, subsistence strategies, and the socio-archaeological contexts of Post-Paleolithic Iberian societies.

## 2. The Problematic Nature of the Historical and Archaeological Narratives on Domestication

Domestication is conceptualized as a long-term, selective process through which *Homo sapiens* transforms a wild species into a “domestic” entity—one that becomes dependent on sustained coexistence with humans and subject to human control [28]. However, historical and archaeological narratives that distinguish “wild” from “domesticated” animals often rely on a rigid binary derived from classical Greek and Roman thought. This dichotomy tends to oversimplify the complex and dynamic continuum of human-animal interactions across prehistoric and early historic contexts. As a result, many archaeo-zoological interpretations of the transition from foraging to farming during the Mesolithic and Neolithic periods have neglected the importance of intermediate strategies, such as temporary restraint, habituation, and selective management of wild populations. This study therefore advocates for a more integrative analytical framework—one that acknowledges the gradual, regionally variable, and multifaceted nature of domestication. Within this broader model, semi-domesticated states and localized management systems are understood not as marginal or transitional anomalies, but as central components of the human-animal relationship. Such practices may include the strategic capture, seasonal



control, or ritual integration of certain wild species, which challenge the traditional domestication narrative and call for greater attention to the variability and cultural specificity of early animal exploitation strategies.

For instance, the prevailing narrative suggests that the taming of the wolf and its evolution into the domestic dog was catalyzed by the practice of some Paleolithic human groups leaving animal bone carcasses at the peripheries of their settlements. Wolves were drawn to this easily available food source, and the boldest among them seized it, thus facilitating initial contact with humans. While this "food-magnet" mechanism appears successful, it fails to explain why other scavengers like jackals and wild boars were not similarly domesticated. Unlike jackals and wild boars, wolves displayed relational, offensive and defensive behaviors akin to humans that made them suitable to support humans in hunting and guarding over other domesticated species. Over generations, the wolves frequenting the outskirts of human settlements grew increasingly accustomed to humans, lived longer, and produced more offspring, gradually diverging from their wild ancestors in morphology, biology, behavior, and genetics. The established homo-wolf relationship followed a *do ut des* dynamic, benefiting both species. Studies propose that the first divergence between dogs and wolf ancestors occurred approximately 41,500-36,900 years ago, with dog domestication dating back between 40,000 and 20,000 years ago. These events occurred among hunter-gatherer populations across northern Europe, with domestication spreading to North-east Asia several thousand years later [29].

In general, for a species to be considered suitable for domestication, it must exhibit a set of essential and interrelated behavioral traits—traits that rarely co-occur in the wild. These include a generalized diet and adaptability to varied food sources; early onset of sexual maturity; high reproductive rates; a readiness to breed in captivity; docility and low levels of aggression; a natural predisposition for sociability and hierarchical social organization; tolerance for close proximity to conspecifics and humans; minimal territoriality; limited agility; and a diminished fear response, often expressed as a short flight or escape distance in the presence of humans [30, 31].

The absence of some of these behavioral traits renders the vast majority of animal species unsuitable for domestication. For example, the panda exclusively consumes bamboo, while the koala feeds only on eucalyptus leaves, making their breeding impractical and costly. Female giant pandas are fertile for only 2-3 days per year, give birth to an average of 1-2 cubs, and often care for only one offspring, making them economically unviable for prehistoric humans to domesticate. Continuing to hunt them would have been much more profitable.

Some animal populations, such as elephants and cheetahs, can be tamed individually but are not conducive to domestication through artificial selection and captive breeding because they rely on wild reproduction.

Felines, unlike canids, are too independent and individual-

istic by nature, preferring solitary or small group hunting methods, making them unsuitable for domestication.

The term "domestic" implies peaceful and friendly coexistence with humans, which is unattainable for dangerous animals like the Cape buffalo (*Syncerus caffer*). Conversely, the Asian buffalo has made significant contributions to humans as a source of milk, meat, labor, leather, and manure.

Fur-bearing animals, even those raised in captivity such as minks, stoats, and foxes, cannot be considered truly domesticated as they retain their natural aggressiveness, requiring strict management to ensure human safety.

Limited agility is crucial for confining species within a defined area, as evidenced by the challenges faced by fallow deer farmers.

Efforts to domesticate gazelles and antelopes have failed due to their tendency to panic in the presence of humans. Some species, labeled as "partially domesticated," are commercially bred for food or raw materials but retain characteristics similar to their wild counterparts in appearance and behavior. Examples include deer, ostriches, alligators, crickets, pearl oysters, and royal pythons.

If we consider domestication as a form of co-evolutionary mutualism between two species, replacing predatory exploitation without compensation (such as hunting) with a mutually beneficial relationship, we can draw some conclusions regarding the continuum between the two poles: wild animals - domesticated animals.

Firstly, animal possessing all the necessary traits for advantageous human intervention in their reproduction are exceedingly rare.

Secondly, domestication typically follows a prolonged period of semi-domestication

Thirdly, throughout history humans have engaged in a variety of intermediate relationships with living species, spanning the spectrum between wild and domestic. Breeding wild animals may appear paradoxical. However, Lucius Iunius Moderatus Columella (1<sup>st</sup> century CE) described in the IX book of *De re Rustica* the practice of breeding roe deer, fallow deer, red deer and wild boar in the wild. These animals were raised for both ornamental purposes and meat production [32].

In essence, the current historical and archaeological narrative on domestication oversimplifies the intricate dynamics between humans and animals, attempting to categorize a multifaceted natural world into rigid, unidirectional frameworks. As a result, it fails to capture the complexity of the human-animal relationship and its changes throughout the Mesolithic and early Neolithic periods.

### 3. The Red Deer as a Paradigmatic Animal in the Transitional Space Between Wild and Domestic Realms

The red deer is a mammal that occupies a liminal position between wildness and domestication. In contrast to more

gregarious and hierarchically organized species such as sheep and goats—which are more amenable to taming—red deer are solitary, elusive, and strongly territorial. Their pronounced wariness and acute flight response to human presence reflect an evolutionary adaptation to sustained hunting pressures over millennia [31]. This behavioral profile, characterized by resistance to confinement and heightened vigilance, helps explain the limited success of efforts toward full domestication. Instead, it supports the hypothesis that pre-historic human strategies were oriented toward the live capture of red deer for short-term management, controlled exploitation, or ritualized use rather than long-term breeding or domestication.

While shyness and fearfulness aren't inherent traits of deer, they've become ingrained due to historical human interactions. In areas free from hunting pressure, deer typically exhibit diurnal behavior, preferring to move in the light of day. Interestingly, deer are also among the most hazardous animals in zoo settings, often causing more accidents than carnivores by unexpectedly attacking keepers [33].

The behavioral traits of the red deer have effectively hindered its full domestication, making its story one of failed attempts at domestication in Europe. Instead, the capture and domestication of other ungulates were highly successful. Examples of rock art depicting the catching of goats by hand include the stations of Engarbo I, in the Segura valley, Jaén, and Rosegadors, in Castellón [34].

Since the Mesolithic period, efforts have primarily involved breeding in various degrees of captivity rather than genuine domestication, which would require extensive selective breeding efforts. Moreover, these endeavors have generally yielded limited practical results, akin to the experiences with other species such as fallow deer, cranes, American bison, musk oxen, aurochs, and elk.

Currently, deer remain wild animals and are not considered domesticated. However, they can be bred successfully in semi-free captivity, particularly in open fields enclosed by high barriers. The key environmental conditions for such breeding include an altitude between 250-500 meters above sea level, large pastures, abundant water sources, the presence of muddy and marshy areas, and extensive forest cover. These behavioral characteristics have facilitated the development of semi-intensive deer farming today, primarily aimed at meat production. The meat obtained from deer is known for its excellent organoleptic properties and is often touted as being cholesterol-free.

Red deer thrive in expansive, open environments conducive to their natural behavior. However, in captive breeding programs, they are confined to more or less artificial habitats, which restrict their exposure to environmental selection pressures and normal social interactions. This can lead to risks such as inbreeding and decreased fitness for survival and reproduction in the wild. To mitigate these risks, careful management is essential. For instance, maintaining a small number of breeding males helps prevent spatial conflicts

among individuals. Ideally, the male-to-female ratio should be around 1:10 to ensure optimal breeding conditions.

The Mesolithic-Neolithic tradition of capturing live deer provides valuable insights into those societies as it intersects the material-economic and symbolic-religious realms. On one hand, it involves the practice of semi-domesticating this cervid in semi-closed environments in the wild. On the other hand, catching deer alive is fully comprehensible within the context of beliefs regarding the sacredness of this animal, the beliefs on its spiritual (not only material) potency, and the associated rites and myths.

The Post-Paleolithic rock art of the Iberian Peninsula (10000-4000 BCE) serves as a significant point of reference for understanding the multifaceted issue of capturing deer alive. The core period spans from the Late Mesolithic to the Early Neolithic. Recent research, such as the comprehensive study on ancient Europeans' DNA published by Vanessa Villalba-Mouco *et al.* in 2023, indicates that Neolithic groups settling in southern Iberia had Anatolian ancestry detectable in their genetic code. This suggests that early farmers migrated over vast distances. However, the Neolithic population of southern Iberia exhibits a higher proportion of hunter-gatherer lineages compared to other European regions. This indicates a potentially closer interaction between the last hunters and the first farmers in this region [35].

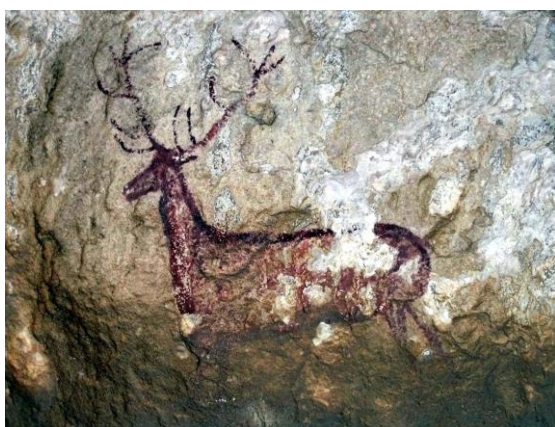
The term "Levantine rock art" was coined by Abbé Henri Breuil in the first half of the 20<sup>th</sup> century. It referred to the Iberian area, spanning from the current provinces of Huesca to Almería and Jaén, where abundant manifestations of monochrome paintings were found in open air, rock shelters, and caves. Breuil initially interpreted Levantine rock art as a remnant of Paleolithic art, albeit with some differences from the classic French Cantabrian parietal art [36-38]. However, contemporary understanding connects Levantine rock art to the Mesolithic, particularly the transitional phase from the Mesolithic to the Neolithic, and the very early Neolithic period.

The Levantine style is characterized by its meticulous attention to detail, particularly in the portrayal of clothing and accessories, alongside its stylized depiction of figures. This artistic tradition features recurring elements such as specific forms for drawing headdresses or heads, flared skirts, or rolled-up sleeves in the center of the composition, and stylized figures. It also allows for the identification of unique poses or details in each figure, contributing to a personalized representation. These consistent features enable researchers to identify and classify various examples of Levantine rock art found across different sites. By referencing established typologies—such as the Levantine Naturalist and Levantine Schematic styles—we systematically categorize the artworks according to their formal and stylistic attributes. This classification is further supported by comparative visual analysis of other regional rock art traditions, ensuring that our interpretations remain both internally consistent and contextually grounded.

## 4. A Lonely, Magnificent Guardian of a Sacred Place

A starting point for our investigation into the illustration and significance of the practice of capturing deer alive in Post-Paleolithic Levantine rock art is the examination of instances where the male deer is not merely depicted as prey but as a solitary, majestic guardian, imbued with ceremonial and symbolic significance. In these instances, the deer assumes a central role in religious or social rituals performed within a sacred space, rather than being portrayed in a conventional hunting scene. Notable examples include isolated stag depictions in the shelters of Chimiachas (Parque Natural de la Sierra y los Cañones de Guara, Huesca), El Ciervo (Albarracín, Teruel), Val del Charco del Agua Amarga (Alcañiz, Teruel), la Cova del Taller (Tivissa, Tarragona), and Pla de Petracos (Castell de Castells, Alicante) [39, 17].

In one paradigmatic case from the small Chimiachas shelter, located deep within the gorge of a tributary to the Vero River, a single red-painted stag is portrayed with exceptional clarity and authority. This figure serves not only as a guardian but also as an emblem of sacred power [40, 41].



**Figure 3.** A lonely, magnificent guardian of a special place: the Chimiachas shelter, along the Vero River (Huesca County, Spain). [https://upload.wikimedia.org/wikipedia/commons/6/6d/Art\\_rupestre\\_Chimiachas.jpg](https://upload.wikimedia.org/wikipedia/commons/6/6d/Art_rupestre_Chimiachas.jpg).

The impressive presence of the animal is attributed to several features: large size, majestic appearance, realistic style, solitary stance, expressive force, motionlessness, prominent display of its imposing antlers, and manifest visibility within the shelter. The artistic rendering of the deer highlights its form by utilizing a concave space that follows the curvature of the shelter's ceiling. The outline of the silhouette is delineated using thick and compact dark lines, with overlapping strokes emphasizing its profile. Various shades of red and ochre fill the figure, while the antlers are accentuated with sharp lines and adorned with many points, indicating the maturity and strength of the specimen [42, 43].

The stag motif, dated between 6000 and 4000 BCE, is relatively well-preserved [44]. Its majestic naturalism aligns with the Levantine style characteristic of the late Mesolithic hunter-gatherer communities - very Early Neolithic groups across the Iberian Peninsula's Mediterranean region [45]. The adult red deer, depicted in a lifelike manner, appears alive and merges seamlessly with the surrounding landscape. An essential aspect of our methodology involves spatial mapping of the panels and motifs within each shelter or cave. The orientation, scale, and positioning of the figures are carefully analyzed in relation to both architectural features and elements of the surrounding natural landscape. Positioned at the entrance of its shelter, which is located at the narrow mouth of the ravine, the stag of Chimiachas overlooks its domain. This location, flanked by high cliffs, suggests strategic control over access points [43, 46-49]. Additionally, the shelter may have been used to control an enclosure for semi-domesticated or hunted deer, as the strategic placement of only a few wooden bars could have effectively blocked the narrow passage, enabling control over the movement of deer within the area [9]. The dominant special significance of the deer in Levantine rock art in the area of the Vero River are confirmed by the four stags depicted in the shelter of Arpán, dominating the headwaters of their valley [46].

## 5. Capturing and Retaining Live Red Deer

Building on the foundational work of Pilar Utrilla and Manuel Martínez-Bea, this study re-examines the theme of capturing live red deer as depicted in prehistoric Iberian rock art. Several panels are noteworthy in that they represent the deer not as fallen or injured, but as securely captured through methods such as snares, crossed bows, and even manual restraint. In additional scenes, the animals are shown in the process of being corralled or trapped using techniques such as box traps, throwing or rocket nets, and even the application of drug-laced darts or bait [50].

Our approach reorganizes these diverse representations into clearly defined thematic categories, integrates newly identified examples, and proposes an interpretation that highlights the controlled hunting methods practiced by skilled hunters, along with both the practical and ritual functions of these capture techniques.

Our re-analysis of these representations of capture techniques in the rock art—originally cataloged by Pilar Utrilla [47]—and the incorporation of new case studies reveal distinct thematic groupings, distributed across the Iberian Mediterranean Basin. These groupings can be classified into three distinct categories: 1) ritualized events that incorporate ceremonial elements into the act of capture, 2) techniques involving manual capture or lassoing, endurance hunting included, and 3) methods based on physical implements such

as snares and traps. We interpret these groupings as follows:

**Communal Ritual Capture:** In sites such as the Muriecho shelter (Colungo, Huesca) and Los Grajos I (Cieza, Murcia), the artwork depicts cooperative capture methods that emphasize ritual and celebratory aspects over mere hunting efficiency.

**Technological and Tactical Diversity:** The depictions include varied techniques based on physical implements for blocking and capturing deer, such as: 1) lasso, 2) snares, 3) traps, 4) netting techniques, 5) claviform projectiles, and 6) boomerang throwing. This wide range of specialized techniques suggests an advanced understanding of safe capture methods designed to keep the deer alive, highlighting a transition toward management practices. A significant non-lethal approach to deer procurement was endurance hunting, in which the animal was chased until it was too exhausted to flee, eventually succumbing to heatstroke or sheer fatigue. The efficiency and ritual motivations behind this hunting method will be explored in depth.

**Symbolic and Social Dimensions:** The images illustrate not only practical hunting techniques but also ritual elements—such as group dances and communal participation—that underscore the symbolic roles of red deer in social cohesion and identity [50, 53].

These findings on prehistoric rock depictions are underpinned by a comprehensive methodological approach that integrates digital image processing, iconographic analysis, spatial distribution studies, archaeological evidence, archaeo-zoological data (including bone assemblages and species distribution), and ethnographic parallels. By employing a multidisciplinary methodology, we anchor our interpretations in substantial data and robust contextual analysis. This approach enables us to identify subtle shifts in technique and symbolism over time, offering a more nuanced reconstruction of prehistoric animal management practices.

### 5.1. Community Collaboration in Capturing a Live Buck in Muriecho

The Muriecho shelter in the Fornocal ravine (Colungo, Huesca) presents a striking example of communal ritual in rock art, depicting a live deer capture with remarkable complexity and expressiveness [40, 51, 52]. Discovered in the mid-1980s, this red-painted parietal image documents a coordinated effort among multiple figures—a choreography of human actions that includes physically restraining the stag by

hand while others appear to provide support, signal, or even control the animal's movement [39, 40, 49].

In our analysis, we separate this depiction into distinct functional elements: 1) a primary capture action represented by figures directly engaging with the animal; 2) a supportive role possibly linked to sound or rhythm, as evidenced by depictions of clapping and dancing; and 3) a spatial arrangement that suggests an organized, collective endeavor rather than a spontaneous act of hunting. This approach not only clarifies the manifold roles within the ritual but also reinforces the interpretation of the scene as both a practical hunting technique and an emblem of community solidarity.

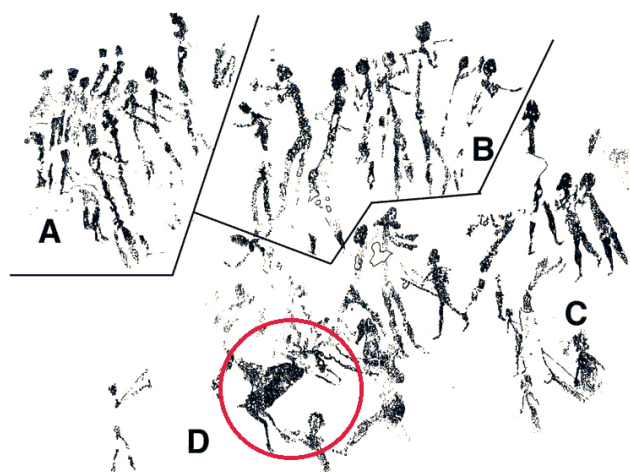
The discoverer described it as illustrating "a kind of ceremonial pursuit or ritual celebration that far exceeds the limits of a plain and simple hunting activity" [51]. According to Alexandre Grimal and Anna Alonso, the representation is more a grouping of unconnected figures than a narrative scene [42]. However, the spatial arrangement of the characters induces to interpret the panel as a choreographic tableau vivant and not as a simple collecting of people [46].

This parietal representation belongs to the Levantine style, i.e. to the Mesolithic - Early Neolithic transition or to the Early Neolithic (from 8000 to 5000 BCE) [51]. It finds parallels in Levantine rock art (shelter of Los Chaparros, Cueva del Chopo) [50]. As we will investigate further, the painting also shares patterns and symbolism with some very famous Neolithic frescos in Çatal Hüyük (Konya Plain, Central-Southern Turkey, ancient Anatolia), which had a highly advanced culture, indicated by the level of its farming and the commercial exploitation of the region's supply of obsidian.

The large central section of the paintings (panel 1) portrays a scene where the entire population of 34-39 elongated human figures (plus three others unclear) collaborates to pin down a live stag. The movement of the characters injects dynamism into an event that carries both playful and religious undertones.

The scene is divided into four sections within the deepest area of the cavity. The focal point is a large male deer (section D) depicted in full stride. A large crack in the surface of the rock led to the disappearance of half of its posterior and of other representations. The magnificence of its antlers and the abundance of spikes indicate it is in full age and strength [9]. Rendered in an oblique perspective to enhance its dynamism, the deer's front legs are outstretched in a galloping pose, making it the central figure of the scene [53].





**Figure 4.** Integral cast of Panel 1 in the Muriecho shelter (Colungo, Huesca) with the scene of the capture of a deer alive. [53]. I highlighted the hunted stag in red.

Four individuals are shown attempting to immobilize the stag with their hands, grasping its antlers, front legs, hind legs, and tail. Notably, one hunter wearing a horse mask seizes the deer's antlers [49], while another secures its front legs. Surrounding them, other humans are actively involved in the capture [50, 53].

The scene's naturalism allows for the identification of various hunting implements. Some hunters wield sticks and clubs to target the animal, while one character carries a bow and a straight bar with a loop, likely intended to secure the stag's antlers with a slipknot.

In the upper left corner of the panel (section A), 14 people are arranged in two rows. In the front line, five are standing and two are seated. Behind them, five are squatting. All of them gaze towards the right, where the hunting action unfolds. Their torsos lean forward in unison, their arms extended parallel and forward as they clap their hands or make noise to aid in capturing the cervid. Positioned at either end of the section, two characters are seated, purely observing the scene unfold. The artist skillfully conveys the sense of a bustling crowd through precise perspective: a prominent front row of large, well-defined humans, followed by smaller figures with less distinct silhouettes. This arrangement portrays an orderly and regulated human gathering [53].

To the right of the panel, a second group of figures (section B) illustrates eight individuals in motion. Four characters hold objects that resemble aerophones, possibly flutes, clarinets, or horns. Others are depicted dancing with their torso tilted forward and arms extended in synchronized motion [53, 54]. While it may be challenging to clearly identify these objects as musical instruments, the presence of other figures in the scene clapping, shouting, singing, or dancing suggests that these objects are indeed musical instruments [55]. This depiction implies that the human groups self-portrayed in periodic encounters at this site aimed to emphasize the significant role of music and dance in their

ritualistic and athletic performances involving the sacred stag.

The scene illustrated in the Muriecho shelter exemplifies the narrative style characteristic of Levantine art, with meticulous attention to detail and gesture [9]. It portrays a high cooperation, specialization, and control in the hunting of majestic stags while endeavoring to keep them alive. The focal point of the community's attention is the running red deer and its pursuers, who play a central role overshadowing other members of the group. The movement and posture of the human figures correlate with their proximity to the deer. The hunters exhibit energetic actions such as running and jumping to capture the galloping quadruped, while spectators, musicians, and dancers show less dynamic actions and occupy more peripheral positions. In essence, the deer serves as the central figure determining the dynamism, posture, and actions of the humans involved.

Bloodless cooperative hunting is performed by asexual figures. However, most literature assumes that all participants in the collective performance are male, despite the lack of gender-indicative elements. For instance, the vast majority of characters do not wield a bow - the typical tool associated with identifying male gender - and only one figure appears to display, albeit ambiguously, masculine attributes [51].

The scenery surrounding the Muriecho rock art station is also unique. Oriented entirely to the south, it is situated nearby and offers extraordinary views of the spectacular natural arch of the Portal de Cunarda, which was formed by the erosion of limestone. It is believed that herds of deer would have been compelled to pass through this location within the narrow canyon of Fornocal, a tributary stream of the Vero River [50, 56].

Utilizing high-resolution photography, digital image analysis techniques and specialized software, Miguel Ángel Rogerio-Candelera has identified the presence of a zoomorphic figure that had previously gone unnoticed. This potential new addition of a stag adds further internal coherence to the scene, as the position of the characters on the panel aligns with this new figure. Those situated to the left of the new animal gaze towards the right, while those positioned to the right of the new animal gaze towards the left. This discovery complements the interpretation of the scene as depicting the capture of live deer, in which the entire community participates [57-59].

By systematically engaging in group practices, participating in daily activities, and sharing beliefs, norms, symbols, and traditions, the inhabitants of a village or a network of contiguous villages managed to diminish the prominence of individual identity, perceiving themselves instead as integral members of a collective self. This form of solidarity fostered day-to-day acceptance of, and conformity to, the social order of the group by each of its "good members."

The collective and often bare-handed capture of a stag alive, performed at specific times of the year or during key moments of community life, served a very different and pro-

found function. It was a high-intensity ritual that electrified participants, transforming them into components of a collective entity greater than the sum of its single parts. The sociologist Émile Durkheim argued that such highly emotional collective ceremonies generate unique experiences, inducing in each participant a sense of euphoria and shared emotional states, thereby forging enduring social bonds. He termed this phenomenon "collective effervescence" [60].

From an anthropological perspective, the emotional communion derived from the cooperative capture of a live stag created a dynamic psycho-social system in which each individual's experience was influenced and amplified by that of others. The individual and collective selves were simultaneously activated, allowing participants to experience both an expansion of personal identity and a fusion with the group [61]. By sharing their actions and emotions with fellow members, participants forged an intense bond, to the extent that the distinction between "I" and "we" became blurred [62]. Acting as one, feeling as one, the community members became more likely to think as one [63].

Through their periodic engagement in this emotionally charged ritual, the members of the community reinforced a strong group identity—a "collective consciousness," as Durkheim termed it [60]. Such cohesive effects did not stem merely from individual excitement or the hunt itself; rather, they emerged from the shared physical and emotional experience within a group context [64].

This mechanism of union and communal bonding, triggered by the collective capture of a stag, was not limited to the hunters alone. It extended to spectators and was even more pronounced among musicians and dancers who accompanied and set the rhythm of the event. The dancing and clapping depicted in the Muriecho shelter could be tied to specific cultural or spiritual significance within the ritual. In many prehistoric societies, rhythmic actions such as dancing and clapping were often integrated into rituals as forms of communication, synchronization, and collective identity. These actions may have served to enhance the spiritual or symbolic dimensions of the ritual, transforming the act of capturing the deer into a communal performance with deeper cultural meaning.

The creation of a highly cohesive and inclusive community through this "superglue" ritual is vividly expressed in Mesolithic and Neolithic visual narratives of rock art, such as the tableau at Muriecho. Furthermore, if the community faced external threats, whether real or perceived, this internal cohesion ritual could foment hostility toward "enemies" and legitimize acts of violence against them [65].

## 5.2. Female Hunters and the Seizure of a Hind at Los Grajos I de Cieza

First documented in 1962, the rock art of Los Grajos—located in the rugged, arid landscape of Cieza Canyon (Sierra de Ascoy, Murcia)—reveals enduring sites of ritual

significance that have evolved through multiple phases of repainting. Over time, the original naturalistic depictions gradually gave way to a more schematic style, reflecting a cultural transition as nomadic hunter-gatherers increasingly interacted with sedentary herders and farmers migrating from the east. These shelters have long served as multipurpose sites for seasonal gatherings tied to solstices, equinoxes, and other important communal events such as political summits, pilgrimages, and trade exchanges. They also functioned as venues for matrimonial alliances aimed at counteracting consanguinity within small, isolated groups.

In Los Grajos I, in particular, a prominent frieze positioned in an upper left recess of the shelter depicts a dynamic scene of female hunters in action, capturing a hind with their bare hands. The composition features three sequential figures—two women with outstretched arms chasing what appears to be a red deer or hind—whose elongated bodies, proportionate legs, and head contours are interpreted as indicative of a hind-like animal [66]. By focusing on this motif, our analysis emphasizes the active role of women in prehistoric hunting practices and sheds light on the ritual significance of these events within the broader social and cultural network of the region.



**Figure 5.** Shelter of Los Grajos de Cieza I (Sierra de Ascoy, Cieza, Murcia). Two women with their arms outstretched, running after a cervid in an attempt to capture it. [66] figure 17.

The first female figure (no. 47) is rendered in a blackish hue. She is depicted with a round head and a chignon with lateral projections. Her waist is narrow and short, tapering into a triangular, flared, and peaked skirt. The upper part of her body is missing due to the paint having flaked off the wall. Noteworthy features include her right arm, bent toward her waist in mid-stride, and her long, extended left arm, with a distinctly open hand featuring three fingers, reaching out to grasp the deer.

Dark reddish stains are visible in detailed photographs, possibly remnants of earlier paintings.

The second female hunter (no. 48) is painted in a brighter crimson hue. She is bare-chested and runs in synchrony with the first woman, adopting a similar posture. However, her body leans even further to the right, with both arms fully extended in near alignment, each ending in three-fingered hands.

The depiction of the hind (no. 49) is somewhat ambiguous and poorly preserved. The animal appears to be in motion, seemingly galloping in an attempt to evade capture by the two huntresses.



**Figure 6.** Shelter of Los Grajos de Cieza I (Sierra de Ascoy, Cieza, Murcia). Detail of one of the two women chasing a cervid with outstretched arms in an attempt to capture it. Photo© Merlini, M.

Significantly, female figures are found in Levantine scenes with hunting themes such as in Ermites I with the role of spotters in hunting deer drives. The prehistoric rock art in Valcamonica (Lombardy, Italy) includes various hunting scenes depicting female figures participating in the hunt. These images highlight the role of women in prehistoric hunting practices. The rich tapestry of prehistoric art Bhimbetka Rock Shelters (Madhya Pradesh, India) contains numerous rock paintings, some of which depict female figures participating in hunting activities using various techniques, including hand capture of deer.

### 5.3. Ceremonial Dance and the Capture of a Hind in Los Grajos de Cieza I

The Los Grajos I shelter exhibits two prominent parietal compositions dominated by red tones. The principal panel is located on the west wall and measures approximately 2.10 meters by 0.40 meters. It has attracted scholarly attention since its early discovery in 1962 due to its rich iconography and complex spatial arrangement. This tableau features a diverse ensemble of anthropomorphic figures—estimated at around fifty—some depicted with skirts, while others display high, arched headgear. Intermixed with these human forms are stylized images of cervids, goat silhouettes, and other quadrupeds with compact bodies and proportionally small heads, possibly representing sheep. Notably, this panel contains one of the most extensive concentrations of dancing figures in European rock art.

Antonio Beltrán Martínez's original count identified 46 figures in the panel [66]; however, subsequent digital anal-

yses have updated this number to 54 figures in 2014 [67] and 57 in 2023, with 53 of these conforming to the Levantine milieu [68]. The revisions emphasize the significance of employing digital imaging techniques to achieve high-resolution documentation of rock art panels. The application of computer-assisted classification methods facilitates the identification of specific iconographic elements, thereby contributing to a more nuanced understanding of prehistoric compositions. The artworks are attributed primarily to the Levantine Naturalist style—dating from the final Mesolithic to the Early Neolithic—although certain elements of the later Levantine Schematic style are evident. Direct archaeological dating material has not been recovered from within the shelter. Nevertheless, a partial excavation by Michael J. Walker in 1969 uncovered stratified materials ranging from the Upper Paleolithic (Magdalenian and Solutrean) to the Early Neolithic [69-71], supporting a broad chronological framework for the site.

Los Grajos I stands as a significant example of the elusive nature of interpreting rock art images. Over time, various interpretations have clashed, underscoring the complexity of its scenic composition. Given its cumulative nature—reflecting multiple instances of painting and repainting—we may never ascertain its exact meaning definitively. Nevertheless, the imagery appears to center around the theme of capturing a cervid [72].

In 1968, Antonio Beltrán interpreted the paintings at Los Grajos I as a Neolithic depiction of dancing female figures wearing long flared skirts ("bailando sevillanas"). However, he did not specify the type of dance represented. He just dismissed the idea of it being a fertility rite due to the absence of joint participation by men and women [66, 73].

By 1970, Beltrán revisited his explanation and proposed that the paintings illustrate a dance performed mainly by women, with men playing a secondary role. He also entertained the possibility of a ritual involving ithyphallic males and animals, suggesting a potential connection to fertility or fertilization themes [74].



**Figure 7.** Shelter of Los Grajos de Cieza I (Sierra de Ascoy, Cieza, Murcia). The dancing ceremonial capture of a stag alive. [74]. Numbering figures by the author: I highlighted the hunted hind in red.



A third interpretation suggested that the scene represents a phallic dance [75-77]. Francisco Jordá segmented the main panel into various sections and focused his attention on the group of male figures lined up at the top of the panel (identified as nos. 18, 19, 20, 21, 22, 31 in our image). He proposed that they are engaged in a ceremonial parade, with an ithyphallic character (no. 22) at the central position, believed to possess divine status and preceded by other ritual practitioners. Another section, situated on the left side of the panel, features a group of lined-up women (nos. 9, 11, 14, 18, 19, 20, 23, 29). Six of them are painted in black and two in red. Associated with them are two additional figures: a prominent vertical motif, interpreted as a tree (no. 8), and a character positioned at the highest point of the tableau. This character, depicted as ithyphallic, was rendered schematically in greenish-black (no. 12). Francisco Jordá proposed that the female figures are engaging in a dance in honor of this individual, possibly another deity [78].

A fourth interpretation, proposed in 1995-1996 by Juan Francisco Jordán Montés, reinterpreted the scene as a shamanic ritual of initiation and consecration, performed by the male figures previously identified by Jordá as participants of a ceremonial procession. According to this interpretation, the neophyte (no. 22) is guided to the place of initiation by a pair of shamans [76]. However, the scholar did not elaborate on the role played by the other figures in this ritual scene.

A reconsideration of the paintings in the early 1990s, along with newly documented details, led to the invalidation of some earlier interpretative hypotheses. For example, Jordá's proposed processional parade of male figures was reassessed. The number of individuals was reduced to six, and four of them—compared to the single ithyphallic figure detected earlier—exhibit a visible sexual organ. Consequently, the attribution of divinity status to figure no. 22, based solely on the exhibition of an erect penis, became difficult to maintain. Similarly, the long vertical line identified by Jordá as a tree (no. 8) was documented as a large human figure leaning forward, holding a long cane in one hand, while the other is raised towards the sky [79].

Taking this new iconographic evidence into account, in the 1990s, Miguel Ángel Mateo Saura interpreted the panel as a dramatization of a totemic rite of shamanic initiation within an animist religious framework [72].

The focal point of the scene is the vertical, slightly inclined, elongated figure (no. 8), painted in dark carmine and blackish-red. According to Mateo Saura, this figure represents the "World Tree," a fundamental element in shamanic beliefs and initiation rites. Through this ultramundane Tree, the initiate ascends to Heaven, coming into contact with the spirit world. The incomplete, "obese" character apparently prostrated at the feet of the Tree (no. 6) is identified as the shaman. The long staff he holds in his right hand is characteristic of shamanic attire, while his bulky appearance may derive from the layering of animal skins worn during ceremonies. Two female figures stand on either side of the

Tree-shaman couple (nos. 7, 9). Figure no. 7, depicted in black, raises her arms above her head in a bow-like gesture. Her waist is long and narrow, and her flared skirt closely resembles a triangular shape. Figure no. 9, also painted in black, stands with arms akimbo. Some shamanic initiation rituals are public or include a communal stage, with the entire group of ritual practitioners participating. The figures of dancers and men in the composition likely play a role in the ritual, though their exact function remains uncertain [79].

Consistently, Mateo Saura proposed a new interpretation of this Levantine scene. Up to 24 characters participate in the narrative, divided into several smaller groups. Their primary focus is the pursuit and capture of a black quadruped outlined with a thin line. This small, striped ungulate with a tail extending in alignment with its back—possibly a fawn (no. 25)—is the target of a collective hunt intertwined with a shamanic initiation. The scene conveys both ritual and communal aspects, suggesting a playful action involving the entire community, potentially including adolescents undergoing a rite of passage [80].

The central group comprises six clearly discernible figures (nos. 17, 23, 24, 26, 27, 28), raising their arms as they chase the cervid. Other groups are positioned around this central action. At the top of the panel, six naked men, painted in carmine or wine-red hues, prominently display their sexual attributes and well-developed calves (nos. 18, 19, 20, 21, 22, 31). These figures are arranged in a perfect row and each one seems to raise an arm toward the shoulder of the person next to him, though Teresa Fernández Azorín and Pedro Lucas Salcedo observed that they do not actually touch [68].

All the male figures are oriented to the right except for the fifth figure (no. 22), who faces left. According to Margaret Díaz-Andrew, Laura Fernández Macías, and Neemias Santos da Rosa, the larger size of figure no. 31 could indicate his role as the leader of the dance, a common figure in such ceremonies.

To the left, at a lower level, six women engage in a well-structured dance (nos. 11, 14, 15, 16, 17, 29), performing synchronized rhythmic movements with headdresses and Levantine-style ornaments [68, 81]. The recurring posture of one arm raised and the other inverted, or both raised, is a notable feature in these depictions, except for the smaller figure on the left, who maintains a posture with arms akimbo. The movement, expressed through the arms and the curvature of the trunk, along with the relatively constant distance between individuals—close, but without contact—suggests structured rhythmic movements with a certain degree of synchronization [82]. These dancers are depicted wearing headdresses and ornamental elements typical of the Levantine style [68]. Their choreography revolves around their companions engaged in capturing deer.

While males predominate in the dances depicted in Levantine rock art, Los Grajos I is a significant exception. The female figures are dressed in elegant flared skirts, while the male characters are naked, revealing their genital attributes. A difference in movements is also noticeable: the women dance on



the spot, while the men move to the right (except for figure no. 22, who faces left). It is a collective circular dance performed separately [54]. In the Levantine rock art tradition, scenes where men and women dance together are never found. The only representation that can be considered an exception is that of Los Grajos I, where male and female figures dance in the same circle, but without mixing genders [54, 81].

In the left area of the panel, five other motifs are illustrated. The central axis of the scene is the long vertical shape (no. 8). A character holding a long stick stands in front of it (no. 12). Positioned on either side of the vertical motif are some women, indicating increasing steps of insertion into the dance. Figure no. 9 is depicted beginning to dance, no. 7 is entering the dance scene, and no. 6 appears to be in a previous step, kneeling before participating in the dance. The significance of figure no. 8 (a totem?) could indicate the sacred access to the ritual dance.

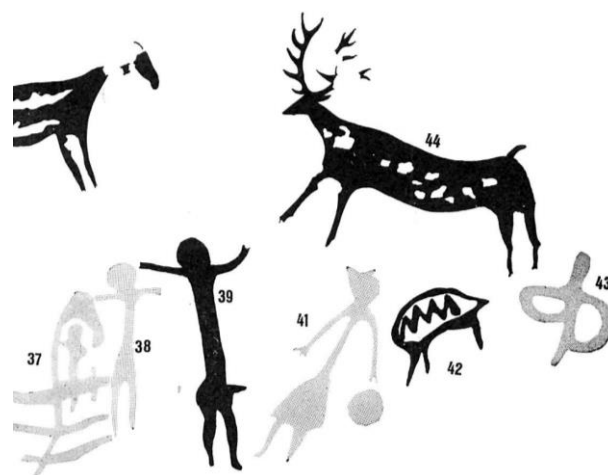
In summary, the paintings at Los Grajos I do not depict expressions of violence, nor do they feature the common figure of archers found in Levantine art. Instead, they portray a collective event where significant emphasis is placed on the relationships between members of a specific group, possibly conveyed through dancing. The complex tableau revolves around the capture of what appears to be a young cervid (no. 25) by male characters (nos. 23, 24, 26, 27, 28). They are depicted as hunters with elongated bodies painted in light red and subsequently repainted in black. They display upraised arms and flailing movements as they assault the animal. Another quadruped, colored in dark carmine and possessing a small head but very clearly distinguishable ears, observes the capture (no. 10) [67, 81].

The act of capturing a cervid while keeping it alive is somehow intertwined with or part of a totemic dance ceremony performed by a series of women and men, moving their bodies and arms rhythmically to the tempo. The Grajos de Cieza I shelter presents a scene similar in content, arrangement, and topic—albeit not in style—to the one we have analyzed in the Muriecho shelter. In both instances, a community comprising numerous individuals, distributed in small groups, participates in the capture of a wild cervid. They perform a ceremony that transcends mere hunting activity, with each participant fulfilling a distinct function or role integral to the whole. While the painting in the Muriecho shelter centers on the capture of a stag, the tableau at Los Grajos I shelter illustrates the capture of a mammal, possibly a fawn, within an animist ritual choral dance. These scenes are more than mere depictions of everyday actions, suggesting that the capture of live deer served as a ritual aimed at enacting and reviving an ancestral myth.

#### 5.4. Dance, Deer Encounters, and Sexual Imagery in the Rock Art of Barranco de los Grajos

A second composition located on the far-right side of the

main scene at Los Grajos I shelter reinforces the interpretation by depicting a dance intimately connected to the capture of a wild cervid. This additional motif, rendered in similar red hues, bolsters the thematic continuity of the ritual and symbolic dimensions present in the overall composition [66, 74].



**Figure 8.** Shelter of Los Grajos de Cieza I (Sierra de Ascoy, Cieza, Murcia). Detail of the dancing ceremonial capture of a deer alive. [66] figure 3. Numbering figures by the author.

Within this scene, figures numbered 38, 39, and 41 are portrayed in a dynamic chase, their raised arms emphasizing the urgency of the pursuit as they follow a stag (no. 44) fleeing in the direction of a hind. Figure 38, rendered in a lighter red, is ambiguous in form and partially merges with the adjacent figure 37, suggesting intentional compositional overlap to convey movement. The head is round and directly set on the shoulders. The body extends vertically with a slight flare at the hips, transitioning into two forked legs without feet. The arms, short and thin, extend perpendicularly from the body. The male figure represented by no. 39 is positioned centrally within the scene and exhibits more defined body contours than the other humans. He is turned to the right and possesses a long, thick body with a small, round head. His arms, slightly arched upwards, are short and extend horizontally. The legs are well-defined, with prominent calves and buttocks. Notably, he is depicted with a large, erect phallus. The posture and movement of this figure correlate with no. 41, a woman with three fingers turned to the left, depicted in light red and wearing a triangular short coat skirt [83].

The pursued stag is depicted in a naturalistic manner, rendered in carmine red. Various parts of its body and head are meticulously detailed: the antlers are carefully drawn, the tail is short yet well-defined, and the legs are finely depicted with well-marked hocks, hooves, and kneecaps. This buck stands out in the Los Grajos I shelter for its exceptional artistic execution and remains well-preserved, despite having experienced intentional chipping in modern times.

Teresa Fernández Azorín and Pedro Lucas Salcedo argue for the inclusion of sexual symbolism in the interpretation of this scene. Their analysis suggests that the pairings of figures—namely, those numbered 37-38 and 39-41—exhibit postures and interactions more indicative of ritualistic or leisure-oriented sexual practices than of reproductive intent [68]. This interpretation invites a broader discussion of sexuality as a complex element within communal rituals.



**Figure 9.** Shelter of Los Grajos de Cieza I (Sierra de Ascoy, Cieza, Murcia). Color correlation of the detail of sexual practices performed during the ceremonial dance capturing a deer alive. [68] pg. 142, figure 6. Photo by Salcedo, P. L.

Figure 38 is depicted standing with an erect penis. With arms outstretched, he touches the head of Figure 37. This female individual, positioned within a small niche, has her arms raised towards her head, her legs open, and is shown in sexual contact with her partner. The central male figure (no. 39) is larger than the others and appears to be wearing a headdress or plume. His arms are extended but do not reach the deer (no. 44) or the female figure no. 41. His penis is represented as an elongated protuberance of considerable proportions, beginning as a dense line and tapering into a lighter one. The researchers interpret this feature as an ejaculation directed towards the female figure at hip level. She leans backward with open hands, adopting what appears to be a receptive posture.

Azorín and Salcedo have identified at least seven figures whose postures suggest possible sexual or relational behaviors within a communal context that may involve shared leisure or ritual events, potentially linked to fertility invocations. In conclusion, they propose a reinterpretation of the scene that reinforces the traditional understanding of the Barranco de los Grajos I painting as a depiction of a hunting dance. However, their detailed examination of the figures and their postures leads them to emphasize the explicitly sexual dimension of this example of Levantine rock art [68].

The capture of the large and powerful deer (no. 44) is an integral part of the composition due to the arrangement of its limbs, which are almost touched or grasped by the central individual (the hunter, no. 39). A comparable imagery can be

found in other rock art sites like El Milano (Mula).

In the Sierra de Ascoy, there are around a hundred rock shelters and caves. The inhabitants of the Los Grajos shelters moved around a wide area and were part of a large tribe that communicated for resource gathering, object exchange, and the sharing of cultural practices. Coeval materials and Levantine cave paintings have been discovered in the Cueva del Arco, Cueva de Jorge, and the Cueva de Las Cabras. However, Los Grajos I is the only place depicting human couples engaged in sexual activities. Subsequent interpretations will need to clarify the relationship that existed in that Final Mesolithic / Early Neolithic cultural group between the choral activities of dancing and capturing a deer alive by a cohesive human group, and mating practices, which were perceived as fundamental to personal relationships.

In conclusion, the recurrent depiction of communal ritual practices emerges as a central theme across multiple rock art sites of the Iberian Peninsula. Group dances, collective hunts, and symbolic captures are repeatedly illustrated, underscoring the role of these activities in forging and reinforcing communal identity. Other examples of prehistoric rock art depict similar rituals involving dancing, rhythmic behaviors, or communal actions, particularly in images associated with hunting. In the Cave of Lascaux (France), among the many scenes of hunting and animal depictions, there are figures with outstretched arms, possibly indicating a form of dance or ceremonial movement. The dynamic postures of these figures could suggest dancing or ritual movements intended to symbolize or re-enact the hunt. The Cave of La Pasiega (Spain) contains the representation of a figure in what appears to be a "dance posture," possibly indicating a ceremonial act associated with hunting or fertility rituals. The movement of the figure, in conjunction with the surrounding motifs, implies the possibility of ritualized behavior incorporating dance, music, or rhythmic sounds to accompany a sacred hunting event. The Rock Art of Tassili n'Ajjer (Algeria) presents numerous depictions of human figures engaged in dance-like movements. Several of these figures are portrayed with raised arms, while others are depicted in circular formations, indicative of communal dances or ritual performances. These dances may have been part of ceremonies related to hunting or the veneration of animals, paralleling practices potentially depicted in the Muriecho shelter. In addition, handprints observed at various rock art sites often appear to be deliberately arranged or overlapping, which might denote rhythmic or synchronized actions during ritual activities. These examples, along with the already-analyzed Iberian shelters, highlight the importance of rhythmic and coordinated group actions in connection with the representation of animal capture. By emphasizing collective participation in these synchronized rituals, the rock art reflects actions likely aimed at enhancing the success of hunts, fostering shared mythologies, communicating with the spiritual realm, reinforcing social cohesion within the community, and affirming group identity.

## 6. Specialized Techniques for Securing Live, Uninjured Deer

In this chapter, we examine Post-Paleolithic Iberian rock art that depicts a diverse array of specialized techniques used for restraining and capturing wild deer through physical tools. These techniques encompass the use of: 1) lassos; 2) snares; 3) traps; 4) netting methods; 5) claviform projectiles; and 6) boomerang throwing.

### 6.1. Mastering the Lasso: Blocking and Restraining Strategies

The lasso emerges as a central method for the live capture of large animals, as evidenced by its recurring depiction across several Levantine rock art sites [84, 85]. Here, we identify three key points that support the argument that early human groups engaged in animal capture through both pragmatic and ceremonial avenues.

**Key Point 1 - Controlled Capture:** In sites such as the Cueva del Polvorín and Cueva de la Araña III, the use of a lasso is illustrated as a precise technique that enables hunters to subdue deer without causing fatal injury, thereby preserving the animal for subsequent management or ritual purposes.

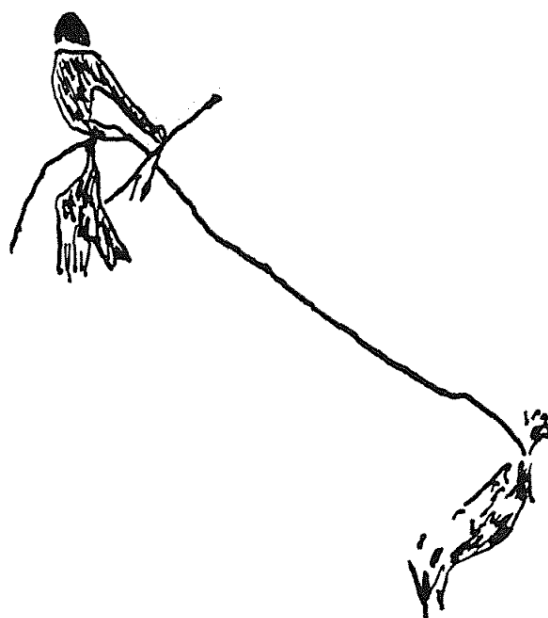
**Key Point 2 - Methodological Implications:** Our analysis distinguishes between practical hunting methods and symbolic ritual actions, clarifying that techniques such as the lasso not only facilitated the capture of live deer for practical use but also integrated symbolic elements tied to ritual significance, indicating the multifaceted roles that hunting played in the community.

**Key Point 3 - Integration with Broader Systems:** These hunting techniques are consistent with a broader array of capture methods—such as snares, traps, and manual techniques—that together form a comprehensive system of animal management in Early Neolithic societies. The integration of multiple techniques reflects an advanced understanding of animal behavior and capture dynamics, suggesting that early human groups were developing sophisticated methods to manage and interact with their environment. This comprehensive approach to deer capture, as represented in rock art, underscores the complexity of early human-animal interactions, where practical necessity and ritual significance were intertwined in the development of sustainable animal management practices.

The Cueva del Polvorín, also known as Cova dels Rossegadors (La Pobla de Benifassà, Castellón), has been a

UNESCO World Heritage Site since 1998. Situated in the heart of the Tinença de Benifassà Natural Park, it sits at the mouth of a steep and narrow ravine through which the river Sània flows. In prehistoric times, it served as an excellent vantage point for observing and hunting the animals that came to drink from the river.

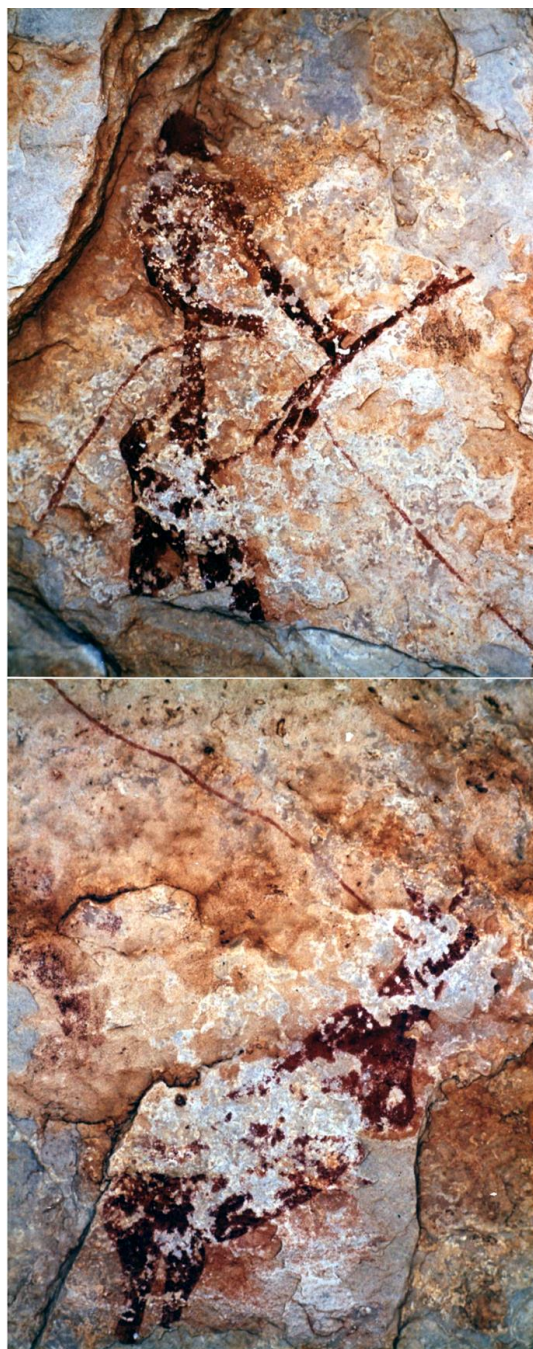
The paintings within the cave, created using red-dish-brown and blackish pigments, comprise around 240 motifs executed with a refined technique with a stylized figurative tendency. They offer a glimpse into the Neolithic environment and the daily life of the population, depicting scenes of worship, hunting, and animal taming. Among the motifs are depictions of deer, goats, wild boars, and birds. Remarkably, despite its proximity to a busy road, the paintings were only discovered in the autumn of 1947. Salvador Vilaseca documented in a foundational work the initial discovery and analysis of the rock paintings in the shelter, providing detailed descriptions and interpretations [86].



**Figure 10.** Shelter of Polvorín (Puebla de Benifazá, Castellón). Drawing depicting the lasso hunting scene of a hind. [86] pg. 20.

In the Cueva del Polvorín, there is a depiction of a single hunter with a rounded head. Despite carrying a bow and arrows in the left hand, the hunter is shown using a lasso with the right hand to capture a young hind (or possibly a goat) by immobilizing it with a long rope. The hunter keeps the captured prey tied up with the lasso [87-91].

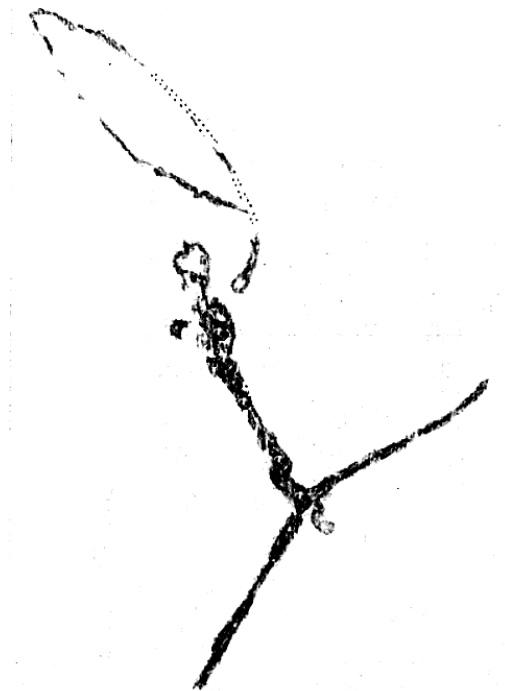




**Figure 11.** Shelter of Polvorín (Puebla de Benifazá, Castellón). The lasso hunting scene of a hind. <https://lavalltorta.com/COVA-DEL-POLVORIN>. Graphic elaboration Merlini, M.

A similar scene is depicted in the shelter of Los Recolectores de Alacón (Teruel), although in this case, the scene is much more chaotic and difficult to discern [5, 92].

In Cueva de la Araña (Cave of the Spider) III, a small, slender hunter is depicted throwing a lasso to capture an ungulate, which may be interpreted as either a stag due to its antlers or a goat based on its proportions [34, 50, 84, 93-96]. The human figure is skillfully depicted in dark red, exhibiting a movement with the sliding loop raised high over the head.



**Figure 12.** Cueva de la Araña III (Bicorp, Valencia). A small, slender hunter throwing a lasso to capture an ungulate. [93].

The Cuevas de la Araña are Epipaleolithic are an aggregation site of shelters located near the Escalona River in the municipality of Bicorp (Valencia province). They attained UNESCO World Heritage status in 1998, owing to their remarkable Levantine-style rock art. In 1924, Hernández-Pacheco presented a detailed analysis of the prehistoric paintings found in the Cuevas de la Araña, challenging earlier chronological assessments by proposing a Post-Paleolithic dating for Levantine Rock Art: between 9000 BCE and 6000 BCE [93]. The results of recent investigations indicate that the acoustic properties of La Araña could have been important for creating affective engagement through musical performances carried out during the production and use of rock art, as well as for the choice of the site as a social and ritual meeting place for Levantine populations [97, 98].

Finally, we recall that in the above-analyzed panel of the Muriecho shelter several individuals are attempting to capture a stag with a lasso and with their hands. In particular, two of them carry a bow and a straight bar from which a lasso hangs, perhaps to hold the horns or to tighten the throat.

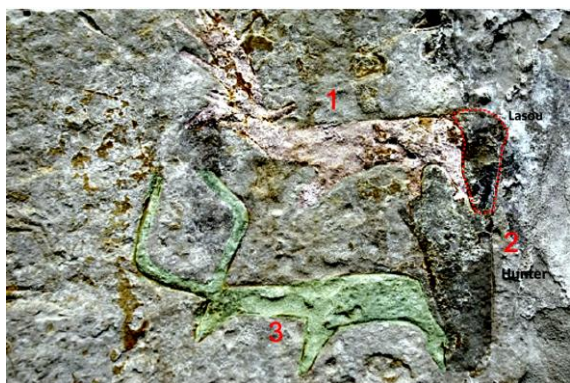
Among the diverse iconographic elements, the depiction of haltered or lassoed horses in Levantine rock art merits particular attention, illustrating early practices of animal domestication and management. Often, horses are shown being led or restrained by ropes or halters, suggesting that these communities employed systematic techniques to manage large animals [101-105]. These depictions highlight not only the historical significance of such practices but also the challenges scholars face in reaching consensus on the nature and significance of these rock art images [99, 100]. One notable example is found in the shelter of Selva Pascuala (Villar del



Humo, Cuenca) [101, 102]. According to Antonio Beltrán, this panel illustrates lasso hunting, as evidenced by the rope that the scholar saw passing around the animal's neck [103]. Conversely, Eduardo Hernández-Pacheco interpreted this representation as a domestic scene from daily life, seeing the human figure leading the dismounted horse by a halter and rope attached to the animal's muzzle [5, 104, 105].

In the Cueva de Doña Clotilde (Serranía de Albarracín, Teruel), an anthropomorphic figure is depicted controlling an equine using a bridle. This image reinforces early evidence of animal management strategies by demonstrating the technological acumen required to domesticate or tame potentially dangerous animals [106]. A similar scene is painted in Villar del Humo (Boniches, Cuenca), where animal control motifs are similarly represented. An analogous motif is observed in the Shelter of Tó Campano, where a vertical line drawn from an animal's muzzle to the ground is representing a symbolic human hand [43, 108-111]. This element suggests deliberate human intervention to restrain or guide animal behavior, a theme that recurs in related sites such as Borriquitos (Teruel) and Canjorro de Peñarubia (Baños de la Encina, Jaén). These visual cues collectively emphasize a recurring framework of human mastery over animal movement [107, 112, 113].

The cultural pervasiveness of the depictions of haltered or lassoed deer is demonstrated by comparing two instances of rock art from geographically distant locations and significantly different periods. These examples highlight the widespread significance of early deer management practices across different cultures and timeframes.



**Figure 13.** Rus-Haltă (Sălaj county, Romania). A hunter throwing the lasso with the intention of ensnaring a stag is carved on a petroglyph. 1. The stag. 2. The hunter with lasso. 3. The bull. [114] pg. 98, figure 10c.

In a petroglyph of Rus-Haltă (Sălaj County, Romania), a dynamic scene is presented where a hunter is depicted throwing a lasso to capture a stag. Set against the presence of both a bull and a stag, this composition exemplifies the interplay between human skill and animal vigor, reflecting proto-domestic practices interwoven with ritual significance.

The careful arrangement and interaction of figures in this petroglyph underscore an early conceptualization of animal control. In the same area, there is an altar engraved with a series of allegories related to deer hunting, referred to as the *Altar of the Deer* [114]. This altar, with its symbolic representations, further emphasizes the ritualistic and practical dimensions of animal management.

The rich petroglyphic complex of Kalbak-Tash (Ongudai district, Altai Republic, Russia) offers a valuable and continuous record of human expressive imagery dating back to the Neolithic period (6000-4000 BCE). Over 5000 painting motifs adorn the flat rocks of the hill overlooking the Chuya River valley. Rock II presents a hunting scene in which a figure wields a bow in one hand while securing a deer with a long rope in the other. This combination of ranged and close-contact techniques reflects an advanced understanding of animal behavior and the challenges of subduing prey without causing fatal injury. Such imagery provides an important comparative perspective, demonstrating that similar capture methods were utilized by diverse cultures across vast geographical areas [115].



**Figure 14.** Kalbak-Tash I (Ongudai district, Altai Republic, Russia), Rock II. The hunter has a bow in his left hand, but holds the deer tightly with a long string in his right hand. [115] pg. 418, figure 34. Graphic elaboration Merlini, M.

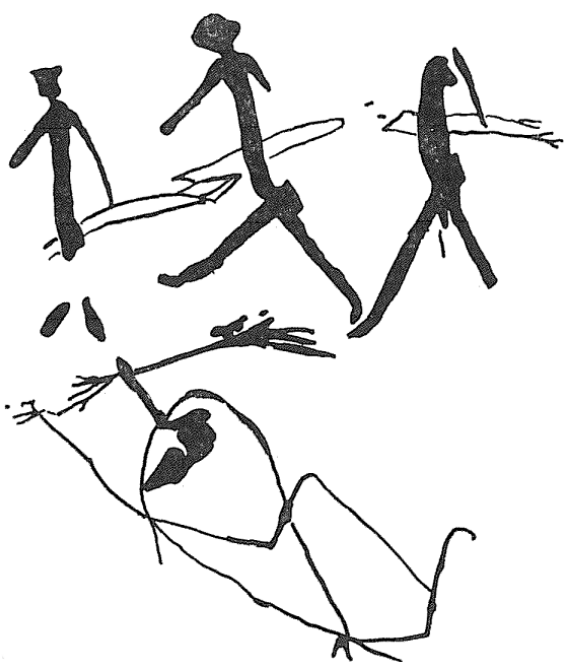
## 6.2. Trap-Based Approaches to Deer Ensnaaring

The widespread use of rope-based traps for deer capture not only evidences advanced hunting techniques but also indirectly attests to the sophisticated practice of basketry. This craft of braiding and knotting fibers—a skill predating textile manufacturing—was integral to creating household tools and personal ornaments, and it remained a vital technology alongside emerging textile production methods.

The Abrigo del Ciervo (Dos Aguas) offers a compelling depiction of a trap mechanism within its complex, which features 59 painted figures executed in various styles and scale. Discovered in 1972 and recognized as a UNESCO World Heritage Site, this shelter stands out not only for its size but also for its detailed narrative of human activity in the

ravine of Dos Aguas. The paintings were likely created during the Neolithic period (7000-4500 BCE) [116].

Within this tableau, a group of three partially damaged human figures is rendered in dynamic motion, while holding bows and arrows at rest. A striking detail is the prominent depiction of the sexual organ on one of the characters, adding a layer of symbolic meaning that suggests themes of fertility, potency, or the power dynamics inherent in hunting and domestication practices. The hunters appear to engage in capturing an unidentified quadruped via a trap illustrated by a thin, sinuous line that intersects to form three distinct spaces. The appearance of three bulges along this line has been interpreted by María Concepción Blasco Bosquedas as knots or junctions in the rope, and within the upper compartment, a vaguely defined figure has been understood as the trapped prey [5, 117]. The depiction of the trap emphasizes the technological and ritual aspects of hunting, illustrating both the complexity of the tools employed and their integration into broader cultural beliefs.



**Figure 15.** *Abrigo del Ciervo I (Dos Aguas). A deer captured with a trap. [117] pg. 13.*

In the shelter of Los Chaparros (Albalate del Arzobispo, Teruel, Lower Aragon), a hunting scene unfolds that echoes the live stag capture motifs observed at Muriecho and Los Grajos I. Positioned along the Martín River, this site functioned as an optimal vantage point for monitoring local fauna and also doubled as a communal gathering space for periodic large-scale events [47]. At the peak of a sacred yet playful ceremony, a feathered hunter charges towards a mighty stag and seizes one of its front legs, while the hind legs are ensnared. Remarkably, the animal remains unharmed [34].



**Figure 16.** *Shelter of Los Chaparros (Albalate del Arzobispo, Lower Aragon). Capture of a stag alive. [50].*

A similar scene was engraved and painted in red and black at the shelter of Els Gascons, in the Calapatá ravine (Cretas, Teruel) [118]. Among other animal figures, two large, very naturalistic stags, painted in red and black, are running towards the left. A hunter running energetically is represented with a linear and stylized appearance. He is superimposed on one of the hind legs of a large deer, as if he wants to capture one of its legs and put it in a noose held up by a pole.

This shelter, together with the Roca dels Moros, inaugurated the "era of discoveries" of Levantine art, as it was published by Abbé Henri Breuil in his 1910 publication [119]. Juan Cabré Aguiló also published it in his *Arte rupestre en España* [120]. In an attempt to safeguard this painting, it was destroyed in the 1920s when it was removed from the cavity [121-123].



**Figure 17.** *Shelter of Els Gascons (Cretas, Teruel). A hunter, running energetically, seizes one of the stag's legs and secures it in a noose supported by a pole. [120].*

The complete absence of archaeological materials during the excavation of the Els Gascons shelter, but its proximity to a watercourse and strategic location at the confluence of two ravines, led archaeologists in charge to interpret the place as an occasional site of prehistoric human occupation.

They viewed its painting complex more as an "information panel" than as a symbolic decoration of a meeting place, sanctuary, or living space [124].

The remote Cova da Bruxa, located in Muros (A Coruña, Galicia), is concealed beneath dense vegetation and preserves one of the most significant Bronze Age figurative rock art complexes in the region. Here, male deer are featured alongside hunter figures, with two stag depictions clearly distinguished from other cervid images by their placement before two distinct trap types—one rectangular and one circular [125].

A prominent motif within the complex portrays a buck with 10-point antlers, centrally positioned to emphasize its prominence. The artist's meticulous rendering reveals a deep understanding of animal morphology, capturing the stag at the peak of its rut—its head raised and mouth agape to suggest a high-pitched bellow that imbues the image with a sense of vitality.



**Figure 18.** Cova da Bruxa (Muros, Galicia). The capture of a stag with a trap as the culmination of the hunt. [126] pg. 100, figure 17.

The engravings depict the "hunting rut"—the chase of the stag during its mating season. This phase, characterized by expansive roaming in search of mates, not only increases the likelihood of prey detection by chance, but also exposes the stags to risk. Heightened sexual arousal can lead bucks to behave recklessly, often in open areas that favor hunter encounters [127]. The isolated depiction of the stag in an open area of the Cova da Bruxa panel is interpreted by Josãa Rey Castiãeira, Manuel Antonio Franco Fernãdez, and Jorge

Juan Eiroa Garc ía as an allusion to its mate-seeking phase [128]. The artist accentuates the animal's majesty through meticulously rendered antlers—well-developed, symmetrical, and branching with equidistant tines—underscoring both beauty and power [127, 128].

Although the overall style is schematic, the realistic posture—especially in conjunction with the rectangular lattice at the animal's feet—suggests a hunting trap constructed from bark-fiber nets, a technique common in the Bronze Age for both hunting and fishing [126, 129]. Alternatively, the rectangular lattice may symbolize a wooden frame over a pit-trap designed to ensnare the animal. In either interpretation, the image conveys the inevitability of the stag's capture, emphasizing its robust and mature form—its antlers exceeding ten points signify a climax in the hunting pursuit. This moment of capture is portrayed as the apex of the hunt [126, 130].

Moreover, the principal panel in Cova da Bruxa features a second adult stag with elongated antlers, depicted on the brink of entering an alternative trap configuration. This trap, defined by a combination of circular and rectangular elements, further illustrates the varied techniques employed in prehistoric hunting practices [126]. This diversity in trap design underscores the complexity and adaptability of early hunting strategies, pointing to an evolving understanding of animal behavior and an increasing sophistication in the tools and techniques used to manage and capture game.



**Figure 19.** Cova da Bruxa (Muros, Galicia). A stag in front of a circular trap. [126] 96, figure 13.

In the Torcal de las Bojadillas (Nerpio, Albacete), a trapped hind is rendered in the characteristic Levantine style. Situated at 1,100 meters above sea level amid rugged ravines and rock formations, the site contains seven caves and shelters adorned with red and black pigment paintings. Discovered between 1973 and 1975, the collection boasts over 700 motifs—including human figures in various scales and typical Levantine animals such as deer, goats, bulls, and leporids. Many of the figures are small, measuring only three to five centimeters, and display meticulous brushwork.

Although vegetal motifs are uncommon in Levantine art,



the shelter of Bojadillas I presents a paradigmatic scene in a naturalistic, narrative style. In this composition, a hind is depicted reclining among various plant elements—interpretable as tree branches based on their distinctive shape and scale—thereby integrating elements of nature into the iconography. The concavity in which the animal and vegetal figures are depicted suggests a trap into which the cervid has fallen. Its folded legs indicate unconsciousness or death [131-133].



**Figure 20.** Shelter of Bojadillas I (Nerpio, Albacete). A captured animal (perhaps a deer) surrounded by the branches of the trap [132].

Yet, a significant detail complicates this plain interpretation: the hind, unmistakably a female deer, possesses a long tail resembling that of a bull or cow and legs with small bird-like feet. This hybrid representation, imbued with sacred powers, transcends the mere material significance of a hunt using traps, suggesting a deeper symbolism. The presence of a blank rupture line or collar around the animal's neck further adds to the enigma of the metamorphosis of the bull and the bird into the deer [134, 135].

Juan F. Jordán Montés interpreted the hind of Las Bojadillas I as undergoing a ritual beheading, possibly heralding a new seasons (spring) or serving as a magical-religious impulse to the annual cycle [134, 136, 137].<sup>4</sup> While unverifiable [134], this notion aligns with the concept that every ritual immolation leads to the formation of a new order, whether political or cosmogonic [138].

Similar depictions of branches connected to animals in

other prehistoric cave art have been interpreted as symbols of the cyclic nature of life and connected fertility, hinting at an integrated and perhaps ritualistic approach to hunting. For example, a couple of branch-shaped signs are superimposed on a pregnant mare, one positioned on its swollen belly, painted in the cave of Lascaux (15000-12000 BCE), on a bison and a horse depicted in Le Portel, on a horse in El Castillo and in Niaux, and behind a bison in Altamira and Marsoulas. The head of a bovid appears before four branches on a knife made of mammoth ivory found in the La Vache Cave (Ariège, France) and dated around 10000 BCE. A similar composition is engraved on a rib from Isturitz. A ramiform is placed behind the head of a bear on a rod from La Madaleine, while in Massat the bear seems to swallow the ramiform with its mouth [139, 140].

Likewise, some Spanish scholars discern, behind the hunting scene of Las Bojadillas I, the sacrifice of the sacred animal trapped amidst branches. This ritual immolation by decapitation alludes to a profound narrative of revitalization of existence and the regeneration of life, symbolizing and/or triggering the potential return of the prey to Earth. The six or seven tree branches that encircle the hind perhaps indicate a repeated emphasis on a message of fertility enhancing it. A comparison with a panel in the shelter of Tinada del Ciervo (Nerpio, Albacete) is significant. Here, a stag serves as a guide for an archer who pursues it. Remarkably, its antlers have metamorphosed into a magnificent tree, revealing the mystical and mythical communion between the psychopomp deer and the primordial tree of life [141]. Juan F. Jordán Montés speculated about a potential association between the ritual death of the doe surrounded by branches in Las Bojadillas I and a rite of cosmic creation [134].

This painting is situated among other scenes illustrating metamorphoses of bulls into deer, fighting among bulls, and enigmatic figures such as a human (possibly a shaman) standing atop a bull. These enigmatic compositions hint at complex mythical narratives, likely shared around intimate bonfires and reinterpreted through ritualistic practices. Together, they form a profound exploration of the interconnectedness of life, death, and rebirth in the ancient worldview of the shaman-artists.

It is very possible that the hind in Las Bojadillas I is caught in a net trap. In several cases, cries and calls of live deer - tamed, mutilated, or restrained -attracted wild deer during the mating season.

### 6.3. Netting Techniques in Ancient Deer Capture

A comparative review of rock art from these diverse sites of the Iberian Peninsula reveals a convergence in the methods and symbolic representations of animal capture. Despite local stylistic variations, common themes—including the use of lassos, halters, and traps—emerge, suggesting a shared conceptual and technical framework for controlling key animal species. This transregional convergence enriches our

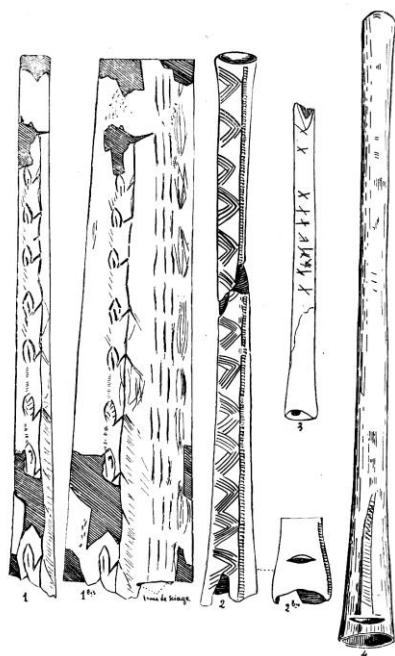
<sup>4</sup> The scholar identifies iconographic parallels in a strange scene depicting the death of a chief in Les Coves de Santa Maira (Castell de Castells, La Marina Alta-Alicant). In this panel a male character, flanked by two others, is impaled by a triangular-tipped spear. He represents the old chief. Positioned in front of him is the executioner, while the new hero or leader, depicted ithyphallic, stands behind the old leader whose strength has waned with time and thus must be sacrificed. A stag with a twisted neck is portrayed nearby, perhaps symbolizing the death of the old hero and/or the associated rite of passage. Of particular significance is the third character, with the erect phallus, emerging from the arborescent or branch-shaped antlers of the deer, further reinforcing the tableau's connection to concepts of fertility, growth, and renewal [134, 136, 137].



understanding of early hunting strategies and is supported by archaeological evidence.

Since prehistoric times, humans have employed sound-producing devices as substitutes for live callers to mimic the vocalizations of target species during hunting or ritual practices. These devices included blowing horns, crafted from animal horns, which could produce a range of sounds imitating animal calls or alarm signals. Rolled-up tree bark was fashioned into wooden megaphones to amplify sound and replicate prey calls. Whistles, made of bone or wood, were designed to reproduce specific animal sounds, such as the whistles of deer or bird calls. Bows, used as stringed instruments, could generate hypnotic or melodic sounds believed to "charm" prey. Additionally, flutes or panpipes, constructed from reeds, wood, or bone, were employed to imitate the tonal patterns of animals or other natural sounds, enhancing the effectiveness of hunting or ritual performances.

A significant instance is the Magdalenian sound device (approximately 15000 to 10000 BCE) found at the La Garenne site in Saint-Marcel (Indre, France) [142]. This device is often referred to as a "whistle" or "flute" and is made from bird bone. It is believed to have been used for producing sound, possibly for communication, or for ritualistic purposes. But above all, sound-producing devices were frequently utilized in community-based hunts to aid in capturing live deer using nets.



**Figure 21.** Saint-Marcel (Indre, France), Placard Cave (Charente, France), Isturitz Cave (Pyrénées-Atlantiques, France). Sound devices that occasionally substituted for live callers. [142] pg. 185, figure 1.

using nets in prehistoric Europe are well documented [143-144].

Motifs depicting nets occur on several Mesolithic carved objects made of red deer antlers, indicating that this hunting technique was well known and used not only to catch fish and birds but also big game as red deer, the chief of the animals in the late Mesolithic forest [145].

*PALEOHUNT Project.* A reconstruction of Palaeolithic hunting techniques investigated hunting strategies during the European Upper Palaeolithic, including the use of nets, to understand the diffusion of populations and the assimilation of ideas [146].

James M. Adovasio, Olga Soffer, and Jake Page documented that women not only took part in communal hunting but also played a pivotal role in inventing the nets used for this activity [147, 148].

Design and use of hunting deer by capturing them in nets is well documented in history. Techniques have not changed much from those used in prehistory. A remarkable example is found on a Late Assyrian gypsum wall relief depicting a deer hunt by King Ashurbanipal in the mountains. This relief is located in the Northern Palace of Ashurbanipal in Nineveh, Room S, slabs 17-18, and is dated to c. 645-635 BCE. Within an unspecified wooded mountain range, a herd of male and female deer is depicted fleeing to the right. The scene culminates with a long net that hunters stretch out across the escape route of the running animals to surround them, direct them, and then trap them [149, 150]. The Neo-Assyrian relief is kept in the British Museum, London (inv. no. BM WA 124871,c).

In the Classical world, since Xenophon's time (5<sup>th</sup> century BCE), written testimonies and illustrations show that the method of capture deer was almost always the same: the preys were driven towards enclosures made of canvas or nets, then immobilized by hunters posted near the traps [151, 152]. A mosaic called the "Little Hunting," located in a guest room of the Villa of Casale (Piazza Armerina, Sicily, Italy), vividly illustrates three mighty stags being hunted, running madly, and caught in a net [152-158].



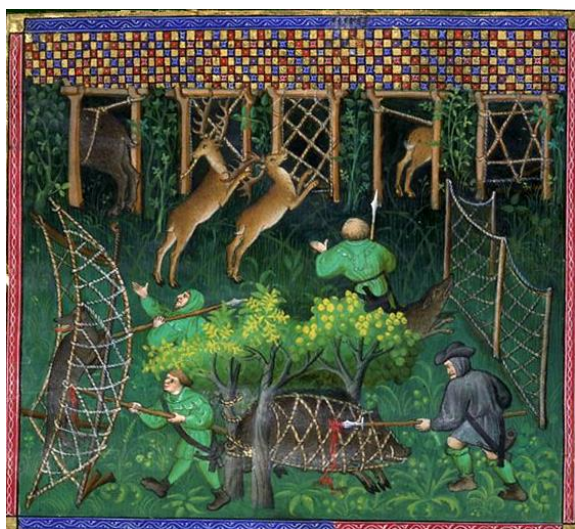
**Figure 22.** Villa of Casale (Piazza Armerina, Sicily, Italy). The Little Hunting mosaic portrays stags in the midst of a hunt, shown in frantic motion as they flee and ultimately become ensnared in a net. <https://parchiarcheologici.regione.sicilia.it/morgantina-villa-romana-casale/wp-content/uploads/sites/17/2021/01/piccola-caccia-2-1920x1275.jpg?v=1638441990>. Graphic elaboration Merlini, M.

Community-based hunts involving the capture of live deer

During Antiquity, hunters sometimes used captured fawns as decoys to attract hinds or, during the mating season, tamed stags, driving them into nets to be captured alive. Evidence for this practice includes the reliquary tomb of Saint Ludre in the church of D  ols (Indre). [158-160]. It portrays a hunter departing for the hunt, walking on foot while guiding a tamed doe, which is followed by her fawn. Then, a stag is captured with a net by a hunter accompanied by two dogs. In the background, several deer heads can be seen.

An elaborate technique of netting deer is reported by Antoine Gaffet de la Briffardi  re in 1750: the animals are surrounded by nets, the perimeter of which is reduced by half after a week. After about fifteen days, having accustomed the deer to the presence of human beings, they were led into a pre-prepared alley, which led to a cart where they were locked up [161].

Gaston Ph  bus's account *Le livre de la chasse* was the breviary of all 14<sup>th</sup> century followers of the art of hunting thanks to a wealth of illustrations comparable to that of Bibles. A miniature (Paris, BnF, D  partement des manuscrits, Fran  ais 616 folio 103) documents the simultaneous employment of both methods we have illustrated: driving wild animals against a net and capturing them with a net [162].



**Figure 23.** Driving wild animals against a net and capturing them with a net. [162] folio 103.

[https://classes.bnf.fr/phebus/grands/c60\\_616.htm](https://classes.bnf.fr/phebus/grands/c60_616.htm)

A lethal combination of techniques and devices employed to capture a deer while leaving it alive—including hands, lasso, and trap—is a key feature of hunting deer in Iberian Prehistory. This is exemplified by a red-colored tableau within the Cueva de la Vieja (Alpera, Albacete). Here, a hunter is depicted calmly and securely gripping the tail of an adult stag, which appears to be attempting to run away. Another character is portrayed swinging a lasso with his left hand while simultaneously controlling the animal's paw with a rope held in his right hand [34, 163, 164].

A trap, depicted as a rectangular tectiform filled with parallel lines inside, blocks the deer's left front leg. This trap bears resemblance to the signs found in Quaternary art, painted over the legs of some deer, suggesting a similarity to Paleolithic depictions of traps [5, 117].

The Cueva de la Vieja is a UNESCO World Heritage Site. It is renowned as a large sanctuary-shelter exploited by prehistoric groups for millennia to perform rituals, including pictorial actions characterized by their plastic quality and liveliness. The red paintings, predominantly found, were created using iron oxides processed in various ways to achieve a wide array of shades, while black paints were made from charcoal or manganese oxides.

Discovered by chance in 1910, the painted panels of the shelter belong to two distinct prehistoric styles: Levantine art and Schematic art. Levantine art, comprising 170 painted motifs, is a creative legacy of the last hunter-gatherers who inhabited these Alpine ranges between 10000 and 6000 BCE. Schematic art, consisting of 37 painted motifs, was produced by Neolithic groups between 6500 and 3200 BCE. In 2022, the paintings underwent restoration as part of the 'Diagnosis, Consolidation, and Cleaning' project.



**Figure 24.** Cueva de la Vieja (Alpera, Albacete). A red-colored tableau depicting a wide range of techniques employed to capture a deer alive, including the use of hands, lasso, and trap. Photo    Merlini, M.

#### 6.4. Precision Tools in Non-Lethal Hunting

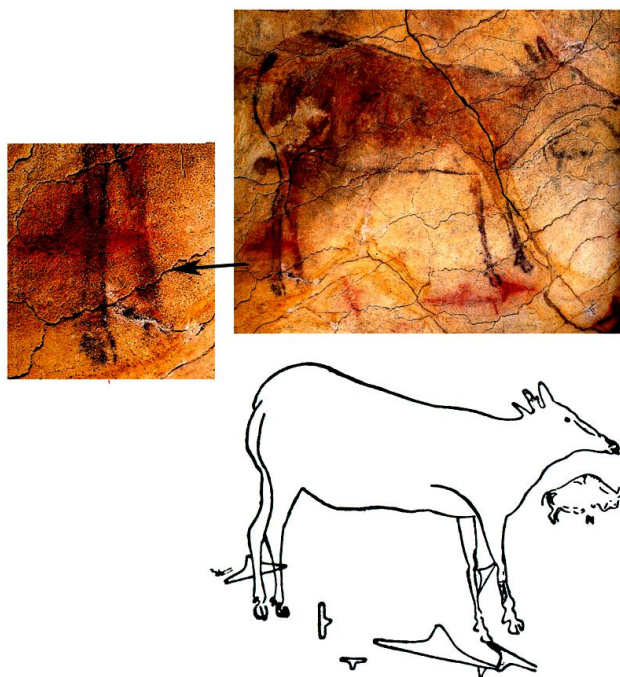
Capturing live deer requires a skilled approach and mas-



tery of precision hunting tools. The Post-Paleolithic rock art of the Iberian Peninsula offers significant insights into the utilization of Mesolithic and Neolithic advanced methods of animal capture, such as claviform projectiles and the techniques of boomerang throwing. The claviform projectiles, depicted in Levantine rock art, suggest a specialized form of hunting that allowed hunters to strike prey with accuracy while minimizing harm, thus ensuring the deer could be captured alive. These projectiles, with their distinctive, elongated shape, likely served as an essential part of the toolkit for immobilizing or injuring animals without killing them outright, reflecting a transition toward controlled hunting practices. Similarly, the boomerang—a tool associated with precision and skill in hunting—appears in some rock art motifs, suggesting its use in sustainable practices for deer procurement. Both of these tools represent not only technological advances but also symbolic elements, reflecting the integration of hunting practices into social and ritual contexts.

#### 6.4.1. Claviform Projectiles for Subduing Deer

A photograph by Pedro Saura, published in *Redescubrir Altamira*, provides valuable visual evidence supporting the exploration of the use of throwing weapons to capture live deer in prehistoric rock art from the Magdalenian III period (ca. 15,000-12,000 BCE) [165].



**Figure 25.** Altamira cave (Cantabria). A hind painted on the ceiling of the Great Hall with claviforms between its legs. Note the overlap of the claviform on its rear leg. [163] pg. 166, figure 3. Composite image from photo by Saura P. in [165] pg. 80, figure 27 and drawing [166].

A Magdalenian polychrome *great hind* adorns the ceiling of the Great Hall in Altamira Cave, standing as one of the most iconic works of prehistoric cave art due to its remarkable realism and intricate detail. It is particularly notable for its impressive size (measuring 2.25 meters in width), as well as its elegance and vibrant color palette, which includes shades of red, yellow, black, and brown. The depiction of the belly is striking, as it was painted over a soft natural relief to emphasize pregnancy and fecundity.

A red triangular claviform, characterized by horizontally arranged short concave sides and straight, thin arms [167],<sup>5</sup> is prominently superimposed on the black-bordered rear leg of the animal. A similar sign appears on one of the front legs [165]. The female red deer and these signs were painted contemporaneously and are directly correlated. In 1935, Abbé Henri Breuil and Hugo Obermaier were the first to propose that the claviform marks associated with the hind could represent stylized depictions of functional throwing weapons, rather than mere symbolic abstract motifs. They classified these as “club-type signs” [166]. Indeed, the claviforms represent weighted throwing clubs designed to entangle and immobilize a deer’s legs, preventing its escape. Adjacent to the deer, in the upper right section of the panel (though not visible in the image), three male anthropomorphs extend their arms forward as if attempting to capture the animal.<sup>6</sup> Their strategic placement suggests an intentional depiction of the effect of these hunting tools on the animal, reinforcing the notion that they were used in active hunting scenarios. If the claviforms do, in fact, represent throwing weapons, their placement alongside the prey, the hunters and other abstract motifs suggests a symbolic or ritualistic significance beyond their practical function.

If the triangular club-shaped tools surrounding the cervid’s legs depict throwing weapons used to immobilize the animal [163, 170], it follows that some claviforms are shown on the ground, indicating missed target. These claviforms are depicted in a slightly different form, with a less pronounced central appendage, shorter and thinner curved sides, and a curved base [166].<sup>7</sup> The hypothesis that club-shaped signs represent throwing weapons used in hunting techniques aimed at capturing deer alive provides valuable insight into prehistoric hunting strategies and the symbolic significance of cervids in Upper Paleolithic societies. Illustrating throwing weapons, the claviforms in Magdalenian art are integrated into complex hunting scenes—often alongside anthropomorphic figures—to suggest they held both practical and symbolic significance. Beyond their utilitarian role, they have been linked to ritualized hunting practices, expressions of human-animal relationships, or mythological narratives embedded in Paleolithic cosmology.

<sup>5</sup> Depictions of similar claviforms have been found in the Cantabrian caves of Tebellín, in Bricia, Llanes, Asturias (4), La Pasiéga C, in Puente-Viesgo, Santander (2), El Castillo, in Puente-Viesgo, Santander (2 + perhaps 4), and La Garma, in Ribamontán al Monte, Cantabria (2) [168].

<sup>6</sup> According to other scholars, they are “orantes” who are praying [169].

<sup>7</sup> A similar tool occurs in the Tebellín cave.

A comparable depiction of a throwing weapon obstructing a deer's escape appears in the Early Neolithic rock art at Cova dels Cavalls, located on the left bank of the Barranc de la Valltorta. This imagery reinforces the idea that projectile-based techniques for live capture persisted beyond the Paleolithic, reflecting continuity or re-adaptation of earlier hunting practices.

The Cova dels Cavalls rock shelter remained undiscovered until 1917 due to its difficult access. It has around 80 stylized figurative units which in most part was vandalized shortly after their discovery. The colors used correspond to the reddish-brown range, and white for body painting, details, and ornaments.

The scene is rendered with realism. The male deer is carefully documented, featuring reddish-brown fur, relatively modest antlers, and a slender body. According to Obermaier and Wernert, the small stag represents the oldest figure in the group, followed by a stylized human figure with realistic features. The final stage of this composite group is marked by the superimposition of a large, realistically rendered bovine over another archer, similar in style to the previous one. Obermaier and Wernert argued that such superimpositions demonstrate the continuous presence of large naturalistic figures throughout the entire development of Levantine rock art, rather than their chronological precedence over the smaller depictions of humans and animals [3, 123, 171].



**Figure 26.** Cova dels Cavalls (Tirig, Castellón). An image of a throwing weapon hindering a deer's escape. [3] Tracing motifs no. 44-48.

A detail from a Copper Age (2700-1800 BCE) petroglyph at Pedra das Ferraduras (Campo Lameiro-Fentáns, Galicia) portrays a male deer surrounded by three hunters. One is depicted stalking the large animal while holding two throwing sticks, while another, also armed with a similar weapon, rushes forward to assist him. A third hunter is approaching from a greater distance. The stag is characterized by its impressive five-pointed branched antlers, one of which slightly

overlaps the body of a prominent anthropomorph. This central figure, likely a cylindrical rock idol, is carved with facial features, including eyes and a mouth. Positioned behind the stag are three hinds, seemingly forming its harem [172-175].



**Figure 27.** Pedra das Ferraduras (Campo Lameiro-Fentáns, Galicia). In a Copper Age petroglyph, two human figures chase, holding throwing sticks, a large stag. [173]. Graphic elaboration Merlini, M.

According to Picazo and his team, representations of throwing weapons also appear in rock paintings at Barranco de las Olivanas and Paridera del Tormón (Albarracín, Teruel), Val del Charco del Agua Amarga (Alcañiz, Teruel), Fuente del Sabuco (Moratalla, Murcia), and Torcal de las Bojadillas (Nerpio, Albacete), among other sites [176].

These depictions suggest that claviform throwing weapons were employed in the live capture of deer, effectively hindering their movement by entangling their legs. This technique is evident in representations from the rock shelter of Los Chaparros and the Cueva de la Vieja de Alpera, where the objective appears to be preventing escape rather than ensuring an immediate kill—regardless of whether the animal was subsequently sacrificed or subjected to taming efforts.

Ethnographic data reinforce this interpretation contextualizing the rock art images within broader prehistoric cultural practices. Various indigenous groups, including those in Africa and the Americas, have employed similar methods, such as bolas and throwing sticks, to immobilize game. Aboriginal Australians, for instance, throw sticks at the legs of emus to impede their flight [177]. Notably, comparable techniques persist in certain regions of Spain where Post-Paleolithic rock art depicts claviform throwing weapons. For example, shepherds in Teruel use sticks to prevent sheep from scattering.

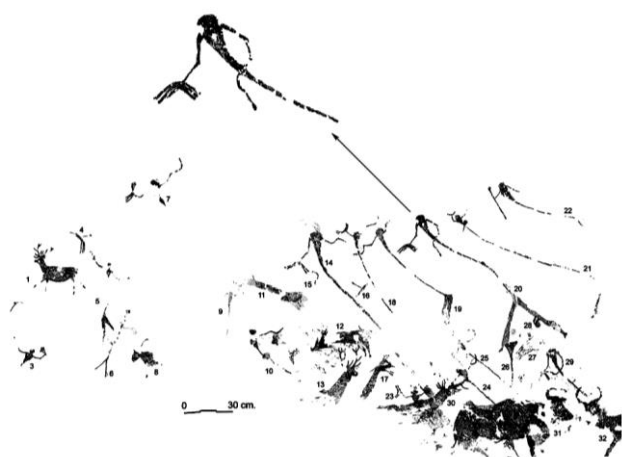
The utilization of claviform weapons in a similar manner



by Paleolithic and Neolithic hunters suggests a sophisticated and time-rooted understanding of hunting strategies aimed at live capture rather than immediate lethality. This, in turn, raises the possibility of temporary captivity, domestication attempts, or even ritual practices associated with the procurement of wild animals.

#### 6.4.2. Boomerangs: An Alternative in Live Deer Acquisition

Boomerang bearers are depicted in the Mesolithic paintings of the Cueva del Chopo (Río Martín, Obón Teruel), dating to the second half of the sixth millennium BCE. Lined up in two rows, fifteen extraordinarily elongated male hunters (more than a meter long) are armed with two or three boomerangs each [178]. They are portrayed in shooting positions. Many of them are preparing to throw a boomerang with their left hand while carrying two or three spare boomerangs in their right hand. Only one character is depicted carrying a stick or a club (no. 22 in the image).



**Figure 28.** Cueva de Obón (Río Martín, Obón Teruel). Mesolithic paintings depicting figures wielding boomerangs while pursuing deer. [178]

The most obvious interpretation of the scene painted in the Cueva del Chopo would be that of hunters pursuing deer (nos. 1, 13, 17) and bulls (nos. 31, 32) with boomerangs. However, the composition of the scene, with the animals off-center, raises questions about its true meaning. Pilar Utrilla and Manuel Martínez-Bea observed that the stalkers surrounding the stag n. 1 (nos. 3-4-5-6) are not addressing the animal but the people on the right. They propose that the panel may depict a clash between opposing human groups rather than a hunting scene [50]. They argue that the exaggerated stylization and excessive size of the characters serve to magnify the protagonists of the battle. The depiction of a fight scene using the phalanx technique evidences the employment of the concept of “reserve” in battle—organized reinforcements arriving later to support the front lines—by Mesolithic groups

of the Iberian Peninsula. In short, the panel suggests that the boomerang was utilized as a combat weapon and that prehistoric fighting was well-organized and well-represented in rock art [54, 179]. The close presence of deer as prey indicates that this hunting technique was also exploited against large animals.

However, no archaeological evidence of boomerangs has been discovered so far in Iberian Mesolithic sites [180]. Additionally, the anatomically impossible elongation of the human figures [178, 181, 182], and the association of these strange anthropomorphs with unconventional weapons such as boomerangs (much less efficient than the bow and arrow) challenge the hypothesis of a confrontation between opposing human groups [178].

Alfred Muzzolini and Aldo Boccazzi provided additional technical insights into prehistoric boomerangs. Through calculations of measurements and weight conducted on similar rock art paintings in Algeria (specifically at Tikadiouine), they concluded that prehistoric boomerangs had limited effectiveness as hunting or war tools. Instead, they were likely regarded as status objects, primarily used in dances [183-185].

The team of researchers responsible for the Cueva del Chopo stated that the characters’ anatomical features and their unusual weapons depicted in the rock art tableau likely hold symbolic significance within a confrontation in a consecrated scene, rather than representing an everyday combat [178]. Esther López-Montalvo interpreted the panel as a ritualized conflict resolution involving large groups organized in squads, employing similar techniques, organizational structures, and weapons used in deer and bull hunting [17, 181, 186].

The presence of a vigorous stag behind two opposing bulls in the panel suggests deeper allegorical meanings.

Describing ceremonies practiced among various groups in Siberia—including the Buryats, Mongols, and Turks of the Altai Mountains—the French anthropologist Roberte Hamayon proposed an interpretation of images depicting animals butting their foreheads, analogous to the bulls represented in the Cueva del Chopo. Hamayon argued that such imagery reflects an allegory of rivalry and conflict among shamans. She illustrated this concept with the Naadaha ceremony, in which a shaman is believed to enhance his ability to compete with, and engage in conflict against, shamans from rival tribes [187, 188].<sup>8</sup>

<sup>8</sup> Shamans perform the ceremony called Naadaha every year for nine days in early spring. During this ceremony, they play drums, jump, dance, imitate the movements of hunted animals, bellow like deer, moo like bulls, shake their heads with matted hair, and attempt to gore each other. In ecstatic agitation and in the grip of transcendental visions, they believe they have incarnated the spirits of powerful and courageous animals capable of transmitting the fecundity of the cosmos to humans through their antlers and horns. Thus, they engage in erotic games to promote the fecundity of hunting animals and all of nature.

Through the Naadaha ceremony, these shamans also become capable of competing and fighting with other shamans belonging to hostile or enemy tribes. These shamanic rituals form the basis of the region’s traditional sporting competitions: wrestling, archery, and horse racing. For example, archery and wrestling games were played during the imperial shamanic prayer ceremonies for rain [189].

Building upon Hamayon's analysis, Juan Francisco Jordán Montés observed that the powerful stags and the two opposing bulls depicted in the Cueva del Chopo are distinct yet related representations. Although their silhouettes do not overlap, they collectively convey the notion that, during conflicts between human groups, shamans participating in confrontations found it advantageous to embody the qualities of both their guiding animals. By synthesizing the attributes of the bull with those of the stag, these shamans sought to augment their power and efficacy in hostilities [191].

In a similar vein, Anna Alonso and Aleixandre Grimal have proposed that, in Post-Paleolithic Franco-Spanish rock art, deer gradually began to occupy the same symbolic space as bulls—though without any deliberate attempt to completely supplant one species for the other [192]. In the Cueva del Chopo, highly stylized human figures—numbering at least ten—are superimposed upon images of both bulls and deer. These anthropomorphs appear to walk or dance while wielding boomerangs. The coral ceremonial display of boomerang-throwing—a motif exceptional in Spanish Mesolithic Levantine rock art—imbues the representation with a magical or religious aura.

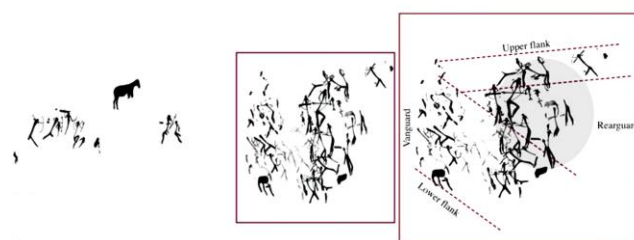
In essence, the human figures depicted in the Cueva del Chopo and similar rock art sites appear to be engaged in a transcendent sacred ceremony involving boomerangs, other human groups and stags/bulls. The ethereal, shadow-like silhouettes of these anthropomorphs suggest that the ceremony possesses inherently shamanic characteristics. They are interpreted as embodying the patron spirits of majestic deer and bulls, dancing ecstatically in close association with these guiding animals. It is posited that these shamans performed ritual dances or enacted mythological narratives, assuming the forms of legendary beings to lead a metaphysical battle against disease-bearing spirits or rival shamanic factions. The exaggerated bodily proportions—manifested in hyper-stylized, elongated silhouettes—do not represent physical elongation but rather signify the shamanic attainment of spiritual elevation and the necessary sublimation of the individual [191].

The occurrence of paintings depicting collective conflicts or war exhibition between large human groups and their resolution in the presence of a stag is confirmed by other instances in the rock art of the region. One notable example is in the central cavity of the El Civil cave III alias de Ribassals, within the eponymous rock art complex formed from Cretaceous limestone, Barranco de la Valltorta (Tirig, Castellón). This rock art station is recognized as a UNESCO World Heritage Site thanks to its remarkable collection of approximately 150 pictographic units in the Levantine style with a stylized figurative tendency, spanning approximately 8000 to

4000 BCE.<sup>9</sup>

In one section of El Civil cave III paintings, it is depicted a battle scene that involves archers with stylized bodies and rounded heads, sometimes adorned with feather headdresses made with white paint. Additionally, the scene includes the active participation of unarmed women carrying baskets or short sticks [181]. The presence of these women raises questions about their significant role [191, 192]<sup>10</sup> and the nature of their involvement in the events being illustrated [181].<sup>11</sup> Their unarmed status might imply non-combatant functions, such as facilitating rituals or performing tasks that were crucial to the success of the group's efforts. The presence of baskets might indicate roles related to provisioning or collecting resources, whereas short sticks could suggest involvement in directing the movement of participants or animals.

Another open question remains regarding the kind of conflict resolution these scenes of confrontation represent. The presence of a stag in such depictions suggests a deeper symbolic meaning. The stag may serve as a mediator or a symbol of peace, fertility, or spiritual guidance, influencing the outcome of the conflict. The inclusion of women in these scenes could point to a broader, community-wide engagement in the confrontation, indicating that the resolution involved more than just physical combat. This involvement might reflect a ritualistic or symbolic dimension to the conflict, where the presence and actions of different community members played a role in achieving a desired outcome. The exact nature of this resolution, whether through negotiation, ritualized combat, or other means, is still a subject of scholarly debate.



**Figure 29.** El Civil cave (Tirig, Castellón). Conflicts between large groups and their resolution in presence of a stag. [3] pg. 31, figure 15.

However, these sporting games and dances originally had the function of distracting the enemy spirits from the ritual performed at the same time by the shaman of the group. Achieving the required and expected magical result (i.e., the success of the hunt) would have been considered impossible without this distraction [188]. Nowadays, these events simultaneously serve as sports, competitions, games, and rituals [190].

<sup>9</sup> Female figures are also found in war or conflict scenes in Cingle de la Mola Remigia and Los Chaparros.

<sup>10</sup> Some recent studies have suggested that certain female figures would be victims of violent actions. For example, a woman in Cova Centelles could be being held by two men - one would grab her arms behind her back and the other would hit her frontally [193, 194].

<sup>11</sup> According to some scholars, the paintings depict a magical dance to attract success in battles [3, 195]. However, upon examining the composition of the scene, the body postures, and the context of the panel, we do not find the coordination typical of a collective dance [54]. The artistic style and the arrangement of figures indicate a complex narrative rather than a uniform dance, possibly a depiction of individual actions within a larger ceremonial context.



**Figure 30.** El Civil cave (Tirig, Castellón). Active participation of women in scenes of confrontation. [181] pg. 548.

Although no boomerangs have been found in archaeological excavations in Iberian prehistory, the Cueva del Chopo is not the only case of depictions of this tool in Levantine rock art. In the early 20<sup>th</sup> century, Abbé Henri Breuil recognized boomerangs in the Grande de Minateda shelter (Hellín, Albacete) [36], a seasonal transit and meeting place for different human groups [196]. More recently, several human figures ready to fight with boomerangs have been discovered in the shelter of Poyuelo I (Torrecilla de Alcañiz) [197]. Some female figures in Levantine rock art carry objects that could be interpreted as boomerangs [82, 198]. This tool presents a great diversity of forms and functions, extending beyond its use as a weapon in hunting and fighting activities. For instance, boomerangs have been documented in Australian Aboriginal groups as tools for digging, making fire, or as ceremonial percussion instruments in dances [199].

The discovery of boomerangs in special Upper Paleolithic and Mesolithic ceremonial sites provides historical insight into the practice of capturing deer to breed them in the wild [200].<sup>12</sup> One remarkable discovery is a boomerang crafted from a polished fragment of mammoth tusk found in the Oblazowa Cave, situated along the Białka River Valley in southern Poland [202–205].<sup>13</sup> This artifact sheds light on ancient rituals dating back to approximately 35,000 to 30,000 BCE [202, 206].<sup>14</sup> Previously, finds within the site had been dated to around 23,000 BCE, but two sets of radiocarbon dates now suggest an earlier timeline [207].

The ritual place within the cave had a circular layout, featuring a raised platform surrounded by massive granite and quartzite boulders. At the center of this circle of stones lay the discovery of the boomerang, alongside other uncommon artifacts.<sup>15</sup> These included two human phalanxes from dis-

tinct individuals (sacrificed fingers) [208],<sup>16</sup> as well as three pendants crafted from perforated teeth of arctic fox (*Vulpes lagopus*), and three engraved fossil shells of *Conus sp. mollusks* from the Tertiary period, likely used as pendants or musical instruments. Additionally, a single tiny ivory bead, two pieces of polished and decorated horncores (interpreted as mining wedges), and lithics from very distant locations were found. Notably, some of the stone artifacts—particularly those made from crystalline quartz—were unsuitable for practical purposes such as cutting or other regular tasks. Instead, they likely held ritual or symbolic significance within the ceremonial context of the site [203, 210].



**Figure 31.** A boomerang was positioned at the center of a circle of stones in the Oblazowa Cave (along the Białka River Valley, southern Poland).

<https://historiamniejznanaizapomniana.files.wordpress.com/2016/07/bumerang-z-jaskinii-obc582azowej.jpg>

The boomerang, along with *Conus* shells, horncore wedges, and a hammer stone, was discovered sprinkled with red pigment (mineral ochre) and carefully placed on a ritual circular platform near the side wall of the cave chamber [211].

The boomerang itself is crescent-shaped, featuring a flat-convex cross-section and a convex top. Its dimensions and weight distribution render it impractical for use as a functional throwing weapon. Rather, its design features—combined with its association with items of profound significance, such as sacrificed human bones—suggest that it likely served a symbolic function. It may have been crafted to emulate commonly used wooden boomerangs and employed in ceremonial contexts, such as symbolic deer chases or re-enactments of mythological hunts involving this revered animal.<sup>17</sup> The deliberate placement of these objects,

<sup>12</sup> See the monograph by Hanns Peter on the definition, typology, and global history of the boomerang [201]. This work offers detailed insights into the distribution, manufacture, use, and diverse cultural significance of boomerangs across various regions and historical periods.

<sup>13</sup> Oblazowa Cave is one of the most important Paleolithic sites in Central Europe. The boomerang found there is the oldest example ever discovered [205].

<sup>14</sup> The problem is that the chronometric results fit well with the developed Aurignacian period, but the assembly of the unearthed objects evidences links to the Pavlovian culture associated with Dolní Věstonice in Moravia. This discrepancy raises important questions about the cultural interactions and exchanges between these prehistoric groups.

<sup>15</sup> The piece is now held in the Archaeological Museum in Krakow (Poland).

<sup>16</sup> The occurrence of two human phalanxes in this context suggests a connection with the hand symbol, often depicted with reduced fingers, frequently observed in Western European rock art. This association is commonly linked to shamanic practices and the ritual manipulation of human remains intended to invoke spiritual powers or ancestral connections [209]. Additionally, the absence of other parts of the human skeletons adds to the significance of this interpretation.

<sup>17</sup> Objects of a bizarre spherical-ellipsoidal shape, magnificently adorned with intricate scenes, appear to have served a comparable symbolic role. These items have been discovered in the Pyrenees—for instance, in the Grotte de La Vache. Although their precise function remains uncertain, some have routinely been cat-



combined with the application of mineral ocher, underscores their ritual significance and suggests an intentional symbolic assemblage imbued with ceremonial and mythological meaning.

## 7. Wild Ritual Games in Neolithic Anatolia: Exploring Correspondences with Levantine Rock Art

Iberian Levantine scenes representing the collective ritual of capturing a stag alive exhibit intriguing thematic similarities and, to a lesser extent, stylistic parallels with various frescoes found on the walls of buildings in the Neolithic Anatolian city of Çatal Hüyük. At Çatal Hüyük, at least five scenes center around this theme,<sup>18</sup> offering glimpses into a Neolithic culture with a much older chronological depth, dating back to the 8<sup>th</sup>-7<sup>th</sup> millennium BCE. During this time, the Iberian Peninsula was predominantly inhabited by hunter-gatherer groups whose artistic expressions were characterized by the geometric Mesolithic style [34].

In particular, the Levantine rock art motifs depicting the live capture of deer bear striking resemblances to paintings uncovered at Çatal Hüyük during the final year of James Mellaart's diggings, specifically in the 5<sup>th</sup> excavation layer of the F.V.I. building [50, 215]. The Anatolian panel located on the east side of the north wall of the F.V.I. building is widely interpreted as a hunting scene featuring a large stag surrounded by hunters. This room is commonly referred to as the "Shrine of the Hunters."



**Figure 32.** Çatal Hüyük (Anatolia, Turkey), F. V.I building, east side of the north wall. A hunting dance around a stag. Painting by Ludovic, R. E. [216].

egorized as pendants due to their design [212].

18 Notable parallels between Levantine rock art and the frescoes of Çatal Hüyük include the depiction of scenes related to deer hunting, which reflect shared cultural frameworks, themes, and practices. For example, in the Neolithic Anatolian city of Çatal Hüyük, one fresco portrays a filiform archer taking aim with his bow at two fleeing deer, one male and one female. The deliberate depiction of both sexes may symbolize the interconnected roles of male and female deer in the natural and spiritual worlds. Beneath the fleeing deer, a long-tailed quadruped is portrayed, which is often interpreted as a dog assisting in the hunt. The stylistic representation of the archer with an elongated and linear body echoes artistic conventions observed in Levantine rock art, where figures are frequently abstract or stylized. Such portrayals suggest a narrative emphasis on symbolic or ritualistic significance, rather than purely realistic depictions of hunting activities [213, 214].

However, Mellaart observed that the human figures depicted in the tableau are either unarmed or equipped with miniature weapons. He thus interpreted the scene not as a literal hunting event, but as a hunting dance performed around a stag during an unknown ceremonial activity. Notably, one anthropomorphic figure positioned beneath the stag's legs is shown holding a pair of boomerangs [217]. Upon closer examination of the painting, it becomes evident that some humans carry throwing sticks and small clubs. These tools are depicted as ineffective, being smaller than their natural counterparts, and the characters are not shown actively throwing them. Instead, the individuals surrounding the stag are portrayed seizing various parts of its anatomy, including the antlers, tongue, nose, legs, and tail, while others approach with bows and ropes to secure the animal.

From these observations, it can be inferred that the panel does not illustrate a violent hunting activity but rather a wild, complex, and collective ritual game. In this performance, the participants interact with the stag by touching and grasping parts of its body. The culmination of this collective performance is the live capture of the animal [43, 218]. Additionally, some participants are shown dancing around the stag, mimicking feline predators in posture and movement. The participants in this ritual include naked acrobats, drummers, and headless figures [219].

In the same tableau, additional human figures are depicted interacting with a boar. These "enigmatic" hunters are portrayed pulling the boar's tail and tongue, offering another representation of a collective and ritual hunt aimed at keeping the prey alive.

On the northwest wall of the same room, another scene features a black-painted man standing on the back of a male fallow deer [218, 220]. Surrounding this pair, several human figures painted in ocher or hematite brandish boomerangs (or throwing sticks) and bows. Directly below them, three individuals—one of whom is headless—are depicted attempting to capture two hinds, while two other figures endeavor to ensnare a red-painted boar in a net.



**Figure 33.** Çatal Hüyük (Anatolia, Turkey), F. V.I building, north-west wall. Painting by Ludovic, R. E. [216].

On the southwest wall of the same room, another imposing red stag is encircled by a group of humans. Only seventeen painted participants from this scene have survived, characterized by skin tones ranging from shades of pink to red. Similar to the previous tableau, James Mellaart observed that none of the individuals depicted are armed. Instead, the scene appears to portray a wild and ritualistic game rather than an actual hunting event. Participants are portrayed as teasing, grabbing, and attempting to catch the stag by seizing various parts of its anatomy, including the antlers, tongue, nose, legs, and tail [214, 218].



**Figure 34.** Çatal Hüyük (Anatolia, Turkey). F. V.I building, south-west wall. Capture of a stag. Painting by Ludovic, R. E. [216].

The scenes from Çatal Hüyük bear thematic and stylistic similarities to the one depicted in the Muriecho shelter, where a large red stag is similarly surrounded by several characters painted in black and red. In Muriecho, one individual is shown holding the stag's nose, another its tail, and a third its forepaw, while additional figures approach to assist in the live capture. Pilar Utrilla and Mar í José Calvo observed that the small character grasping the deer's tail in the second tableau of Çatal Hüyük is distinguished by a pointed beard, resembling the profile of the Muriecho figure depicted wearing a horse mask and tightly gripping the deer antlers. This specific figure stands out from the other, more stylized figures in the scene due to its larger size and distinct typological features [44, 46]. Additionally, in the lower-right section of the Çatal Hüyük painting, a portly woman is depicted alongside a hind or a young stag.

The visual motif of humans capturing stags alive is not unique to the Mesolithic-Neolithic period of the Iberian Peninsula or the Anatolian Neolithic. Its universality is further demonstrated by an example found in Armenian rock art [221].

In this panel, adult male deer are neither hunted nor wounded by machos using arrows or spears. Although the hunters are armed with bows and arrows, they refrain from shooting darts. Instead, these figures (occasionally depicted with exaggeratedly large hands) are shown capturing and

controlling the animals by holding their noses with bows or laces. A similar method is employed to trap an ibex depicted on the left side of the image. The actions and techniques illustrated closely mirror those observed in the scenes from Muriecho and Çatal Hüyük.



**Figure 35.** Humans capturing stags in Armenian rock art. [221] pg. 63, figure 28. Graphic elaboration Merlini, M. The action is highlighted in red.

Ritualistic dramas and dances centered around the capture of deer (or moose) and the symbolism of their antlers have persisted into the modern era, echoing ancient totemic practices rooted in Mesolithic and Neolithic Levantine art, the Anatolian Neolithic, and Central Asia. In Germany, for example, "Hirsch Montag" ("Deer Monday") is celebrated on Carnival Monday, two days before Ash Wednesday. Marking the seasonal transition from winter to spring, this event involves street parades where bands of young people dress as stags in a jubilant celebration [219].

## 8. Ritual Respect and Non-Lethal Approaches to Deer Procurement: Persistence Hunting

In the previous paragraphs, we have examined Levantine rock art paintings that depict a wide array of methods and tools utilized to capture deer alive. These include: 1) clubs (Muriecho); 2) straight bars with a hanging loop (Muriecho); 3) rods and lassos (Los Chaparros, Cueva de la Vieja de Alpera, Cueva de la Araña III); 4) throwing claviform weapons (Altamira cave); 5) throwing sticks (Pedra das Ferraduras); and 6) boomerangs (Cueva del Chopo). In certain instances, the preys are faced bare-handed (Muriecho, Grajos de Cieza I, Los Chaparros, Cueva de la Vieja de Alpera, Rac ó de Nando). Collectively, these depictions demonstrate advanced expertise, specialization, and control in capturing deer while keeping them alive.

Another significant strategy for capturing deer illustrated in Levantine rock art paintings is persistence hunting, or endurance hunting. In traditional chase hunts, hunters followed the tracks of their prey and, upon locating it, typically fired a

series of arrows.<sup>19</sup> In contrast, persistence hunting involved pursuing the prey—often during the hottest part of the day and sometimes with the assistance of dogs—until the animal was too exhausted to flee, succumbing to either heatstroke or exhaustion. Archaeological evidence and ethnographic accounts contextualize the enquired images suggesting that this technique was not merely practical, but often linked to taboos and rituals that emphasized respect for life, avoiding unnecessary slaughter, and ensuring the continuity of the species by allowing other individuals to "return" to the Earth to be preyed upon.

### 8.1. Rock Art Evidence for Endurance Hunting

A compelling depiction of the technique of persistence hunting is found in Solana de las Covachas IX, where two human figures with outstretched, unarmed arms appear engaged in endurance hunting to capture a running stag. Situated at the head of the La Taibilla River (Nerpio, Albacete), the Solana de las Covachas rock art complex includes nine shelters, discovered in 1954, which were gathering sites for ceremonies involving hundreds of people [222].

The rock art panel illustrates the core strategy of persistence hunting: isolating an individual prey from its group (a young as in the presented instance, but also an elderly, or otherwise vulnerable individual) and pursuing it over long distances until it could no longer escape [223]. Prey was sometimes driven into natural traps, such as cliffs or ravines, or artificial ones, such as ditches, spikes, or nets—some of which we discussed in a prior section [224–228]. The evidence from Solana de las Covachas IX suggests that this type of hunting was practiced in open meadows rather than wooded areas, enabling hunters to follow tracks more easily, run faster, and prevent the prey from resting.

The red deer, as depicted, is an agile and fast animal capable of navigating dense brush, traversing swampy terrain, leaping high obstacles, and sliding through very small openings. Despite its speed, its gallop lacks long-distance endurance. A well-tracked deer would become fatigued after about 40 kilometers of running. In the Iberian Mesolithic-Neolithic context, hunters are thought to have covered astonishing distances, perhaps not even the 145 kilometers in 12 hours, a performance of endurance common among the Tarahumara

people (known also as Rarámuri), a Native American group of the Sierra Madre Occidental (north-western Mexico) renowned for their ultrarunning abilities [223]. A coordinated team of hunters could have successfully outrun a deer, while a lone hunter would likely have failed [224–227]. In the tableau from Solana de las Covachas IX, two hunters are shown on the verge of capturing a fleeing but exhausted stag, with one hunter depicted as actively pouncing on the animal. The faster the prey was captured, the better the hunters' chances of securing their quarry before competing predators or scavengers intervened.<sup>20</sup>



**Figure 36.** Shelter of Solana de las Covachas IX (Nerpio, Albacete). Two humans chase a stag running after it. Drawing de Méric, R. [230] pg. 50, figure 10.1.

Endurance hunting was a prehistoric strategy requiring exceptional tracking skills, teamwork, and the strategic use of environmental resources. This technique has deep evolutionary roots in the genus *Homo*, dating back to early humans in Africa [231]. It likely contributed significantly to the development of human anatomy, favoring traits like sweating for thermoregulation, which gave humans a unique advantage over many prey species [232]. Before innovations like spearheads, bows, and nets—and prior to the domestication of dogs—persistence hunting was one of the most efficient methods of securing food [228, 233, 234]. Instead of relying on complex weaponry, hunters depended on endurance and stamina, pursuing their prey until it collapsed from exhaustion and could be easily killed. If the key competitive advantage of humans in this context is their ability to regulate body temperature through sweating while running [235], which prevents overheating and allows for sustained exertion, another crucial factor is the capacity to track animals over long distances. Furthermore, the ability to successfully track animals has been enhanced by human-dog partnerships. As Pat Shipman suggests, Upper Paleolithic hunters may have employed wolf-dogs to aid in locating and exhausting prey, marking an important step in human-animal relationships and cooperative hunting strategies [236].

The cultural and symbolic dimensions of long-distance running hunting are also evident in rock art. According to

<sup>19</sup> For instance, consider the representation of a sophisticated tracking operation depicted across seven distinct scenes from the Cova Remigia (Cingle de La Gasulla, Castellón). These artworks provide insights into the narrative construction concerning the complex methods used in tracking and hunting, underscoring the cultural importance of these activities.

Similar motifs have been identified in other locations, such as the Barranc de Gasulla and the Cueva dels Tolls, near Moya in the province of Barcelona. These sites, like Cova Remigia, document the convergence of survival skills and symbolic representation in prehistoric art. The repetitive depiction of such scenes across geographically dispersed sites suggests that these tracking techniques were widely shared and recognized as pivotal elements of these communities' survival strategies. The detailed representation of tracking activities indicates an understanding of animal behavior, movement, and ecological contexts. Such expertise not only ensured hunting success but also highlights the capacity of these early societies to observe, interpret, and adapt to their environment [5].

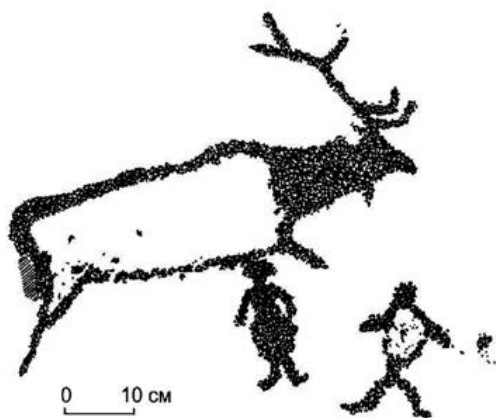
<sup>20</sup> Inexplicably, Anna Alonso Tejada interprets a stag as placing its forelimbs on the head of an anthropomorph [229].



Mikko Ijäs, some of the earliest examples of visual depictions reflect the experiences and rituals associated with persistence hunting. Ijäs refers to these depictions as "fragments of the hunt," encompassing not only chasing scenes, but also related symbolic allegories, such as the admiration of the animal's grace, human/animal transformation imagery, depictions of tracks, or images of running figures. Extreme forms of endurance, such as long-range chase, can induce an altered state of consciousness in some hunter runners. This modified mental may include a heightened sense of awareness and feelings of being detached from the body. Ijäs suggests that some of the oldest examples of rock art may represent altered states of consciousness and shamanic practices tied to endurance hunting [237]. His interpretations align with Levantine rock art evidence, offering new dimensions to our understanding of these ancient practices.

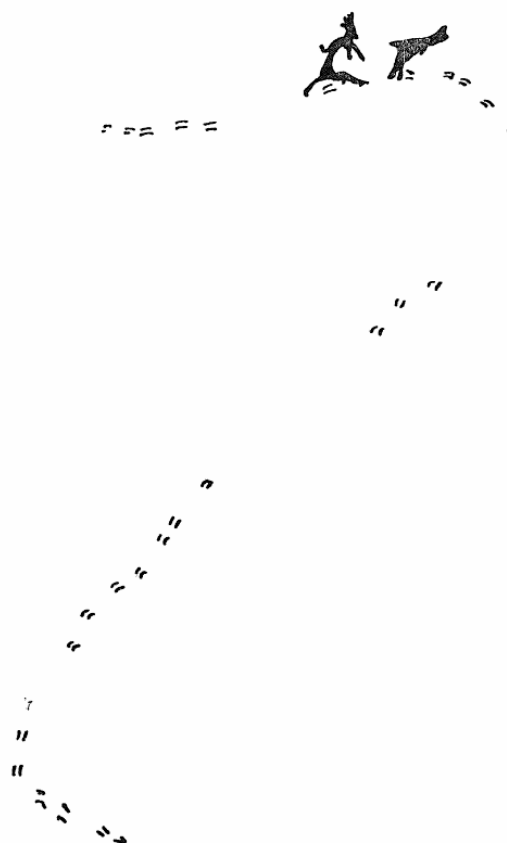
Returning to the shelter of Solana de las Covachas IX, one can observe that the head of a small male deer being chased is overlapping and partly merging with that of a previously painted caprid. Additionally, we can discern the chromatic superimposition of this Levantine stag on anthropomorphic figures portrayed in schematic style [133]. This observation challenges the rigid hypothesis that assumes an evolutionary process of forms—where naturalism is succeeded by schematism—and suggests that large, static animals depicted with naturalistic details do not necessarily correspond to the initial phases of the Levantine artistic process [230]. Instead, this evidence points to a prolonged coexistence of the two styles, possibly coinciding with the decline of Levantine art and the emergence of schematic art [133, 237].

For comparative purposes, a fascinating petroglyph from North Asia illustrates male and female hunters engaged in persistence hunting, chasing a male reindeer with outstretched arms. This engraving, located at the significant rock art site of Aral Tolgoi in the Mongolian Altai, a UNESCO World Heritage Site, captures the coordinated efforts of a hunter-man and a hunter-woman as they pursue their imposing prey [238].



**Figure 37.** Aral Tolgoi (Mongolian Altai). Male and female humans running after an imposing male reindeer [238].

The reddish Levantine rock art of Morella la Vella (Morella, Castellón), another UNESCO World Heritage Site, dates back to the Mesolithic period (9000 BCE-4000 BCE). Departing from the naturalism characteristic of older Franco-Cantabrian art, the Levantine style as shown in Morella la Vella evolved through an abstraction process, producing basic, flat forms without volume. Despite their simplicity, these figures and their tools remain easily recognizable.



**Figure 38.** Shelter of Morella la Vella (Morella, Castellón). A single hunter pursues a quadruped following its tracks. [239] pg. 68, figure 1.

Discovered in 1917 on the limestone walls of the Upper Gallery of one of Morella la Vella's shelters, a painting portrays the technique of endurance hunting. It features a lone hunter adorned with what appears to be either a three-pointed hat or a crown of feathers. Depicted with long strides and following the tracks of a quadruped (shown in pairs), the hunter pursues the prey without any visible weapons or lassos. Upon reaching the animal, he must confront it bare-handed [5, 239]. Despite their schematic silhouettes, both the human figure and the prey exude grace and dynamism. The artist achieves a narrative function by employing sinuous, elongated forms. The attempt to create perspective—seen in the bottom-up depiction of the hunter ascending a hill, following the prey's footprints—adds further intrigue to the artwork.

In the shelter of Morella la Vella, blood trailing is portrayed as a critical aspect of the hunt. Red dots symbolize the animal's wounded condition and represent a visual clue for the hunter. Blood spoor often serves as the sole indicator of the prey's location, condition, and escape trajectory. Success in such hunts relies heavily on the tracking skills and endurance of the pursuer.

At Upper Paleolithic Cueva del Castillo (Puente Viesgo, Cantabria), the living structure profiles of red deer remains suggest highly effective hunting strategies targeting prime adult individuals [240, 241]. However, in general large prey were not killed instantly but only wounded, necessitating prolonged pursuits. Archaeologist R. Dale Guthrie has argued that red dots in Upper Paleolithic caves (from Aurignacian Chauvet to Solutrean Lascaux) may represent blood tracks. Notable examples include the reindeer with blood spoor known as the Dancing Reindeer (*Le renne dansant*) and another reindeer with a trail of blood painted in the Salle du Fond at Chauvet-Pont d'Arc (Ardèche, France) [242].

Although Levantine hunters possessed complex technologies, persistence hunting following the wounding of a deer was a very common practice. Hunters needed to be in close proximity (approximately 25 meters) to inflict hemorrhaging with projectiles like darts. The wounded prey could still cover considerable distances, necessitating long pursuits and careful tracking often in the absence of other traces of the animal. The blood trail, depicted in the Morella la Vella shelter, indicates that the hunter was adept at following empirical clues, such as footprints, scent, excretions, and blood, while simultaneously leveraging knowledge of the animal's physiology, habits, and behavior. He certainly shared a consideration of the Tarahumara hunters: "The deer is very smart and knows how to confuse humans by reversing direction or stepping in the same tracks." Yet, skilled trackers like the hunter at Morella la Vella could read the prey's movements through the spacing and depth of tracks, assessing whether it was running, walking, strong, or fatigued [243, 244].

A fitting ethnographic example of blood trailing is found in the hunting practices of the Kalahari San. After shooting arrows tipped with poison, San hunters retrieve the shafts and, if one is missing, deduce that the animal was hit. The poisoned point may have pierced the prey's skin, marking the beginning of a prolonged blood trail pursuit [233, 245].

The Barranc de la Palla is a natural gorge located in Tormos, in the La Marina Alta region of Alicante (Valencian Community). It is notable for its Levantine rock art, which includes depictions of hunting activities, human figures, and animals such as deer and goats. Among these representations a painting appears to illustrate the final scene of a persistence hunt, involving a stag and several canids [246]. Interestingly, not all components of the panel share the same coloration, suggesting a lack of synchronicity in their execution, as noted by researchers [230].

The painting implies the successful capture of the stag

alive, as there are no visible arrow wounds on the animal's body.<sup>21</sup> The stag is depicted in profile, but its antlers and hooves oriented forward, which conveys a sense of movement and dynamism. Scholars, including Anna Alonso and Alexandre Grimal, have classified this artwork as belonging to the final phase of Levantine art, based on stylistic and chronological analyses [230].



**Figure 39.** Barranc de la Palla (Tormos, Alicante). A Levantine painting possibly depicts the final scene of a persistence hunt. [230] pg. 50, figure 10.3.

The shelter of Les Caigudes del Salbime is located in the ravine of Las Cañas del Salbime (Mazaleón, Teruel), which drains into the right bank of the Matarraña River. This site overlooks natural communication routes that may have held significant importance for the hunting activities of Epipalaeolithic groups.

Although the shelter is not densely decorated, it features a Levantine rock art scene that appears to illustrate an outcome of persistence hunting. A hind is shown in a dynamic stance, aggressively facing a human figure who seems to have been pursuing it. The hunter is depicted in motion, with a bow and arrows held in a resting position, and there are no visible

<sup>21</sup> The morphology of the canids, along with the absence of archers or arrows embedded in the animal, led Juan F. Ruiz López to speculate that the tableau may represent a pack of wolves hunting a deer [102].

darts or wounds on the animal. The hind, is rendered in a vivid red hue and executed in a naturalistic style.<sup>22</sup> The prey, weary from the relentless pursuit, is on the brink of being captured by the hunter's bare hands. Yet, it might still defy its fate by charging at its pursuer in a final act of resistance.

Due to an inaccurate rendering, the scene was misinterpreted as a curious, unusual depiction in which a hind appears to be swiftly chasing an unarmed human figure—one who seemingly had previously pursued and attempted to attack the animal [23].

The paintings of Les Caigudes del Salbime were discovered in 1920 by Lorenzo Perez Temprado, the secretary of Mazaleón [247]. Unfortunately, the panel with the archer and the hind was removed at an unknown point by unknown people after its discovery and study, resulting in a significant loss to the historical context of the site [248]. A landslide caused by storms in October 2024 caused the other paintings to detach from the rock and fall to the ground.



**Figure 40.** Shelter of Las Caidas del Salbime (Mazaleón, Teruel). Scene depicting a hind aggressively facing a human figure who appears to have previously pursued the animal. <https://matarranya.media/wp-content/uploads/2023/12/14-Turisme-25anyArtRuprestre-CaigudesdelSalbime.png>

The Cingle del Mas d'en Josep is nestled at the base of an escarpment facing southeast, on the left slope of the La Valltorta ravine, positioned between Cova de Cavalls and Les Coves de La Saltadora [249]. The Levantine rock art found in the shelter includes 30 motifs, structured into several hunting compositions rendered with a figurative and stylized tendency [250, 251]. Unfortunately, some of these remarkable representations have been lost due to the inadequate protection of the shelter [252].

Exploiting the relatively flat morphology of the sole significant concavity within the complex, a grouping of motifs is painted in reddish-brown color. This tableau portrays a hunting scene that features two stags with imposing antlers, both fleeing at high speed. One stag is rendered with only its front legs. The preys are pursued by an archer, characterized by well-proportioned features. The hunter is depicted in a dynamic pose, running with arms open to the sides [249]. His head, apparently shown in profile, is adorned with anten-

na-like and feathered headdresses, while additional decorative details include belts with holding strips and knee adornments [253]. The forward arm of the stalker appears to hold a bow and a bundle of arrows, but this interpretation remains problematic due to the damaged state of the painting. The front section of the arm has been lost, eliminating the precise area where the bow would be held. Nevertheless, the bow is not in a shooting position. The hunter's movement aligns diagonally with the nearest deer, which is depicted mid-stride with its limbs extended forward and backward, illustrating its rapid motion.

Inés Domingo Sanz observed that, while at first glance the scene may appear to form a cohesive narrative, a closer analysis reveals it to be a diachronic creation. The original painting of a persistence hunt involving a single male deer appears to have been expanded upon at a later stage with the addition of another prey. This second stag differs notably from the first animal in its technical and formal rendering, as well as its trajectory, which deviates slightly from that followed by the hunter. This deviation may have been influenced by the change in slope of the rock surface in this area.

From a formal perspective, the naturalism of the first stag contrasts sharply with the poor anatomical articulation of the second. The latter's antlers, positioned unnaturally, make the depiction of ears impossible. Additionally, its elongated neck and poorly articulated knees result in an unnatural flexion of its forelimbs. From a technical standpoint, the two herbivores differ in both color and the filling technique used: the second stag is rendered using a striped technique, unlike the more naturalistic shading of the first. Notably, the second animal is incomplete, depicted only up to its anterior third. This truncation does not appear to result from space constraints, but instead seems to be a deliberate convention, akin to the elongated neck [254, 255], seemingly capturing the movement mid-motion. A series of stains located on the right side of the panel could represent traces of footprints or blood, likely a result of the long-distance running hunting method depicted [254].

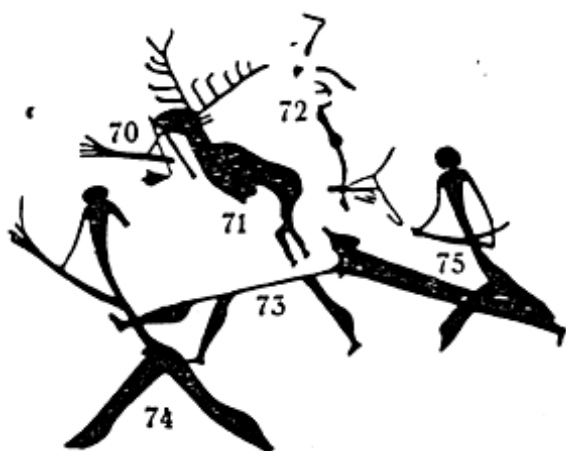


**Figure 41.** Cingle del Mas d'en Josep (Tírig, Castellón), fifth unit. Representation of a long-distance running hunting. Tracings based on [255] pg. 255 figure 10.

<sup>22</sup> The silhouette of the hind was initially outlined with a brush and then uniformly filled in [5, 247].



Archers chasing an imposing stag, with their bows in a rest position, are also depicted in the previously mentioned El Civil Cave III [3, 249], which belongs to the same Levantine art horizon as the paintings of Mas d'en Josep [256-258]. The panel illustrates a complex interweaving of runner hunters, which may alternatively be interpreted as dancers encircling their prey during its ritual capture. In this interpretation, the weapons shown in the painting are not actively used for hunting, but serve as part of a ritual depiction [259]. The older representation in this context corresponds to a large human figure (motifs 72-73a), characterized by exaggeratedly open limbs that do not reach full horizontal extension. The figure features a waist ornament, formally reminiscent of the Centelles-type human figures [254].



**Figure 42.** El Civil Cave III alias de Ribassals (Tirig, Castellón). Archers pursuing an imposing stag, their bows held in a rest position. Tracings after Benítez Mellado in [3], modified to include some of the newly identified representations that emerged following the restoration of the complex [255] pg. 245 figure 3.

The rock art complex of La Saltadora is situated on the left bank of the La Valltorta ravine. It encompasses a group of 26 shelters, which collectively host 291 pictographic units. These motifs exhibit a stylized figurative tendency, with a color palette ranging from reddish-brown to blackish tones. The complex is renowned for featuring some of La Valltorta's most iconic representations.

The previously mentioned Coves de la Saltadora IX [27, 249] houses one of La Valltorta's most emblematic depictions. This image portrays a well-preserved archer engaged in the final phase of persistence hunting: the ambush. The archer is shown facing left, adopting a posture suggestive of stealth and anticipation, likely characteristic of stalking tactics. The archer's position conveys a sense of waiting in stillness, underscoring the strategic precision required during this critical stage of the hunt. It is an emblematic image illustrating how the duel between the hunter and the deer unfolds on a level of "strength" that does not rely on brute force, but rather on agility and speed. The depicted stag, character-

ized by its relatively smaller size, likely represents a juvenile, which adds a subtle narrative element to the scene [260, 261].



**Figure 43.** Saltadora Cave IX (Coves de Vinromà, Castellón). Archer engaged in the final phase of persistence hunting: the ambush. Tracings after [261].

## 8.2. Ethnographic Parallels to Prehistoric Ritualized Persistence Hunting Techniques

Archaeological evidence and comparative ethnographic resources contextualize the Post-Paleolithic rock art images, revealing that endurance hunting has persisted in various forms among some traditional cultures until recent times [233, 243, 245, 262-273]. Many anthropological accounts describe scenes that parallel those represented in prehistoric rock art paintings of Final Mesolithic and Early Neolithic populations of the Iberian Peninsula and explain that this exhaustive chasing technique was effectively utilized to capture deer alive. This was often conducted in accordance with ritual prescriptions, for example to avoid bloodshed.

Among the Pueblo peoples, relevant examples are found within the Zuñi group (a Native American tribe located primarily in the Pueblo of Zuñi, in the desert of western New Mexico, United States), believed to be descendants of the prehistoric Ancestral Pueblo (Anasazi). Their rock art production is fundamental for understanding their religious-cultural milieu, where the deer holds a secret and sacred significance. It is a very secret figure, because a long time ago climate changes rendered this animal one of the only available sources of meat. The deer has also a central ceremonial significance, being depicted as a benevolent supernatural creature, symbolized with a black body, a bright red heartline (representing the breath of life), and an open mouth, signifying the intake of that life force.

Rock art also illustrates how Zuñi hunters adopt elaborate rituals and disguises to successfully stalk and capture this sacred animal "in its house," which is symbolized as a structure or building [274]. During these pursuits, hunters paint their faces and arms yellow and white to resemble deer, wear the skin and antlers of a stag on their back and head, and assume a hunched posture. They employ special magical practices, such as placing a shard of special pottery on the trail where the prey was last seen. By magic, this shard was be-

lieved to cause the deer to move in a circle and return to the same spot. At the critical moment of ambush, hunters emit loud imitations of the hunting roar of the mountain lion, terrifying the already fatigued deer. This tactic causes the animal to freeze in fear and exhaustion, rendering it petrified and vulnerable to capture without the use of weapons.

After capturing a deer alive, Zuñi hunters employ a unique method to ensure its revival. They hold the deer's mouth shut, pressing it into the ground until it suffocates. The belief is that by holding its breath inside, as symbolized by the heart-line artistic motif, the animal can be revived and return to life [275]. According to James M. Potter, when a Zuñi hunter kills a deer, he would ritually draw the animal's "last breath" from its nostrils and simultaneously inhale that same breath to ensure the deer's spiritual resurrection [276].

The Zuñi hunting ritual extends beyond the hunting expedition itself. Each morning, while the trackers were away, their wives perform rites involving the sacred image of the mountain lion to ask for its assistance in the hunt. This includes offering food to the lion idol and spreading the blessed food in the direction of the hunters. Upon the hunters' return with a successful catch, the deer is brought into the house and dressed in clothing, symbolically representing the ancestors visiting the family in animal form [274]. The deer's blood is smeared onto the mouth of the sacred lion image, and the sanctified meal is distributed outside the house. Cornmeal, known as the "mother corn," was scattered over the deer, and an ear of corn was placed between its forehooves. The deer was then stroked while hunters petition other deer to "not run away from us, be friendly" [277]. Blankets are draped over its body, which is ceremonially smoked. Its meat is shared with neighbors and anyone who encounters the hunters [278].

In short, long-distance running hunting for deer alive is not merely a practical activity among the Zuñi; it is a multifaceted ritual embedded within a complex religious and spiritual belief system. This system emphasizes reverence for the land, nature, and ancestral spirits and is enacted within a tightly knit society organized around family and communal living. A crucial role in these rituals is played not only by the hunters but also by their wives, who seek the deity's favor—a prerequisite for a successful hunt.

Similarly, the Cohonina people, one of the ancestral groups of today's Hopi, Zuñi, and Navajo tribes, employed collective endurance hunting as part of their cultural and ritual practices. Their petroglyphs, including those at Keyhole Sink (Williams, within the Kaibab National Forest, northwestern Arizona), depict hunters active between approximately 500 and 1200 CE, running after a deer herd and driving it into a box canyon—a natural trap with no escape for the prey. This scene dramatically illustrates long-distance running hunting as a highly sophisticated strategy that ex-

ploited the natural geography of the canyon. The rock art panel at Keyhole Sink directly represents the actual site used for hunting by the Cohonina.

As reflected in the traditions of the Hopi, one of the tribes descended from the Cohonina, once the deer was captured, it was ceremonially placed with its head directed toward the village. This gesture was believed to magically summon the desired rain in that direction. The hunters then suffocated the animal by pressing its head into the ground. This act carried profound ritual significance, as other methods of killing involving bloodshed—such as slitting its throat or drowning—were believed to result in adverse weather phenomena like whirlwinds or sandstorms [279].

One of the most commonly depicted animals in West Mexican petroglyphs is the white-tail deer (*Odocoileus virginianus*). Much of Huichol (Wixárika) rock art illustrates communal long-distance deer hunting, the figure of the Blue Deer—representing Kauyumari, a pervasive spiritual entity that serves as a guide for the Huichol people—and the myth of the sacred deer, which, according to tradition, created peyote with its hoofprints as it moved. This act is believed to have introduced peyote to humans, solidifying the deer's central role in Huichol cosmology and cultural practices [280-282].

The Huichol, who continue to live in relative isolation in the mountains of western Mexico, have preserved many of their ancient traditions, remaining largely unchanged since the arrival of the Spanish, with whom they had minimal contact.

Hundreds of petroglyphs in Ocotillo Canyon (near Mascota, western Mexico) depict a ritual deer chase practiced by the Huichol people in the 1<sup>st</sup> and 2<sup>nd</sup> centuries CE: the Sacred Deer Hunt. The shaman lured the deer using the sound of a megaphone crafted from rolled-up tree bark [283]. Dogs were employed to drive the deer into a narrow canyon, where it became trapped in nets and was subsequently carried off [280, 284]. Interestingly, the Huichol—like a few other populations in South America, Asia, and Africa—sometimes used a hunting bow as a stringed instrument, casting a kind of musical spell to "charm" the prey [285]. This long-distance running Sacred Deer Hunt often coincided with the pilgrimages to sacred sites such as Wirikuta [283].

Another image, also originating from an Ocotillo Canyon petroglyph, portrays a hunter-shaman adorned with a feathered hat, ceremonially holding a hind above his head. This depiction suggests a significant ritual or symbolic act, linked to the Sacred Deer Hunt. The act of lifting the hind, combined with the shaman's ceremonial attire, may represent a moment of spiritual connection or an offering to the gods, emphasizing the profound interplay between humans, animals, and the divine in Huichol cosmology.



**Figure 44.** Petroglyph on the west side of Ocotillo Canyon (Mexico), dated to 1-200 CE. A shaman is shown calling a deer with a megaphone during a persistence hunt. Photo © Merlini, M., after the exhibition *Tlapitzalli, musica e strumenti del Messico antico in mostra*, Scuderie del Quirinale, 30 July - 15 September 2024, Rome.



**Figure 45.** Petroglyph on the west side of Ocotillo Canyon (Mexico), dated to 1-200 CE. A shaman is portrayed ceremonially holding a hind above his head. Photo © Merlini M., after the exhibition *Tlapitzalli, musica e strumenti del Messico antico in mostra*, Scuderie del Quirinale, 30 July - 15 September 2024, Rome.

The Huichol shaman leader of the long-distance running Sacred Deer Hunt determined the number of deer to be hunted based on his visions or dreams. However, the Sacred

Deer Hunt was not intended for consumption or sport. Its purpose was to capture deer alive. Once blocked, the animal's legs were tied, and it was transported to the ceremonial site at the end of the hunt-pilgrimage. At this site, the ears of the deer were pricked, and its blood was used to anoint sacred objects within the temple. According to Huichol mythology, this sacred running hunt was decreed by the deities Father Sun and Uncle Fire to sanctify ritual objects with the deer's blood [286-288]. Beyond anointing objects, deer blood was also offered as a sacrifice to prevent famine, drought, and illnesses [289]. Within Huichol art, deer motifs often appeared in a tripartite "complex" alongside maize (corn) and the peyote cactus, both of which hold similar sacred status within the Huichol worldview [290].

The rock art sites of the Sierra Tarahumara featuring white-tailed deer are significant as places of power, transformation, danger, and sources for complex identity narratives. Regarding persistence hunting, widely practiced by the Tarahumara people, at first glance, it may appear to have been primarily a matter of efficiency. Until recently, hunters pursued deer through mountainous woodlands for up to two days, chasing the animals until they collapsed from exhaustion, after which they were throttled by hand [228, 291, 292]. Groups of 3 to 15 hunters could run non-stop for distances of up to 100 km, skillfully navigating rugged canyons. Without the aid of dogs or throwing weapon like arrows and spears, they strategically chased deer over rocky terrain, which slowed the prey due to injured hooves [244].

Strategies included chasing the prey until it collapsed from exhaustion, making it easier to kill using stones or clubs. An exhausted deer loses the will to escape and falls to the ground, becoming vulnerable to the hunters. Alternative strategies included driving the prey into a dead-end location, such as a natural barrier of wooden poles or a river, where it could be more easily killed. A box canyon near the Korá-kachi rock shelters (Place of the Crow) in New Mexico (USA), with steep walls enclosing three sides and an open fourth side, was a prominent site for trapping deer. The paintings at this shelter evoke early functionalist interpretations, such as the "hunting magic" explanations applied to Paleolithic European art [293] and southern African rock art [294, 295]. In this case, ethnographic documentation supports the idea that the supernatural image of the deer had ritualistic and informational significance connected to long-distance running hunts in this specific terrain. Additionally, the Korá-kachi rock shelters are noted for reports of floating lights, believed by locals to signal the presence of sorcerers or their spirit-bird familiars, both of which are considered potentially dangerous to human health [296].

One of the most impressive depictions from Korá-kachi, made by Felice Wyndham, is a drawing featuring a fantastically antlered stag traced from her photographs of the site. The animal is rendered in a stylized, abstract manner, however, its essential characteristics are clear. Its form is composed of bold, sweeping lines that suggest both movement



and tension. The antlers are an emphasized element, extending outward with a graceful, yet powerful, curvature. They seem to be drawn with deliberate strokes that highlight the animal's majesty and its vital role in the scene. The lines of its form indicate energy and urgency, vulnerability and defiance, aligning with the idea that it is being cornered in the box canyon. The stag is set against the angular, enclosed backdrop of a box canyon, which not only frames it but also intensifies the dramatic moment of capture. The interplay between the natural curves of the animal and the rigid geometry of the canyon reinforces the narrative of the hunt.

Such images encapsulated in the hunters' minds the vision of deer driven and trapped within the box canyon. As Jane M. Young describes for Zuñi representations of deer, these visual depictions seem less about the exertion of magical power to achieve a successful hunt and more about the efficacy of reciprocal correct relations. The belief is that if rituals are carried out with the proper respect and a "good heart," the desired outcome will manifest [296]. The depiction of the stag being driven and cornered emphasizes a dynamic and dramatic moment: a transition from freedom to confinement in a moment of human harness and control over the forces of nature. The animal is not merely a representation of fauna, but a potent symbol of transformation, or even a guide between the human and supernatural realms. Its transfigured shape implies that even when nature is subdued, it retains an inherent power that can never be fully tamed. The "box canyon" isn't just a backdrop, but a site imbued with spiritual energy. Its enclosed, angular space can be read as a metaphor for both entrapment and concentration of power. The canyon walls may represent natural boundaries or thresholds—places where the everyday world meets the sacred. The setting, therefore, reinforces the idea that the depicted event is not only a literal hunt, but a moment charged with symbolic meaning.



**Figure 46.** Korákachi rock shelters (Place of the Crow) in New Mexico (USA). A stag is driven and cornered in a box canyon. [296] pg. 393, figure 3.

The unique qualities and somewhat entoptic features of

this particular pictograph [295] suggest to Felice Wyndham an alternative possibility: that the visual motif of the stag with supernatural, elongated antlers might be connected to the peyote healing ceremonies conducted in the vicinity of the painting during the recent past [297]. Such entoptic imagery may reflect the altered states of consciousness often associated with peyote rituals, where the deer is revered as both a spiritual guide and a symbol of healing.

Pitfall hole-traps, carved directly into the bedrock, are an ancient hunting technique still occasionally used today and were more commonly employed in the past by the Ancestral Puebloans, also known as the Anasazi. Active between approximately 500 CE and 1300 CE, these traps were the final stop for exhausted deer at the end of a prolonged pursuit. Game pits remain visible at the rim of the mesa, relatively close to the large prehistoric pueblo in Mortandad Canyon (Los Alamos County, New Mexico). The Anasazi - regarded as ancestors of modern Pueblo tribes such as the Hopi, Zuñi, and various Rio Grande Pueblo peoples - strategically positioned these pitfall traps on low saddles between canyons. The traps were likely camouflaged with light brush and enhanced with wing walls made of juniper and piñon pine branches. The hunters drove the deer up the slope from the canyon to the saddle and into the pit, where, ideally, they would step on the concealed cover, fall through, and sustain severe injuries, such as a broken leg or neck [298]. Observations made in 1914 by Ivor Thord-Gray document that, upon being trapped, the deer were sometimes killed by strangulation [299]. However, in instances where the long-distance running hunt was unsuccessful, hunters interpreted this outcome as a divine signal, stating that "It was not the time for the deer to die" [244].

Some scholars have described the Tarahumara as an "almost mythical tribe of Stone Age super-athletes," due to their extraordinary ability to run effortlessly for long distances across the rugged, mountainous terrain of the Sierra Tarahumara [300]. However, these hunters do not regard themselves as exceptional athletes. Rather, for them, long-distance running after deer represents a profound act of spirituality. They perceive their great physical and mental endurance while hunting as a powerful form of prayer [233, 245, 301, 302]. Running is deeply integrated into their cosmological and spiritual beliefs, reflecting their close connection to the natural world and the divine.

In Tarahumara society, long-distance running for deer hunt is also intricately associated with ceremonial resistance dances, which hold profound spiritual significance. These dances are performed with the blessing of their deity, On-órúame [221, 244, 303, 304]. According to Tarahumara mythology, it was the mythical deer itself that taught to humans the traditional *Yúmari* dance, a ritual that can last between 12 and 24 hours [221, 244, 305]. The *Yúmari* is much more than a dance or offering; it is a profound synthesis of cosmological principles that unite humans with the celestial realm. This ritual reflects the Tarahumara's reciprocal relationship with

their creator deity, symbolizing the regeneration of cosmic life and reaffirming their role as the "pillars of the sky." In this framework, the deer plays a central role. As Carlo Bonfiglioli explains, the deer is considered a sacred being, embodying grace, vitality, and a connection to the divine. Within the context of the *Yúmari*, the deer serves as a bridge between the earthly and celestial spheres, and its symbolic sacrifice sustains the balance of the universe and ensures the continuity of life [306].

Sacrificing a captured deer is also a key element in other Tarahumara ceremonies [244]. Offering deer venison is especially important when shamans prepare for their journey into the spirit world. It is also an essential requirement for peyote rasper-healers, as the spiritual strength of the deer is believed to empower their healing rituals [305].

In conclusion, the extensive resources and efforts documented in ethnographic studies regarding persistence hunting to capture a deer alive underscore the profound symbolic and ritual value of this practice allowing interesting parallels with rock art imagery of Final Mesolithic and Early Neolithic populations of the Iberian Peninsula. Such hunting method, widely employed in prehistory, extend far beyond subsistence needs. It reaffirms the deer's sacred status, the sanctity of the hunt itself, the intricate connection between humans and nature, and the spiritual bonds between the living and their ancestors.

### 8.3. Herakles in Pursuit of the Ceryneian Hind: Echoes of Mesolithic and Neolithic Practice

The Mesolithic and Neolithic communal bonding through the ritual collective capture of live male deer has been so potent in human history that its echoes persisted across millennia. Xenophon (kyn. IX 5-10) [307] and Arrian (kyn. XXIII 4) [308] argued that the deer could have been captured alive only by very skilled hunters. The captivating myth of the invincible hero Herakles chasing and capturing the divine antlered Ceryneian Hind (*Elaphos Kerynitis*), also known as "the Golden-Horned Hind", after an exhausting long-distance running hunting had prehistoric roots and in turn served as the benchmark for a cascade of stories [49, 309].

A remarkable figure in Greek mythology, from the Homeric age to the classical period, the Ceryneian Hind began life as the Titan Taygete, one of the companions of the Mistress of the Animals, Artemis [310, 311]. This fantastical creature, akin to the unicorn or phoenix, was a wild female deer crowned as a stag with majestic golden antlers [309]. Described as an enormous female deer, comparable in size to a large bull [312], the Hind possessed striking features: golden antlers akin to those of a stag [311, 313-315], bronze or brass hooves [316], and a "dappled hide" [314]. It was intricately associated with Artemis and her chariot [312]. In some traditions, it has been sacrificed in place of the virgin Iphigenia. Its most notable trait —imposing antlers that

shone with a brilliant golden hue atop the elegant body of a hind—set it apart from ordinary deer, marking it as a creature of rarity and grace. However, the Hind was also dangerous, snorting ravenous fire [315], chasing farmers, devastating fields, and ravaging vineyards [315]. Despite its destructive tendencies, it was impossible to hunt due to its remarkable speed, endurance, and elusiveness, as it roamed untamed across the Arcadian forests, the Ceryneian hills, and the mountains of Argos [318].

Pursuing the Ceryneian Hind was no ordinary hunt; it became a mythic quest, an arduous trial that tested the courage and determination of even the bravest hunters. The Hind's most dangerous quality was not its wild nature, but the obsessive compulsion it provoked in hunters. They were driven to pursue it relentlessly, following their prey even into unknown and perilous lands. Reversing the intent of endurance hunting, most pursuers succumbed to sheer exhaustion. Thus, the Hind's magical property was its ability to compel hunters to follow their desires to the bitter end, regardless of the cost [319].

Herakles undertook the capture of the Ceryneian Hind as his third labor, a task assigned by King Eurystheus [320]. The Hind's sacred status under Artemis made this endeavor even more formidable. As Pindar observed, Herakles was prohibited from harming or killing the animal [321]. The hero needed a delicate approach, respecting the Hind's divine connection and avoiding injury to the creature. His strategy relied on subduing the animal by wrestling it to the ground by its antlers. Herakles could not risk incurring the wrath of Artemis, as he already faced Hera's enmity.

The capture of the Hind became an exceptional quest, testing the boundaries of human action in the celestial sphere. Herakles pursued the Hind for an entire year, traveling through Arcadia, into Hyperborea—the land beyond the north wind—and further into the Otherworld. This prolonged endeavor highlighted Herakles' unparalleled endurance and determination, solidifying his reputation as a hero of extraordinary prowess [311, 313, 320]. The motif of Herakles' year-long pursuit preserves traces of prehistoric mythological patterns associated with the solar year and the symbolic role of the antlered hind in winter solstice rituals [322]. In ancestral mythological traditions, dominant women were larger-than-life figures capable of transforming into deer or vice versa. According to this totemic narrative, these supernatural women, initiated into the Deer-Mother cult, ruled the world and manifested as stags—covered in hair and bearing enormous branching antlers—to guide the sun's ascent at the winter solstice following the longest night [319].

Herakles' pursuit led him to the Garden of the Hesperides, where he found the Hind beneath the tree of the golden apples, guarded by the serpent Ladon. Numerous versions and parallel sub-narratives of the conclusion of this myth exist. A recurring theme is that Herakles finally subdued the Hind without causing harm, though he broke off one of its golden antlers [312, 313, 323-326]. He then tied the Hind's legs to-

gether and carried it back to Arcadia, where he encountered Apollo and Artemis. The goddess was enraged at the capture of her sacred animal and wished to punish Herakles. However, the hero successfully explained his predicament: he was compelled by the oracle to complete the labors assigned by Eurystheus. Artemis, placated, healed the Hind's wound and allowed Herakles to continue his journey [311]. Carrying the animal alive to Mycenae on his shoulders,<sup>23</sup> Herakles completed his third labor through his sagacity, without force, peril, or excessively angering Artemis [317]. Depictions of Herakles' struggle with the Ceryneian Hind appear in ancient vase paintings, sculptures, and mosaics, immortalizing the hero's extraordinary feat.<sup>24</sup>

#### 8.4. The Legacy of Prehistoric Stag Capture in the Classical World

We briefly examine some instances of hunting deer alive in the Classical world to highlight the enduring influence of the mythical pursuit and capture of the Ceryneian Hind by Herakles.

An Etruscan plaque depicts a dynamic scene of two hunters physically grappling with a young stag (700-650 BCE). This artefact, discovered in Orvieto, is now held in the National Archaeological Museum in Florence [328].



**Figure 47.** Etruscan plaque from Orvieto, 700- 650 BCE. Two hunters are wrestling with a stag. Drawing © Bulgarelli, D.

23 However, at least one version of the myth recounts that he slew the divine animal and presented it to Artemis as an act of propitiation atop the mountain sacred to the goddess, known as the Artemision [314].

24 See some examples in chronological order. Plate fibula, Side B (Boeotia, 699–675 BCE), bronze. University of Pennsylvania Museum, Philadelphia. Inv. no. 75-35-1. Archaic Athenian black-figured neck-amphora (ca. 540–530 BCE), held in the British Museum, London. Inv. number 1843,1103.80. Attic black-figure pointed amphora (ca. 510 BCE), attributed to the Acheloos Painter. Toledo Museum of Art, Toledo. Inv. number 1958.69a. Attic black-figure painting (ca. 520–510 BCE), held in the Staatliche Antikensammlungen, München. Fifth metope on the West Pediment of the Temple of Zeus (Delphi, ca. 513–500 BCE), now in the Delphi Archaeological Museum. Attic red-figure kylix (ca. 480 BCE), attributed to the Antiphon Painter. Musée du Louvre, Paris. Inv. number Louvre G263. Carnelian scarab of Etruscan-Italic art (ca. 325–200 BCE), held in the Metropolitan Museum of Art, New York. Bronze fountain from Pompeii (House of Sallustio, VI 2, 4), probably a copy of Lysippos' work (1st century BCE), now in the Regional Archaeological Museum in Palermo. Mosaic from the Labors of Herakles (3rd century CE), held in the Archaeological Museum of Paros. Bronze statuette from the Orsi di Scifo wreck (ca. 310 CE). Museo Archeologico Nazionale di Capo Colonna in Crotone, Calabria, Italy. Marble slab in relief of Constantinopolitan execution (6th century CE), probably part of the decoration of the Basilica Herculis, preserved in the National Museum of Ravenna.

The plaque belongs to the Orientalizing phase of Etruscan art, showcasing indigenous Italic artistic conventions while reflecting growing cultural exchanges with Eastern Mediterranean civilizations (Greek, Phoenician, and Near Eastern cultures). These influences are evident in narrative depictions and vibrant human-animal interactions.

Hunters and prey are portrayed in stylized yet expressive forms, emphasizing motion and intensity—hallmarks of early Etruscan art. The stag is depicted with elongated limbs and a slender, youthful body that convey its vulnerability. Despite its size, the animal appears animated, resisting the hunters' grip, which suggests that the scene represents a moment of struggle rather than submission having already taken place. The two human figures are naked, skin to skin with the stag, emphasizing their physical connection with the animal in the act of restraining or wrestling with it rather than delivering a lethal blow subduing. This artistic choice reflects a cultural emphasis on dominance over nature rather than simple predation. One hunter tries to immobilize the animal, clutching its antlers and holding its rear leg aloft, while the second restrains the animal by its neck and maneuvers it to the ground, holding a spear for precaution. This portrayal of struggle aligns with the popular imagery of Herakles subduing the sacred Ceryneian Hind, a symbol of humanity's triumph over untamed nature—a recurrent theme in early mythologies. However, unlike the Etruscan hunters depicted, the mythical hero faced the unleashed wild animal alone, without the aid of any helper or companion.

The technique of holding the rear leg, often used to immobilize large four-legged animals reflects a practical understanding of animal handling since it prevents the use of its hindquarters. It is widely documented in Etruscan art. A significant example is a black-figure amphora (6<sup>th</sup> century BCE), which shows a hunter controlling a stag by grasping its horns and rear leg [329]. Wrestling a stag rather than killing it highlights the triumph of human mastery over wild forces, an act celebrated in elite Etruscan society, where deer were considered "elite prey," symbolizing status rather than subsistence hunting [27].

In Etruscan society, the deer was an "elite" prey, since it did not represent, in the hunting context, a basic necessity (as in Greece and the Near East) [27]. Wrestling with a stag served as an initiation ritual for young men, testing their strength and courage. Stags, often associated with vitality and renewal, represented a proof of arete (excellence) or a rite of passage into adulthood or warrior status. Hunting a deer, therefore, was understood as a "warrior apprenticeship" [330]. In a funerary context, the act of physically engaging with a stag, rather than immediately killing it, suggests a moment of display of the triumph of human control over wild forces. This kind of imagery was functional to the celebration of the owner of the figurative object, often commemorated simultaneously as both a hunter and a warrior, given the inseparability of the two aspects.

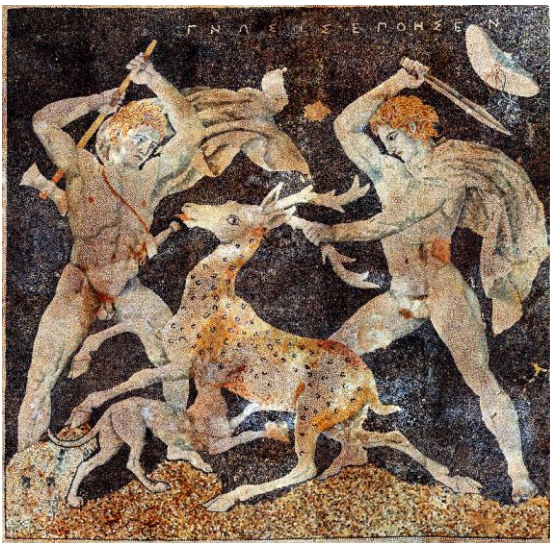
Of particular interest is the Tomb of the Blue Demons



(450–430 BCE) in Tarquinia (Latium, Italy) [331, 332]. Advanced imaging techniques, such as multispectral reflectometry and ultraviolet fluorescence imaging, have revealed a detailed hunting scene on the tomb's entrance wall [333–335]. This scene shows a hunter in pursuit of a puissant stag, identifiable by its prominent antlers. The depiction symbolizes themes of valor, mastery over nature, and the metaphorical journey to the afterlife. The hunting scene contrasts with the underworld imagery within the tomb, serving as a metaphor for the transition from life to death.

In both cases—the plaque from Orvieto and the Tomb of the Blue Demons—the depiction of hunting a stag alive reflects its ritualistic role in Etruscan culture. Captured stags could be handled alive for sacrificial purposes, as illustrated in Attic red-figure vases that show deer presented for sacrifice [329]. This practice resonates with the myth of Iphigenia, where the human victim is replaced by an animal sacrifice. According to myth, Iphigenia was condemned to death to atone for her father's guilt, having slain a deer in Artemis's sacred grove. However, she was saved by the goddess, who substituted her with an antlered hind on the altar. Hunting and sacrifice thus emerge as interconnected facets of mythology, underscoring themes of redemption and divine intervention.

The late 4<sup>th</sup>-century BCE Stag Hunt Mosaic from the House of the Abduction of Helen in Pella, the capital of the Macedonian Kingdom, captures the dramatic conclusion of an endurance hunt. This early Hellenistic floor mosaic exemplifies the increasing naturalism, dynamism, and technical sophistication of Macedonian and Greek art. Signed prominently by the renowned artist Gnosis, it is recognized as the earliest known signature of a mosaicist [158, 336–340].



**Figure 48.** Pella. The Stag Hunt by Gnosis, one of the most remarkable mosaics of animals and people in the House of the Abduction of Helen.  
[https://upload.wikimedia.org/wikipedia/commons/1/19/Stag\\_hunt\\_mosaic%2C\\_Pella.jpg](https://upload.wikimedia.org/wikipedia/commons/1/19/Stag_hunt_mosaic%2C_Pella.jpg).

The pebble mosaic portrays a hunting scene featuring two muscular young men, identified as heroes or aristocratic hunters, locked in a fierce struggle with a stag. The composition emphasizes intensity and motion, presenting the dramatic confrontation of the hunt as not merely an event but a profound test of human strength, skill, and destiny. The circular arrangement of the scene compels the viewer's gaze to move continuously, following the dynamic interplay between the hunters and their prey. By employing shading techniques (*skiagraphia*), the artist achieves an illusion of depth, lending the composition a sense of vitality and three-dimensionality.

At the heart of the mosaic lies the stag, rendered with elongated limbs and a graceful yet powerful form that underscores its resistance after a long run. Depicted at the height of motion, the stag's body twists sharply, its legs splayed as it attempts to evade capture. The stag's head is thrown back, its open mouth and protruding tongue expressing agony or defiance. Its large, expressive eyes and well-defined musculature further enhance its presence, portraying it not as a mere victim but as an active participant in the struggle.

The hunting dog, positioned mid-action, lunges at the stag, intensifying the scene's drama.

Though the artist does not explicitly identify the two human figures, they are widely believed to represent Alexander the Great and his close companion, Hephaestion. Alexander is recognizable by his upswept, centrally-parted hair, a distinctive feature of his portraiture. He is holding and forcefully tearing off one of the stag's antlers in a gesture reminiscent of Herakles grasping the Ceryneian Hind. According to Paolo Moreno, the double-headed axe wielded by the second figure is an attribute of Hephaistos, the god of craftsmanship and fire, and serves as a subtle allusion to Hephaestion's name. This clever interplay of symbolism and wordplay reflects the elite, intellectual environment of Macedonia, where sophisticated iconographic nuances were well understood [341]. The stag hunt motif resonates with the themes of heroism, camaraderie, and conquest. In the context of Alexander's legacy, the hunt embodies his political and military achievements, often framed as heroic endeavors reminiscent of mythological quests [342]. It symbolizes the triumph of humanity—particularly the aristocracy—over nature and chaos, reinforcing themes of order and civilization.

The two hunters, dressed in short tunics, are engaged in a coordinated effort to subdue the animal. Their movement is fluid yet tense, emphasizing the physical exertion and skill required. The contrast between their light, active figures and the neutral, earth-toned background heightens the dramatic impact of the scene. The figures' dynamic poses and intense expressions evoke the emotional and physical stakes of the hunt, hallmarks of Hellenistic art. The mosaic is a prime example of the era's emphasis on violent movement, dramatic narratives, and emotional intensity [343–347].

The Stag Hunt Mosaic, alongside other Etruscan and Hellenistic artefacts, reflects the enduring legacy of prehistoric

traditions associated with the hunting and capture of live stags. These narratives and artistic representations preserve the symbolic significance of deer hunting, portraying it as a testament to human strength, ritual practices, and the transformative journey between life and the afterlife. The act of capturing a live deer, often ritualized, symbolized humanity's dominance over the natural world, while simultaneously celebrating the hunters' physical prowess, resilience, and courage.

## 9. Conclusions: Four Reasons for Capturing and Preserving Deer Alive

The rock art scenes we have presented refer to a special relationship that the Final Mesolithic and Early Neolithic populations of the Iberian Peninsula had with the red deer (primarily males, but also females). We have reviewed the iconographic evidence of the mass, but selective, trapping of live deer, but why did they catch this animal and leave it alive?

Iain Davidson has suggested a link between the capture of deer alive and the existence of pre-breeding activity in the Final Mesolithic and Early Neolithic. This practice was primarily aimed at obtaining meat, but also utilized for milk, leather, the production of items of personal prestige, carriages, rides, and medicines [222]. As farmers began to domesticate animals, they gradually improved their utilization for human purposes [348, 349]. Most likely, this process was related to the spread of animal husbandry and agriculture from the Middle East to Eastern and Western Europe after 6300 BCE. Given the characteristics of the deer, the domestication process was only partially successful.

A second reason for catching a deer alive held meaning and value in itself. Levantine rock art depicts ritualized mass trapping of male deer only. They occurred during ceremonies where the animal was the central figure. Its grasping and capture took place in a spectacular and highly ritualized manner, often with bare hands or special rope tools. The ceremony was also a playful event. It was performed by man and women in an arena-like space and accompanied by parades, dances, music, and the support of enthusiastic spectators. For the hunters, it was not enough to simply capture the deer alive. They also sought to demonstrate their courage and skills by challenging, teasing, and holding various parts of the animal, including its horns, tongue, nose, legs, and tail. Notably, the abilities required of the hunter corresponded to the traits traditionally attributed to the animal itself—swift rather than strong. To subdue its prey, the hunter had to be on par with the adversary, matching the deer's agility, vigilance, ability to move swiftly across difficult terrain, camouflage skills, and speed. Thus, the deer held the role of a majestic quarry, conquerable only through a heroic endeavor in which the human adversary strove to emulate and surpass its qualities [27].

As evidenced by the examined paintings in the Barranc de la Palla and the shelters of Solana de las Covachas IX, Morrellà la Vella, and Las Cañas del Salbime, a third significant purpose of catching a deer and keeping alive was the respect of certain taboos and rituals, thereby avoiding contempt for life and preventing excessive or meaningless hunting, so that the prey could return to Earth again.

At this stage of our *chaîne opératoire*, we have finally to connect the capture of the stag by keeping it alive with the sacredness of this animal and its role in the performance of shamanic rites. During ceremonies, ritual specialists engaged in direct contact with the deer. The significance of this gesture is extremely complex, because the shamans were not merely revering the sacred nature of the deer and exploiting it as a source of magical-energy resources, but specifically acknowledging it as their guide animal to the other world [49, 221, 310].

Building on the insights of this study, future research should prioritize the integration of advanced digital imaging technologies with spatial data analytics to enable a more refined analysis of prehistoric rock art. Interdisciplinary approaches that combine archaeo-zoological data, stratified archaeological evidence, ethnographic parallels, and high-resolution digital reconstructions will significantly contribute to clarifying the evolution of hunting techniques and deer management practices. Extending this line of inquiry to a wider range of sites is essential for constructing robust regional and chronological frameworks. Such efforts will ultimately deepen our understanding of the cultural dynamics underlying prehistoric representations of animal and their relationship to ritual behavior, social organization, and technological innovation.

## Abbreviations

UNESCO	United Nations Educational, Scientific and Cultural Organization
IFRAO	International Federation of Rock Art Organizations
EMAP	European Music Archaeology Project
CSIC	Consejo Superior de Investigaciones Científicas
UNED	Universidad Nacional de Educación a Distancia
BAR	British Archaeological Reports Publishing
BnF	Bibliothèque nationale de France
IEGPS	Instituto de Estudios Gallegos Padre Sarmiento
TAPA	Traballos de Arqueoloxía e Patrimonio
HAU	Journal of Ethnographic Theory
CUCSH	Centro Universitario de Ciencias Sociales y Humanidades
IPCTE	Institute for Research and Training in European Cultural Heritage
SASA	Serbian Academy of Sciences and Arts

## Author Contributions

Marco Merlini is the sole author. The author read and approved the final manuscript.

## Conflicts of Interest

The author declares no conflicts of interest.

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