

Article

'A World of Knowledge': Rock Art, Ritual, and Indigenous Belief at Serranía De La Lindosa in the Colombian Amazon

Jamie Hampson^{1,*} , José Iriarte¹  and Francisco Javier Aceituno² ¹ Department of Archaeology and History, University of Exeter, Exeter EX4 4QJ, UK; j.iriarte@exeter.ac.uk² Departamento de Antropología, Universidad de Antioquia, Medellín 050001, Colombia; francisco.aceituno@udea.edu.co

* Correspondence: j.g.hampson@exeter.ac.uk

Abstract: There are tens of thousands of painted rock art motifs in the Serranía de la Lindosa in the Colombian Amazon, including humans, animals, therianthropes, geometrics, and flora. For most of the last 100 years, inaccessibility and political unrest has limited research activities in the region. In this paper, we discuss findings from six years of field research and consider the role of rock art as a manifestation of Indigenous ontologies. By employing intertwining strands of evidence—a range of ethnographic sources, local Indigenous testimonies from 2021–2023, and the motifs themselves—we argue that the rock art here is connected to ritual specialists negotiating spiritual realms, somatic transformation, and the interdigitation of human and non-human worlds.

Keywords: rock art; La Lindosa; northwestern Amazon; shamanism; animism; tiered cosmos; transformation; Indigenous ontologies

1. Introduction

'There are the paintings... The great spiritual worlds are captured here...' (*Ismael Sierra, a Tukano Oriental elder, at the site of Principal, 20 September 2023; translation by the authors*)

'We have to read a figure, we have to read it from inside out... If we begin to look at the figure of each image it will give us many stories, and then what appears in each image is the knowledge of each species, and that is what is handled at the shamanic level... And that is how we begin to know the pictographs... Because this is a world of knowledge... I tell you each one of these figures contributed the shamanic knowledge for our own management of the territory where we are... When this knowledge comes out it appears as a wardrobe, as a shamanic wardrobe, as a guide to be able to practice shamanism... To understand the pictographs you have to have different levels of knowledge... One part is that you have to look at them from the shamanic viewpoint... that corresponds to the shamans... you have to have another vision which is the oral shamanism which is the one that I manage... we have to concentrate very well for it to provide us with information'. (*Ulderico, a Matapí ritual specialist, at the Raudal site, 1 September 2022; translation by the authors*)

In the Colombian Amazon, in the vicinity of Serranía de la Lindosa (Figure 1), are thousands of painted human and animal figures, plant motifs, and geometric designs (Trujillo 2016; Urbina and Peña 2016; Becerra 2019; Castaño-Urbe 2019; Muñoz 2020; Morcote-Ríos et al. 2021; Iriarte et al. 2022a, 2022b; Robinson et al. 2024). Having returned to the region after the Colombian government and the FARC (Fuerzas Armadas Revolucionarias de Colombia) revolutionaries signed a peace treaty in 2016, Indigenous descendants of the original artists have recently explained to us that the rock art motifs here do not simply 'reflect' what the artists saw in the 'real' world; they also encode and manifest critical



Citation: Hampson, Jamie, José Iriarte, and Francisco Javier Aceituno. 2024.

'A World of Knowledge': Rock Art, Ritual, and Indigenous Belief at Serranía De La Lindosa in the Colombian Amazon. *Arts* 13: 135. <https://doi.org/10.3390/arts13040135>

Academic Editor: David Whitley

Received: 12 July 2024

Revised: 5 August 2024

Accepted: 7 August 2024

Published: 19 August 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

information about how animistic and perspectivistic Indigenous communities constructed, engaged with, and perpetuated their ritualised, socio-cultural worlds. As Ulderico, a Matapí ritual specialist, told us in front of one of the painted panels in September 2022, ‘you have to look at [the motifs] from the shamanic viewpoint’.

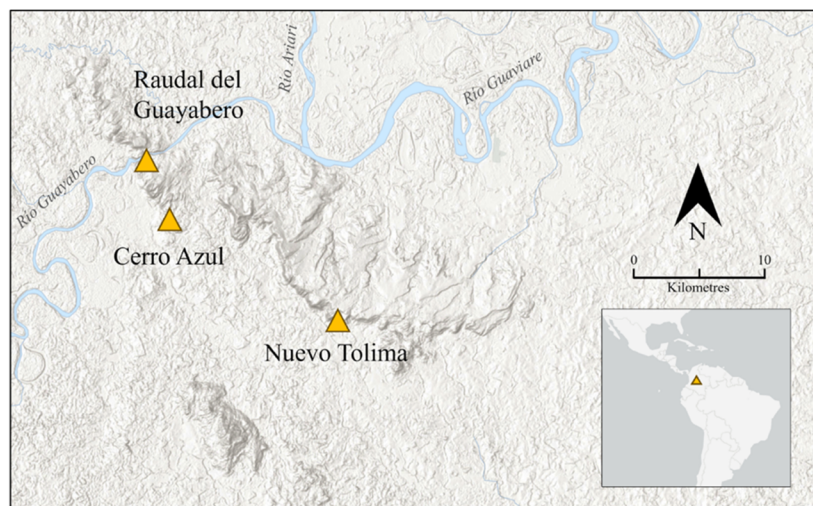


Figure 1. Map of the location of the Cerro Azul, Raudal, and Nueva Tolima rock art sites within the Serranía de la Lindosa in the Colombian Amazon.

As with other regions globally, analysing ethnographic and ethnohistoric records alongside the rock art panels strengthens interpretation (e.g., [Lewis-Williams 1981, 2006](#); [McDonald 2013](#); [Valle et al. 2018](#); [Munduruku et al. 2021](#); [Whitley 2021](#); [Tuyuka et al. 2022](#); [Stewart and Challis 2023](#)). In this paper, we employ a multi-stranded approach when considering the rock art motifs at multiple panels at the sites of Serranía de la Lindosa. We address regional ethnographic contexts and include translations of narratives given by Indigenous elders in front of the rock art panels.¹ Dozens of groups in the wider region practised some form of shamanism ([Métraux 1949](#); [Reichel-Dolmatoff 1978a, 1978b, 1987, 1997](#); [Rivière 1994](#); [Shepard 1999](#); [Alberti and Bray 2009](#); [Santos-Granero 2008, 2009](#); [Kopenawa and Albert 2013](#); [Wright 2013](#); [Langdon 2017](#); [Castaño-Urbe 2019](#); [Iriarte et al. 2022b](#); [Robinson et al. 2024](#)). Moreover, the testimony of numerous Indigenous elders at the rock art sites today systematically and unequivocally demonstrates the connection of many of the motifs to shamanistic and animistic beliefs.²

2. Serranía De La Lindosa and Its Environs

The Serranía de la Lindosa (La Lindosa for short) is a 20 km long sandstone outcrop located along the Guayabero River in the northwest of the Department of Guaviare, Colombia. This region forms the border between Orinoiquia savannahs to the north and the Amazon rainforest to the south; it is characterised by an intersection of flora and fauna between the distinctive savannah and tropical forest environments ([Vriesendorp et al. 2018](#)). The present climate is warm and humid, receiving ~2800 mm of rain annually.

Until the 2016 peace agreement between the FARC revolutionaries and the Colombian government, civil war, political unrest, and inaccessibility made research in the region almost impossible (although see [Correal et al. 1990](#); [Gheerbrant 1993](#); [Urbina 1994](#); [Brito-Sierra and López-Arévalo 2015](#); [Trujillo 2016](#); [Urbina and Peña 2016](#); [Rostain 2019](#)). Recent archaeological excavations carried out by members of the ERC (European Research Council) project LASTJOURNEY have established Late Pleistocene (ca. 12.5 ka BP) human contexts ([Aceituno et al. 2024](#); [Morcote-Ríos et al. 2021](#)); we now know that during these early times the area was occupied by mobile groups engaged in a broad-spectrum economy that included hunting, fishing, and plant exploitation ([Morcote-Ríos et al. 2021](#); [Robinson et al. 2021](#); [Aceituno et al. 2024](#)). The region has long been a crossroads and enclave

for numerous Indigenous communities, including Arawakan, Cariban, Makú-Puinave, Tukanoan, Desanan, and Witoto ethnolinguistic groups (Cayón and Chacon 2014; see also Iriarte et al. 2022b).

It is likely that uncontacted Indigenous groups in nearby Chiribiquete National Park (the border of which is less than 100 km to the south) and other neighbouring regions are still creating rock art (van der Hammen 2006; Castaño-Urbe 2019). On the other hand, it seems that Indigenous groups in and around the hills of La Lindosa are not. There are Nukak Makú, Jiw, Tukano and Desana Indigenous reservations (*Resguardos*) in the vicinity of La Lindosa; several Tukano and Desana speakers live close to the rock art sites, and within the nearby town of San José del Guaviare. Since 2018, we have carried out interviews with Tukano, Desana, Matapí, Nukak, and Jiw elders in front of the painted panels; as we outline below, much—but not all—of the information tallies with shamanistic and animistic narratives recorded in the twentieth century in other regions of the Amazon.

Hundreds of rock art panels are present throughout the hill chains of La Lindosa, including well-known examples at the sites of Cerro Azul (a prominent free-standing *tepui* i.e., table-top hill), Nuevo Tolima, and Raudal del Guayabero (Figure 2) (Trujillo 2016; Urbina and Peña 2016; Becerra 2019; Castaño-Urbe 2019; Iriarte et al. 2022b; Robinson et al. 2024). Sixteen large painted panels—with thousands of images, mostly in red ochre—adorn the 400 × 150 m Cerro Azul outcrop.³ Ochre pieces have been recovered from the earliest occupational levels, including ochre tablets with striations from grinding found in contexts dated to ~11.54 ka cal BP, and painted rock fragments from contexts dating from ~10.28 ka cal BP to approximately 500 years ago (Morcote-Ríos et al. 2021; Iriarte et al. 2022b; Aceituno et al. 2024). Attempts to directly date the parietal images are ongoing. Because we have not yet been able to chronologically separate images with any degree of confidence, we do not discuss potential chronological changes or sequences in the artwork.



Figure 2. Cerro Azul with the location of rock art panels.

3. Methods

In this paper, we focus on six panels from Cerro Azul: Currunchos, Demoledores, Las Dantas, El Más Largo, Principal, and Reserva (Iriarte et al. 2022b) (Figure 3). The selected panels provide a range in the location, size, and number of images; they are also relatively well-preserved and accessible for drone photography. Las Dantas and El Más Largo are large rockshelters with 998 and 1031 images respectively. Principal has a high density of well-preserved motifs (244). Currunchos contains 153 images, and access to the site requires a challenging traverse from inside a cave mouth around a rock outcrop. Access to Reserva (244 images), higher up the cliff face, is also difficult, and requires climbing. The 171 motifs at Demoledores are in a concave alcove with an impressive view over the rainforest.

Using photogrammetry from drone and traditional photography, we created a 2D and 3D stitch of each of the panels before employing GIS software (ArcGIS Pro 3.3) to apply relative x and y coordinates and a unique identifier number to each motif. Motifs were

then assigned to one of four descriptive categories: Figurative, Geometric, Abstract, and Unknown.⁴ The Figurative category includes sub-categories: humans, animals (including therianthropes), schematised figures, handprints, flora, and objects.⁵

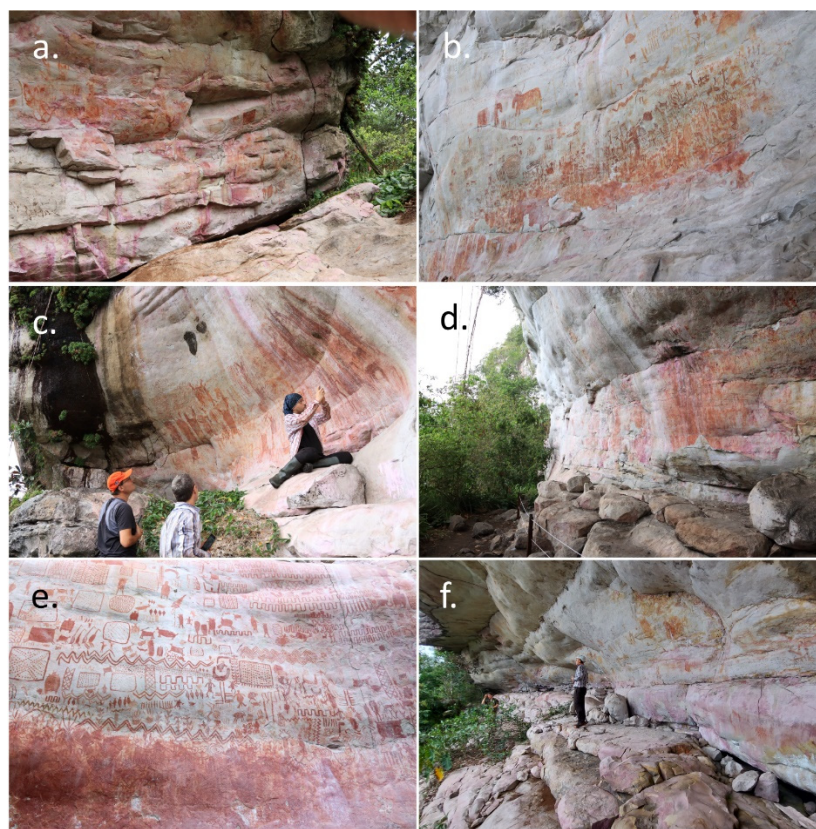


Figure 3. Photos of the rock art panels at Cerro Azul: (a) Currunchos, (b) Las Dantas, (c) Demoledores, (d) El Más Largo, (e) Principal, (f) Reserva. All photos in this article are by the authors.

4. A Closer Look at the Rock Art of La Lindosa

A total of 3223 images were catalogued across the six panels. In this paper, we concentrate on the Figurative images (Table 1), for the simple reason that the ethnographic and ethnohistoric records contain more information about these motifs compared with non-Figurative images (for more on the geometric and abstract motifs at La Lindosa, see below, and Iriarte et al., forthcoming).

Table 1. Figurative representations in the rock art of Cerro Azul.

	Panel						Total	% of total
	Currunchos	Demoledores	Dantas	Más Largo	Principal	Reserva		
Total images	153	171	998	1031	626	244	3223	100
Non-figurative	112	115	344	356	242	175	1344	41.7
Figurative	41	56	654	675	384	69	1879	58.3
Animal	23	17	203	144	154	15	556	17.25
% of total panel images	15	9.9	20.3	14	24.6	6.1		
% of total panel figurative images	56.1	30.4	31	21.3	40.1	21.7		

Table 1. Cont.

	Panel							
Human	3	12	209	203	83	21	531	16.48
% of total panel images	2	7	20.9	19.7	13.3	8.6		
% of total panel figurative images	7.3	21.4	32	30.1	21.6	30.4		
Schematised	7	24	149	266	86	28	560	17.38
% of total panel images	4.6	14	14.9	25.8	13.7	11.5		
% of total panel figurative images	17.1	42.9	22.8	39.4	22.4	40.6		
Handprint	0	0	88	50	51	0	189	5.86
% of total panel images	0	0	8.8	4.8	8.1	0		
% of total panel figurative images	0	0	13.5	7.4	13.3	0		
Flora	1	3	4	6	10	5	29	0.9
% of total panel images	0.7	1.8	0.4	0.6	1.6	2		
% of total panel figurative images	2.4	5.4	0.6	0.9	2.6	7.2		
Object	7	0	1	6	0	0	14	0.43
% of total panel images	4.6	0	0.1	0.6	0	0		
% of total panel figurative images	17.1	0	0.2	0.9	0	0		

As we demonstrated in a previous paper (Robinson et al. 2024), animals at La Lindosa are represented individually and in groups (Figures 4 and 5). They are shown both ‘statically’ (i.e., standing) and ‘dynamically’ (e.g., running deer, leaping monkeys).⁶ Animals are portrayed either in profile or top-down view. The top-down view is limited to Crocodylia, lizards, turtles, and stingrays. Bats appear to be the only animal represented in portrait (face-on) view. Despite the frequent occurrence of penises on human figures—many of which are erect—genitalia are almost entirely absent from the painted animals (see below). Depictions of feet are sometimes ‘specific’ (including distinct toes), ‘non-specific’ (lacking foot definition), and abstract (i.e., containing non-realistic elements). When depicted, the number of toes varies considerably, even on a single animal (see below). An important motif that we return to later is a serpent with legs, and emanations from the head (Figure 4n; see also Figure 10 below).

As in other parts of the world, several rock art motifs at Cerro Azul—and indeed across the wider region—incorporate both animal and human elements, suggesting the depiction of therianthropes (Figures 6–8). The Tukano, Desana, Matapí, Jiw, and Nukak speakers who accompanied us to the rock art sites highlighted these images, discussing the fluid transformation between animal and human states in an animistic and perspectivist worldview (see below). Therianthropic figures are most often bipedal and in a ‘performative’ stance, in which motion is implied. Arms, for example, are often outstretched, and fore and hind legs depicted as if on different planes. As noted above, penises, which are frequently depicted on human figures, are all but absent from animal figures; tellingly, however, they are present on three therianthropic figures. Many human figures at Cerro Azul have tapir- or deer-like feet (see below).



Figure 4. Examples of animal taxa represented at Cerro Azul. (a) armadillo, (b) paca, (c) coati, (d) amphibian, (e) tapir/danta, (f) stingray, (g) feline, (h) turtle, (i) deer, (j) crocodile, (k) monkey, (l) porcupine, (m) possible horse, (n) serpent with head plume and legs, (o) lizard, (p) deer, bat, spider, aquatic birds, (q) possible sloth, (r) canid.

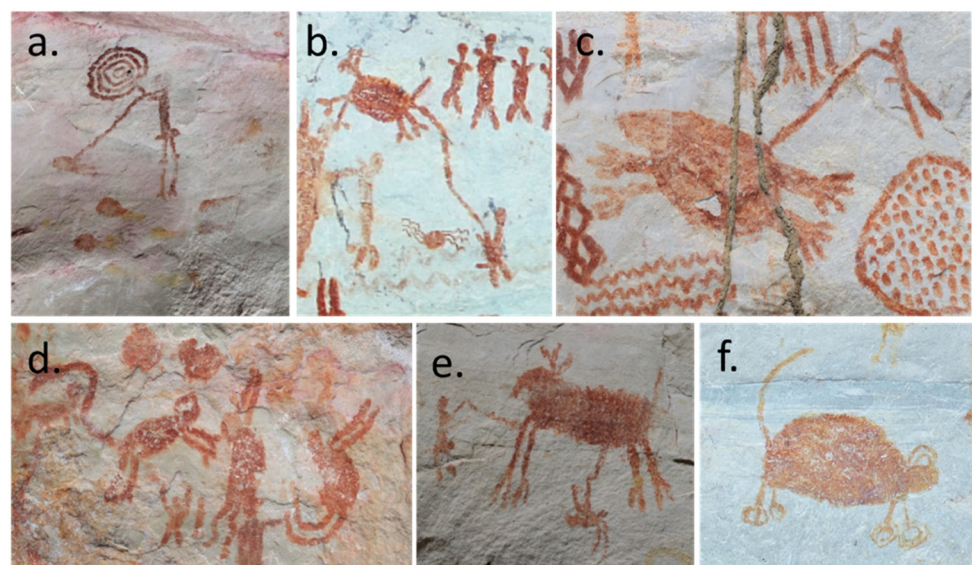


Figure 5. Images of (a) fishing (note the concentric circle, and see below); (b,c,e) (possible) hunting; (d) monkey leaping/transforming sequence; (f) unknown animal with circular feet and curved head elements.

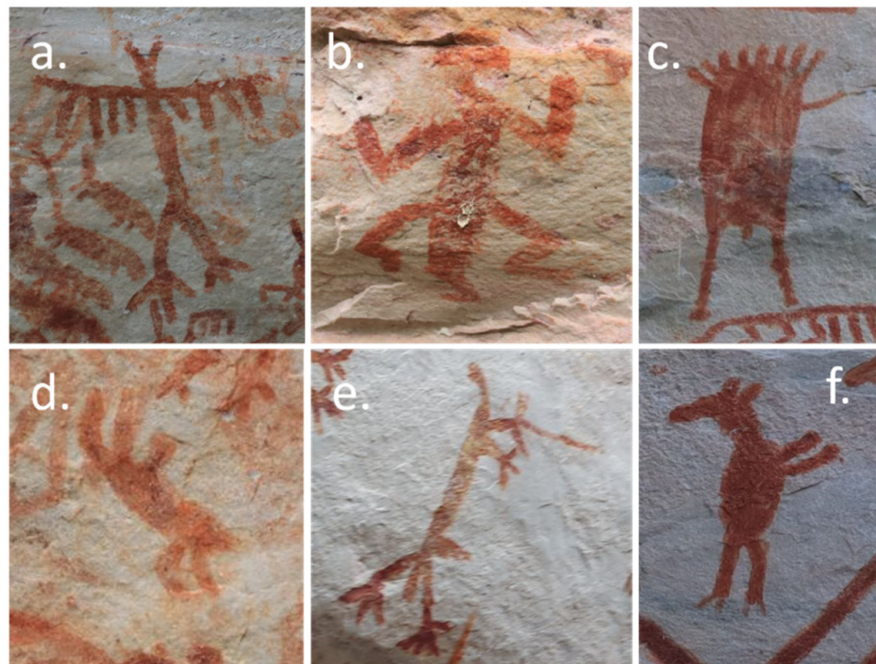


Figure 6. Therianthrope images, as suggested by Indigenous informants: (a) avian/human; (b) lizard with round, human-like head; (c) possible bird/human/plant with penis; (d) possible sloth/human; (e) unknown human/quadruped with tail and penis; (f) deer/human, looking over its shoulder (note the two-toed feet; and see below).

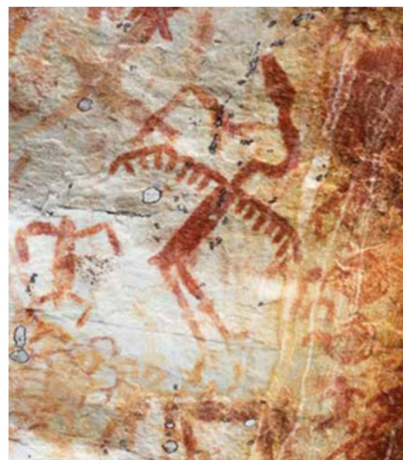


Figure 7. Snake-bird-human therianthrope at Nueva Tolima. Note the exaggerated knees, and short tail. For a discussion on transformation and catching fish in a ritualistic framework, see below.



Figure 8. Part of Las Dantas panel. Note the deer, standing on their hind legs, left centre. We discuss geometric and plant motifs, handprints, and other specific figures in forthcoming papers.

5. Rock Art, Shamanism, Ethnography, and Ethnohistory at La Lindosa and Beyond

Rock art research in the Amazon, in South America, and beyond repeatedly tells us that art is both a reflection and manifestation of cultural and spiritual beliefs, as well as a communicative tool (see examples in [Hampson et al. 2022](#); [Iriarte et al. 2022b](#)). Pigment procurement, artistic ‘style’, composition, and the choice of subject matter are embedded within social norms and ontologies, and attempts at etic identification of rock art not only highlight the core fluidity in Indigenous categorisations but also remind us that the unambiguous ‘specificity’ of an image (from a Western point of view) was not necessarily the goal of the original artist ([Hampson 2015, 2024](#); [Robinson et al. 2024](#)). Indeed, ethnographic evidence tells us that ‘Tukanoan decoration is not mimesis; the Indians do not copy life-forms from nature’ ([Reichel-Dolmatoff 1987](#), p. 17). Similarly, Tukanoan ‘artistic and technical skill and perfection are not of the essence. An artifact may be ill made; a dance may be clumsily executed or a person may have a poor singing voice. What counts is . . . meaning. Artistic excellence should never become a goal. In fact, shamans warn people not to be too form-perfect; not to be too impressed by appearances’ ([Reichel-Dolmatoff 1987](#), p. 17).

The rock art motifs at La Lindosa appear to mirror and embody these concepts, with the action of painting—and the resulting ‘presence’ of a motif—of greater concern than conveying the anatomical specifics of, say, a deer, or a human figure ([Robinson et al. 2024](#)). It seems that many images at La Lindosa—and indeed rock art corpuses elsewhere (see examples in [Hampson et al. 2022](#))—were deliberately painted *without* diagnostic features. Moreover, artists could and did often choose to accentuate certain features to increase the potency of a particular motif (e.g., [Keyser and Whitley 2006](#); [Hampson 2015, 2016](#)). Equally important, there are numerous ethnographic texts throughout the Americas which make clear that painted motifs were and are powerful things in themselves; indeed, the word for pigment is often synonymous with the word for ‘potency’ or ‘supernatural spirit’ (e.g., [Laird 1976](#), p. 123; [Hultkrantz 1987](#), p. 94; [Whitley 2009](#); [Stoffle et al. 2011](#), p. 14; [Hampson 2015, 2024](#); [Hugh-Jones 2016](#)). Classificatory ambiguities in taxa (from a non-Indigenous perspective) also stem from the fact that animistic ontologies were and

are fluid and polysemous (see below); it is not surprising that there are human/animal therianthropes and other motifs at La Lindosa depicting transformative states (Goldman 1940; Fulop 1954; Rivière 1994; Viveiros de Castro 1998; Alberti and Bray 2009; Wright 2013; Langdon 2017; Pilaar Birch 2018; Moro-Abadía and Porr 2021; Iriarte et al. 2022b; Robinson et al. 2024).⁷ In addition, we know that taxonomic specificity was not always the goal of Indigenous artists partly because many entities, including rock art motifs, were considered to be ‘emergent’, or in the ‘process of becoming’; to many Indigenous groups in the Amazon and elsewhere, processes in an animistic framework were and are as important as the final product, if not more so (Reichel-Dolmatoff 1978a, 1978b, 1987, 1997; Rivière 1994; Alberti and Bray 2009; Wright 2013; Langdon 2017; Whitley 2021). Before we turn to the detailed testimonies of Indigenous elders recorded in front of the painted sites at La Lindosa in 2022 and 2023, we look more closely at Amazonian ethnography, and what it might tell us about the significance of rock art panels and motifs.

Few Amazonian researchers now doubt the overarching paradigm of the so-called New Animism, a relational practice in which humans cultivate relationships with other persons, whether human or non-human (Hallowell 1960; Descola 1994, 2012; Viveiros de Castro 1998; Bird-David 1999; Harvey 2002, 2014; Ingold 2006; Alberti and Bray 2009; Santos-Granero 2008, 2009; Abram 2010; Kohn 2013; Iriarte et al. 2022b).⁸ In many Amazonian perspectivist and animistic cosmologies, everything that grows, moves, or evolves is ‘equal to’ a human, with a soul and a social life (e.g., Viveiros de Castro 1998; Kohn 2013). To this end, each living being’s physical body can be imagined as an ‘outer cover’ (or ‘clothing’), hiding its human form. Only other members of the same species, or special beings such as shamans who cross species boundaries, can see through this external covering (Viveiros de Castro 1998; Kohn 2013).⁹ According to this Amazonian way of seeing and living, the world is inhabited by various types of emergent beings, including humans and non-humans, who perceive reality fluidly, and from different but complementary viewpoints. These entities—including spirits, animals, plants, and even objects—are conscious, and, like humans, have the ability to reflect and to influence events.¹⁰

A point we underscore here, and throughout this paper, is the key role of ritual specialists in Amazonian groups. Indeed, there are numerous ethnographic references to the crucial roles that *payés* [shamans] play (see below). Moreover, when Victor Caycedo, a Desana elder, accompanied us to the sites in 2022 and 2023, he explained that ‘the *payé* is the one who commands in the *maloca* [house],¹¹ he is the one who has the powers, he is the one who has the *yagé* [hallucinogenic ayahuasca],¹² he makes the lightning fall, he makes the winter fall. . . . *Payés* can see inside and out; they can see a person’s bones. If a man is sick, he can see a ‘stain’. He sees black marks in your knee, if that’s where you are sick. The *payé* sees things, diagnostically, both now and in the future. *Payés* open up a space: the spell is powerful.’

In his book (Sierra 2019, p. 31), Ismael Sierra—an elder from the Tukano Oriental group—also refers to *payés* as ‘great sages . . . or ancient historians. . . They are capable of transforming into a person, in order to reach this world. And that power, he has it more than us. He knows more than we do.’

As Reichel-Dolmatoff (1967, pp. 110–11) also makes clear:

The hills in the forest are not only meeting places of one shaman and *Waí-maxsè* [the Master of Animals—an important figure to whom we return below] but also the locales where, in their hallucinations, various shamans of neighboring tribes celebrate their reunions. Among them and the Master of Animals a true barter unfolds during which each tries to gain advantages. It is imagined that within the uterine hills, which are like great communal houses, the animals hang from the rafters in a somnolent state, and the shaman chooses the animals which he needs for the hunters of his group. Going from rafter to rafter he shakes them, and with each shake, the animals awake and go forth into the forest. *Waí-maxsè* “charges per shake” and at times when more animals have been awakened than

was intended and bargained for, negotiations are renewed with the Master of Animals who asks for more and more souls.

On 16 September 2023, Victor elaborated on the concept of painted rockshelters as spiritual *malocas*/houses for us:

Where are we? This [gesturing to the paintings at the Principal site] is the door, this is the house and this is the wall of the *tepui*, one sees that it is made from stone, but for those in ancient times it was not stone, it was the wall of a house. . . This is a sanctuary, we are *inside* the *tepui*. The ancestors can hear us. . . Each time you come, you see different things; things show themselves to you. All these rockshelters are houses.¹³

Also in September 2023, Ismael Sierra pointed to the paintings at the site known as La Fuga and said:

So here are the animals that are there, they exist in that mountain range that was formerly and still is, but it is in the spiritual world. . . These are men with two arms, they are giants that exist in that spiritual *maloca*. . . there is an animal, a panther lion that has two heads, one head here and the other here, instead of a tail it has a head, they are from the spiritual world . . . they are monsters that are here [pointing to the panel], almost everyone in this mountain range must have their *maloca*, this [pointing to the panel] for a wise man, for a *payé*, it is a *maloca*. . . In this world there are different places, where there are some *malocas* of this world. Where the white people call them sacred places. Or enchanted.

Complementing the point that, in many American regions, the word for pigment is often synonymous with the word for ‘potency’ or ‘supernatural spirit’ (see above), several of the Indigenous elders who accompanied us to the La Lindosa sites explained that the paintings were created by spirits—an ontological equivalence between the actions of a ritual specialist and their spirit helper (see e.g., Whitley 2009). At Principal in September 2023, for instance, Victor pointed to motifs high up the rock face and asked rhetorically: ‘How would you paint up there? How would you do it? They didn’t do it with a ladder. . . they didn’t do it with some big devices that were put there. . . Why? Because the natives in the old days lived spiritually. . . They were a spirit. . .’ On another occasion, also at the Principal site, Ismael gestured to the paintings and said: ‘That is not done in this world. . . that is not done by us. . .’ The Jiw¹⁴ creation story (Iriarte et al. 2022b, p. 40) also offers an explanation for the origin of the rock art at La Lindosa:

In the beginning, there was no sun, moon or stars. Everything was in darkness. Laman, the world creator, made a big pot with a lid. Whenever he lifted the lid, light flooded out and a new day dawned. Nothing lived on earth, so Laman created the first bird. The bird brought seeds from the underworld, and from those seeds grew palms and fruits, and all the plants on the planet. Next Laman prayed, and all kinds of animals appeared. Laman wanted us to remember how life began, so he decided to throw a party. In between dancing and singing, Laman made the paintings on the rocks to make sure that what he had done would never be forgotten.

The relationships between Indigenous myths and specific rock art motifs are of course far from straightforward; it should come as no surprise that myths and motifs are contextual, interdependent, and polysemous. As outlined above, Amazonian ethnographies and present-day explanations demonstrate that artworks do not merely ‘reflect reality’ or ‘illustrate’ the narrative and metaphorical myths, as if they were pictures in books; rather, the images reside within an animistic and agentic framework, and act as storehouses of symbolic potency. The creation of motifs, and their context on the walls of what many Indigenous groups refer to as the ‘Master’s House’ (i.e., painted rockshelters; see below), emphasises one part of their semantic spectrum—animistic potency—while also illuminating a range of other values, including those in social and economic realms. Numerous Amazonian groups recognise the hills and *tepuis*—and other places with rock art, such as river rapids—as sacred spaces corresponding to a mythical time within an animistic worldview (e.g., Reichel-Dolmatoff 1971; Urbina 1994; Hugh-Jones 1996; Riris et al. 2024).

Ethnographic sources—and even present day narratives—must of course be used with caution; clearly, testimonies cannot be taken at face value, or as a coherent series of unambiguous facts (see e.g., [Lewis-Williams 2024](#)). Unsurprisingly, anthropological texts and interviews are fragmentary and at least in part a product of recorders' interests and contextual knowledge (or lack thereof).¹⁵ We also need to remember that Indigenous informants often do not bother explaining the most fundamental concepts that make up their worldviews simply because they regard them as self-evident e.g., the sacred and mundane worlds constantly intertwine; rock art motifs are powerful things in themselves; there is no sharp divide between nature and culture; etc. In the Upper Rio Negro region, for instance, [Hugh-Jones \(2016, p. 165\)](#) explains that 'Many of the petroglyphs would appear to represent Yuruparí [ceremonial] instruments but in Indigenous eyes they are not representations; they are the real thing. Petroglyphs are Yuruparí in another form (see also [Xavier 2012, p. 7](#)). This is why one should avert one's eyes and not look at them. By the same token, for Tukanoans, their anaconda ancestors did not merely arrive by river; the meandering rivers *are* those ancestors and were created as the anacondas moved.' (*Our emphasis*. We consider the significance of snake motifs below.) When we read ethnographic texts, then, we must be careful not to overlook important 'nuggets'—pieces of information couched in Indigenous language and metaphors ([Lewis-Williams 2024, p. 72](#)). Or, in David [Whitley's \(2021, p. 69\)](#) words, 'many ethnographically relevant statements about rock art can only be recognized as such when the ontological differences between the Western and the Indigenous worldviews are themselves understood'.¹⁶

6. A Closer Look at Animal Motifs: Moving Beyond 'Menus'

Animals feature prominently in rock art worldwide, including multiple regional traditions and corpuses in South America ([Beltrão and Locks 1993](#); [Miotti and Carden 2007](#); [Prous 2007](#); [Baeta and Prous 2017](#); [Carden 2009](#); [Troncoso et al. 2017, 2018](#); [Motta and Villanueva 2020](#); [Troncoso and Armstrong 2022](#); [Robinson et al. 2024](#)). Studies from across the globe demonstrate that it is extremely rare to find a direct relationship between the ratio of painted animal images to the species identified in associated archaeofaunal assemblages ([Laming-Emperaire 1957](#); [Leroi-Gourhan 1965](#); [Vinnicombe 1972](#); [Whitley 1994](#); [Lewis-Williams 2002](#); [Fiore and Zangrando 2006](#); [Valenzuela et al. 2015](#); [Russell 2017](#); [Valle et al. 2018](#)), and La Lindosa is no exception ([Robinson et al. 2024](#)). This disconnect alludes to the complex and many-layered social and ideological relationships between humans and animals beyond utilitarian exploitation ([Descola 1994, 2012](#); [Viveiros de Castro 1998](#); [Fiore and Zangrando 2006](#); [Valenzuela et al. 2015](#)).

As we have recently shown ([Robinson et al. 2024](#)), scenes of food preparation and consumption are not depicted in La Lindosa rock art. While the low frequency of representations of larger mammals (e.g., tapirs, deer) in the zooarchaeological assemblage at La Lindosa may be related to the lack of preservation of identifiable bone fragments ([Robinson et al. 2024](#)), it is worth noting that hunting taboos for multiple Amazonian groups generally avoid these larger mammals, in part due to the symbolic relationships with these important animals; unsurprisingly, hunting and consumption are mediated by the ideational domain ([Ross et al. 1978](#); [Reichel-Dolmatoff 1997](#); [Politis 2007](#); [Yoamara et al. 2020](#); [Robinson et al. 2024](#)). Indeed, the larger animals are often perceived to be more sacred and more potent because they embody spirit-ancestors ([Politis 2007](#); [Robinson et al. 2024](#)). The tapir, for example, in a complex and multi-stranded relationship, is incorporated into Tukano ontology and genealogy as an ancestor ([Reichel-Dolmatoff 1985, 1997](#)). A Tukanoan hunter's account notes that there are two types of tapir: the zoological animal, and one that has been transformed from a human ([Reichel-Dolmatoff 1997](#)); we should not be surprised by the fact that human figures at Cerro Azul often have animal feet (Figure 9). These kind of symbiotic and discursive relationships are also found within Amazonian ontologies in Brazil and Venezuela, where the consumption of certain primates (as well as tapir) is restricted because they are believed to be members of the family and/or ancestors ([Yoamara et al. 2020](#)).¹⁷



Figure 9. Human figure with animal feet at Principal.

The natural and supernatural worlds across Amazonia were and are fluidly integrated, and animals are endowed with human-like characteristics and behaviours (Århem 1996; Descola 1994, 2012; Reichel-Dolmatoff 1997; Viveiros de Castro 1998; Bird-David 1999; Cabrera et al. 1999; Politis and Saunders 2002; Iriarte et al. 2022b; Robinson et al. 2024). Animals often embody or contain the spirits of ancestors, with the three largest mammals of the forest—tapir, jaguar, and deer—particularly revered as spirit-animals; they are ‘like people’. Conflation of, and transformation between, animal and human states (including one animal species to another animal species) is a common component of Amazonian cosmologies, with numerous myths featuring transformation within and between a wide array of animal species (Descola 1994; Reichel-Dolmatoff 1997; Viveiros de Castro 1998; Bird-David 1999).

According to the Nukak (Iriarte et al. 2022b, p. 52), ‘tapirs are just like us. In *Bak*, the world below, tapirs keep jaguars as their pets. In *Bak*, tapirs remove their skin and show their human form. Tapirs enter our world, called *Yee*, through sacred natural salt licks (*salados*), they dress as animals and we take care of them.’ Here we see the shamanic concept of beings moving from one realm to another—an important concept that we return to below.

The serpent motifs at Cerro Azul are another example of animals that are not painted simply because they were ‘good to eat’.¹⁸ Some of the serpents at La Lindosa have legs and plumes on their heads (Figure 10). Serpents were and are of great importance to Indigenous groups, partly because they are liminal creatures, at home in the water and on land—like Amazonian *payés*, they can move from one realm to another (e.g., Reichel-Dolmatoff 1987, 1997). Serpents are also important because they are ‘re-born’ after shedding their skin—as are ritual specialists after certain rituals (e.g., Reichel-Dolmatoff 1987, 1997). There are numerous ethnographic accounts (e.g., Hugh-Jones 1979; Reichel-Dolmatoff 1987, 1997; Ballestas Rincón 2007; Riris et al. 2024) from Amazonia that include large snakes—often anacondas—as ancestral and/or celestial creator beings, often glossed as ‘snake-canoes’. These potent beings are found within animistic and shamanistic frameworks and, as in other parts of the Americas, are connected with re-birth, transformation, waterways, the sky and the Milky Way, and the underworld (Castaño-Urbe and van der Hammen 2005; Iriarte et al. 2022b; Hampson, forthcoming).¹⁹ At the site of Más Largo in September 2022, Ismael pointed to the plumed serpent motif with legs and said: ‘I am going to begin with this big anaconda, for us Tukanos the anaconda means a lot. Because the Tukano people, who are composed of twelve groups of people. . . we arrived in a spiritual world. . . We came from that spiritual world many, many years ago. . . Then we arrived and from there we made a transition. . .’ At the site of Raudal, too, Ulderico explained that ‘the power of the figures of La Lindosa is oriented by the power of the boa’. Clearly, rock artists in the Amazon did not depict animals simply because they saw them in the ‘real’, everyday world.

Animal tracks are absent from the art at Cerro Azul, and, as mentioned above, foot depiction often lacks definition or consistency in the number of digits; once again, this strongly suggests a stylistic and cultural choice rather than the representation of key

anatomical information that could aid a hunter (cf. [Robinson et al. 2024](#)). Circular foot and head elements are unlikely to represent the armour of European war dogs (*pace Urbina and Peña 2016*) because the feature appears on a range of (non-canid) quadrupedal animals (Figure 5f above). More importantly, two of the Indigenous informants who accompanied us to the sites rejected this claim. All of the above strengthens the hypothesis that the Cerro Azul artwork was *not* simply a means of depicting activities associated with everyday animal hunting, processing, or eating. As attested by numerous ethnographies and ethnohistories, hunter-prey relationships were and are embedded within complex social institutions and an overarching animistic framework.

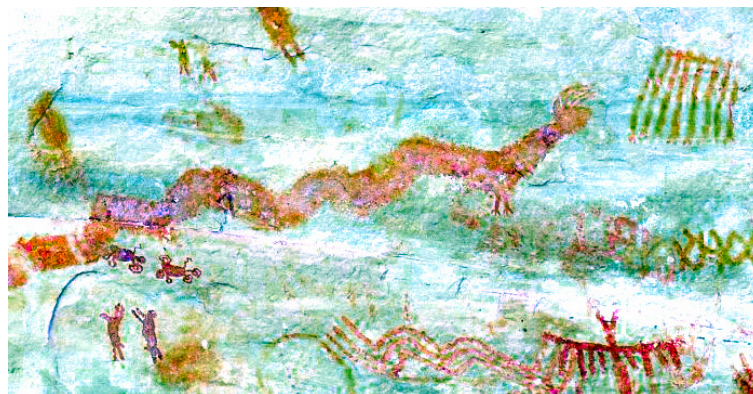


Figure 10. Serpent with legs and head plumes at Cerro Azul (digitally enhanced using D-Stretch filter lwe).

7. Hunting and Fishing in an Animistic World

At Las Dantas, a male human figure appears to be hunting a quadruped with a long spear (Figure 5c above). Nearby (on the same panel), two other ‘scenes’ show similar interactions with a canid (Figure 5b) and a deer. A further image at Más Largo depicts two humans connected to a deer (Figure 5e). As with all the motifs at Cerro Azul, these scenes are not necessarily literal, and the lines connecting humans and animals probably represent spiritual connections and a symbolic hunter-prey relationship within the animistic frameworks discussed above ([Reichel-Dolmatoff 1967, 1971, 1976](#); [Lewis-Williams et al. 2000](#); [Keyser and Whitley 2006](#); [McGranaghan and Challis 2016](#); [Stewart and Challis 2023](#); [Robinson et al. 2024](#); [Hampson, forthcoming](#)).²⁰

At Más Largo, there are instances of male human figures using lines to hook fish. Next to the human figures are large concentric circles, which at first glance seem to depict ripples in the water (Figure 11; see also Figure 5a above).



Figure 11. Male human figure (right), connected to a fish (digitally enhanced using D-Stretch filter lwe). Note also the unusual legs on the top left figure.

The meaning behind—and full significance of—the concentric circle and nested U-shape elements is unknown, but these geometric motifs are likely connected to ritual specialists and altered states of consciousness (see Figure 12; see also Reichel-Dolmatoff 1978b, 1987; Lewis-Williams 2002; Déléage 2007; Iriarte et al. 2022b; Iriarte et al., forthcoming; Hampson, forthcoming).²¹

MOTIFS													
	TUCANO ART	NUEVO TOLIMA	LAS DANTAS	LA RESERVA	PANEL PRINCIPAL	DIDIER	LOS CURRUNCHOS	DEMOLEDORES	FANTASMA	MASTODONTE	ARBOL	LA FUGA	SERPIENTE
1													
2													
3													
4													
5													
6													
7													
8													
9													

Figure 12. A comparison of the phosphene motifs drawn by Tukano shamans in altered states of consciousness (column 1) with the geometric motifs at La Lindosa (from Iriarte et al. 2022b). For more on geometric shapes at La Lindosa, (see Hampson, forthcoming and Iriarte et al., forthcoming).

Even if we do not know the full significance of the geometrics, we *do* know from ethnography and from the testimony of local informants that fish and fishing play an integral role in Indigenous animistic ontologies throughout Amazonia (e.g., Reichel-Dolmatoff 1971, 1987, 1997; Ballester 2018). A Yanomami (Venezuela) myth, for instance, includes Thueyoma—a female fish-being—who allowed herself to be captured (in human form) by the Creator Omama (Chagnon 1997). There are also numerous ethnographic narratives in which ritual specialists transform themselves in altered states of consciousness into caiman-men in order to capture women in rivers (Figure 13; see e.g., Nimuendajú 1939; Reichel-Dolmatoff 1997; Surallés 2005). One evening in September 2023, after returning from the rock art sites, Ismael showed us images in his book (Sierra 2019) and told us that ‘another being that transforms is the *tonina*, or freshwater dolphin. There is also *Wai majso* (fish woman)—or what white people would call mermaid.’ The very act of fishing, too, involves interaction between the realms of land and water (Hampson, forthcoming).



Figure 13. Possible caimans (eight, arranged symmetrically) at a circular salt lick, which is seen as a portal to the world below. Note how similar this motif is to the sunburst phosphene (type 6) in Figure 12.

8. Liminality, Portals, Transformation

Importantly, when we compare depictions of fishermen and the aquatic (heron-like) birds (Figures 5a and 4p above)—and indeed with the snake-bird-human motif at Nueva Tolima (Figure 7)—we see that the motifs have exaggerated knees; this is a crucial iconographic and conceptual link that should not be overlooked.²² Herons and other aquatic birds are of course liminal, cross-realm creatures that feature heavily in the animistic ethnography (e.g., Reichel-Dolmatoff 1997, p. 130; see also Appendix A) and indeed the testimonies of local informants. Victor, for instance, explained at the site of Principal that:

The [ritual specialist] who wanted to be transformed. . . the one who wanted to be a heron, that one dressed in his clothes and transformed himself and flew away. . . Spiritually they [the ritual specialists] ate and that's why they transformed into animals and went to look for food. . . And just like . . . the tapir, the deer, the heron, in that way they were converted, and they went out in search of food, and on their return. . . this is the door [pointing to the deer and U-shaped motif; see Figure 14 below]²³, that is the door, that is the door that the deer is entering, that is the main door, this is the big *maloca*, that is why we call it the *tepui*, at that time it was *maloca*, very big, this is where these tribes live. This is a secret that they have for all the South Americans who are here in the Orinoco. . . *Payés* fly and look for animals. A spirit can go below because he holds the world in one hand. Water birds can go into the world above and the world below.

In addition to the U-shaped portal and shamanic deer, another important section of the panel at Principal includes aquatic heron-like birds and bipedal human-like deer with their heads turned around as if to look at the birds (see top left of Figure 14; see also Figure 8 above; and right of Figure 15 below); again, and as attested by Victor and Ismael, this alludes to transformation and cross-realm liminality within an animistic framework (see Hampson, forthcoming).



Figure 14. U-shaped motif and deer at Principal. In September 2023, Victor, a Desana elder, explained that the U-shaped motif is a portal to the ‘big *maloca*’ behind the rock face and that the deer is a transformed ritual specialist. Note also the front-on bat motifs (top left) and the numerous geometric motifs—some of which are manifestations of the ancestral anaconda.



Figure 15. Human figure with elongated arms and unusual legs at Raudal. Note also the deer-like human figures looking back over their shoulders (digitally enhanced using D-Stretch filter lwe).

9. Shamanism and the Master of Animals Within a Tiered Cosmos

Within many Amazonian groups, human-animal relationships are mediated by *Wai-maxsè*, the Master of Animals and forest spirit who protects and controls animals (e.g., Reichel-Dolmatoff 1967, 1971, 1978a, 1987, 1997; Fausto 2008; Fernández-Llamazares and Virtanen 2020). The release of game and a successful hunt require negotiation with these spirits. Indeed, hunts were and are regulated by rules, restrictions, and rituals (Fernández-Llamazares and Virtanen 2020), many of which are related to fertility within an animistic ontology (see e.g., Descola 1994; Viveiros de Castro 1998; Bird-David 1999; Harvey 2002; 2014). There are several ethnographic and ethnohistoric examples of ritual specialists negotiating with the Master of Animals to release game; the shamans perform ritualised trances and visit rockshelters to paint animals before hunts:

With a red pigment they paint on rocky walls the animals which the hunters need, thus reaffirming their request to *Wai-maxsè*. Next to the figures, or within their bodies, they paint the signs which, according to the Tucano, symbolize fertility: rows of dots that signify

drops of semen, lines in zigzag which signify the succession of generations, or lines which fill up the body of the animal and signify its fecundity. (Reichel-Dolmatoff 1967, p. 111.)

As in many animistic traditions worldwide (e.g., Keyser and Whitley 2006; McGranaghan and Challis 2016; Challis 2019), there are special relationships in the Amazon between ritual specialists, rock art, hunters, and prey.²⁴ The Desana word *yee*, for instance, means both jaguar and shaman—and there are numerous ethnographic examples in the Amazon of ritual specialists transforming *into* jaguars (e.g., Reichel-Dolmatoff 1997, p. 140). Victor, at the site of Principal, told us that a ritual specialist ‘takes *yagé* snuff and turns into a jaguar. He can walk all over the world, all four parts of the world. If he is a good person, he can turn into a *payé*. You need to smell the *yagé* and then you transform and you get to know the people. When pointing to a jaguar painting in a book on the rock art of Chiribiquete, Ulderico explained that ‘it is not the jaguar of the forest we are talking about, it is the image of shamanic knowledge’.

A well-known Barasana myth also makes clear that jaguars are shamanic avatars as well as ‘mediators between the three cosmic divisions of the world, between life and death, between the human world and the spirit world of the ancestors, and between nature and culture’ (Hugh-Jones 1979, p. 125; see also Lewis-Williams 2002). Barasana shamans are believed to keep jaguars as other people keep dogs—and they become jaguars at death. Moreover, Barasana groups consider jaguars to be the ‘predators of the earth’; it is no coincidence that jaguars can swim and climb trees—like ritual specialists, they metaphorically transcend tiered cosmological realms (Hugh-Jones 1979, p. 125; see also McEwan 2001). In a similar manner, eagles and anacondas are associated with shamanic travel: eagles (the predators of the sky) swoop down to the earth and catch fish in rivers, and anacondas (the predators of the water and the underworld) often leave rivers and travel on dry land (Hugh-Jones 1979, pp. 124–25).

Bats (see Figures 4p and 14 above) are also important to many Amazonian groups not only because they are (unusual) flying mammals, but also because they, like jaguars and tapirs, are nocturnal. For many groups, night is associated with the underground realm of spirits—and also with ritualistic performance, altered states of consciousness, dreaming, and the dead (Reichel-Dolmatoff 1997). Bats of course hang upside down (towards the underworld) and congregate in caves, tree roots, and streams—liminal spaces which Indigenous groups believe are portals to other worlds (Reichel-Dolmatoff 1997; see also Iriarte et al. 2022b, p. 54). Moreover, pointing to the paintings of bats at the site of Principal, Victor told us: ‘So much has been said that those are the bats, but it happens that that . . . is a dress [a costume of the spirits; see below], and he [the *payé*] dresses up and transforms into a bat.’

Another example of embodied transformation is the human figure with elongated arms and unusual legs at Raudal (see Figure 15 above). Again, we know from Indigenous informants and ethnography that shamans in altered states of consciousness often describe themselves as having elongated limbs and other somatic distortions (see e.g., Hampson 2016; Hampson, forthcoming).

10. Shamans and Plants

It is not just animals that are important to Amazonian ritual specialists; as is well known, plants play a key role in animistic worldviews, too. Indeed, ritual specialists are sometimes known as *vegetalistas* (e.g., Reichel-Dolmatoff 1997; Langdon 2017). In Chiribiquete, there are painted depictions of *yagé*, yopo, virola, and tobacco plants (Castaño-Uribe 2019, pp. 209, 217, 219). Seeds of the hallucinogenic yopo (*Anadenanthera peregrina*) and copal (*Protium* sp.) resin—which is used as ceremonial incense by many Amazonian groups today—were found in excavations at La Lindosa (Iriarte et al. 2022b, p. 38; see also Rodd 2002; Daly 2024). At Cerro Azul, there are several examples of plant-like motifs with human-esque legs (Figure 16; see also Iriarte et al. 2022b, p. 72)—motifs we discuss in forthcoming papers.



Figure 16. Possible plant motif with human-esque legs at Demoledores Shelter.

11. Moving Forward, Caring for the Paintings, and Why This Research Matters

Further work is needed to ascertain exactly how strong animistic and shamanistic relationships might have been at La Lindosa—but local Indigenous testimonies make it clear that *at least some* of the rock art here is connected to ritual specialists negotiating spiritual realms and the interdigitation of human and other-than-human worlds (Hampson, *forthcoming*). The intertwining of this knowledge with other strands of evidence—including dozens of independently collected Amazonian ethnographies—underscores the ritualistic elements of the art and how those elements fit within wholistic ontological frameworks.

The preservation of the paintings of La Lindosa is of paramount importance to the Indigenous groups in the region. In September 2023, Ismael pointed out that the spirits have left: ‘Who is going to maintain [the paintings]? It’s like having your own house when you live in a house. . . . When you see that people are very tiresome, very annoying, they are making war all over the place, you have to leave—and that’s what is happening here. . . . Those who take care of you are spirits. . . . No one believes it, but here are the spirits. . . . We believe because my father was one of those [ritual specialists] who interacted with these characters [motifs] here. . . .’ These kinds of connections are personal, and real.

David Whitley (2021, p. 74) reminds us why anthropological approaches to rock art research are key:

[T]he explicit adoption of an ontological perspective was the foundation of ethnographically based shamanistic rock art interpretations. Absent this change, the ethnographic data would have remained unrecognized. The putative lack of such evidence would then continue to serve as justification for the colonialist claim that rock art has no connection to contemporary indigenous people, as was argued [in the Californian context] by Heizer and Baumhoff (1962) and has been parroted by many others, thereby continuing to strip indigenous peoples of their rightful heritage.

Clearly, it is only by listening to Indigenous elders and fully engaging with anthropological texts that we will be able to continue meaningful rock art research at La Lindosa.

Author Contributions: J.H.: conceptualisation, writing (original draft preparation, review and editing), methodology, fieldwork. J.I.: conceptualisation, writing, methodology, fieldwork, investigation, funding acquisition. F.J.A.: conceptualisation, writing, methodology, fieldwork, investigation, funding acquisition. All authors have read and agreed to the published version of the manuscript.

Funding: This work was funded by the ERC project LASTJOURNEY (ERC_Adv_834514). Fieldwork in 2023 was partly funded by a UKRI/AHRC Impact Accelerator Account, for a cultural heritage management diploma degree for local community archaeology tourist guides (J. Iriarte PI, with University of Antioquia (Medellín, Colombia) and the Secretariat of Culture and Tourism, Guaviare Department (Colombia)).

Data Availability Statement: The original contributions presented in the study are included in the article; further enquiries can be directed to the corresponding author.

Acknowledgments: Without the teachings of Victor, Ismael, Ulderico, and other elders in and around La Lindosa, this work would not have been possible; we thank them wholeheartedly. We are also extremely grateful for the assistance and friendship of the local communities, especially the families

of José Noé Rojas and Nelson Castro, our field guide Barbas, and the Junta de Acción Comunal El Raudal. This research was authorised by the Colombian Institute of Anthropology and History (ICANH) (permit number 7593). Ethics clearances were awarded by the ERC, UKRI, and ICANH. Two anonymous reviewers provided useful comments and suggestions.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A ²⁵

Ulderico's telling of the Matapí creation story, and how he became a shaman, sheds further light on the art of La Lindosa:

'When they [our ancestors] came down to Earth and arrived here. . . They came down from the world of the spiritual beings. . . they pulled half of the spiritual beings with them. . . And then the spirits that came down that had been torn apart . . . roamed the Earth like crazy, and then when they woke up they started to see a world of images, and **then the whole world of images—as we see it here—was going to be the transformation of the living beings** in the future world. . . . And then they began to concentrate,²⁶ they sat down, and then they began to organise it. . .

Their consciousness was born, the knowledge is all these images, and they accumulate it inside the 'knowing bench' . . . and in shamanic thought one has his enemies and that's why he has to see 'the way', how to hide the knowledge in the 'thinking bench' so they don't pester him. And then when they began to organize that, and those figures appeared, and that was where they sat down and began to capture—and how can I simply say—that they threw it away and remained in that figure, and thus they rethought each one of those figures, the figure how it is, and then this figure that we see manifests itself as the life of each species.

We have to read a figure, we have to read it from inside out. . . If we begin to look at the figure of each image it will give us many stories, and then what appears in each image is the knowledge of each species, and that is what is handled at the shamanic level. If I did not know any of these components of the figure I would not have the capacity to manage this world that is here. . . And after they organized it, the beginning of the second era arrives and that is where they begin to take. . . that is how they materialize it, that is where they give it the name, its habitat and all the shamanic knowledge that it has to manage it. . . And that is how we begin to know the pictographs. . . . Because this is a world of knowledge. . . I tell you each one of these figures contributed the shamanic knowledge for our own management of the territory where we are. . . When this knowledge comes out it appears as a wardrobe, as a shamanic wardrobe, as a guide to be able to practice shamanism. . .'

Ulderico also told us about his initiation, and what he had to endure to become a ritual specialist:

'After the fifteen days that you fast, your vision goes. . . You suddenly go out into the bush and all the noises prepare you as you begin to hear how the animals talk, and you no longer consider them as animals, and then when you see how everything is—let's say the spiritual representation of each tree, of each place, of each place of respect—then you begin to be able to relate to that, and **if you do not get into the vision of a shaman from beyond then you cannot interpret this**, and then you cannot manage your own territory—that is what happened to my two brothers.'

Ulderico also explained that after his initiation, he used to 'concentrate' once a month in order to be in 'continuous contact with the spirituality of these figures'.

Notes

- 1 On the use of ethnographic analogy, (see [Wylie 1985](#); [Lewis-Williams 1991](#); [Currie 2016](#); [Whitley 2021](#); also, see below).
- 2 Unsurprisingly, each group in the Amazon has their own particular term for shaman. In this paper, we use the words *payé*, shaman, *rezadore* ('one who prays'), and 'ritual specialist' interchangeably. (See also [Castaño-Urbe and van der Hammen 2005](#)). Below, we discuss the role of shamans within animistic and perspectivist frameworks.
- 3 Rock art sites in the nearby Inírida River and Chiribiquete regions contain similar motifs ([Urbina 1994](#); [Castaño-Urbe and van der Hammen 2005](#); [van der Hammen 2006](#); [Argüello and Martínez 2016](#); [Castaño-Urbe 2019](#)), suggesting a shared animistic ontology and artistic practice, albeit with distinct regional variations (see below).
- 4 As outlined below, although we start with etic categories here, we recognise the inherent issues of subjectivity and ambiguity within any form of categorisation and art interpretation. Classifications are of course subject to change as understanding of the artistic tradition increases, and in this article we adapt emic concepts and categories wherever possible. We also acknowledge here that, by themselves, numbers—and indeed the empiricist paradigm as a whole—do not help us establish the *meanings* of rock art motifs (see, e.g., [Lewis-Williams 2006](#)).
- 5 Schematised images are primarily abstractions from a human or animal form that incorporate distinctly 'non-realistic' (from a Western perspective) elements. (This does not include the therianthrope merging of animal and human features, which is included under Animals—see below.) A common schematised motif, for example, is a series of vertical lines that lack defined human features, but suggest a human figure because of the addition of limb-like appendages (see [Robinson et al. 2024](#)). Geometric motifs, incorporating repeated basic shapes, are common in the region. Importantly, we know that for many Indigenous groups in the Amazon, animals are often manifested in artwork as geometric designs; zig-zags and undulating lines, for instance, often represent snakes, while a scroll design sometimes invokes a jaguar's spots (see below; see also [Iriarte et al. 2022b](#); [Hampson, forthcoming](#)). Importantly, we also know that geometric designs are often considered to be 'gifts' from animal and plant 'donors' (e.g., [Reichel-Dolmatoff 1997](#)). The Abstract category includes irregular non-figurative or geometric images, whereas the Unknown category encompasses images that—usually due to poor preservation—cannot be clearly identified. Future papers (e.g., [Oosterwijk et al., forthcoming](#) on handprints, and [Iriarte et al., forthcoming](#) on the relationship between dancing figures and geometrics) consider specific motifs, category by category. For a discussion of the importance of animal figures at La Lindosa, (see [Robinson et al. 2024](#)).
- 6 As in many parts of the world, more work needs to be done on how scenes are identified and categorised. One of us ([Hampson 2019, 2024](#)) has previously shown that what we as Western researchers identify as a 'scene' does not always tally with Indigenous concepts and beliefs. Similarly, researchers have usually found it extremely challenging to establish consistent definitions for 'static' and 'dynamic' motifs.
- 7 [Reichel-Dolmatoff \(1997, p. 33–34\)](#) points out that the 'true specialists . . . in classificatory systems are the shamans who, because of their practical and esoteric activities, must handle enormous masses of data. To bring order into the visible and invisible universe, as conceived by the Desana, and to make all tangible and unseen phenomena amenable to manipulation and control are tasks all shamans must cope with, and the methods and aims of classificatory systems are often a matter of discussion by shamans and elders.'
- 8 As [Furst and Furst \(1981, p. 26\)](#) made clear more than 40 years ago, for instance, Reichel-Dolmatoff 'is one of the lamentably small handful of ethnographers who insist that the ideology and intellectual life of native peoples deserve to be taken seriously . . . and who recognize not just the decisive role of ideology in the regulation and organization of daily life but the functional interrelationship of mental life with the environment, whether sociocultural or natural.' Similarly, [Alberti and Bray \(2009, p. 337\)](#) point out that in re-visiting the ethnographic and ethnohistorical texts of animistic groups, 'we find indigenous accounts serving as both models for the exploration of past peoples through the archaeological record and as an intellectual resource for modelling theories about the archaeological record.' Several anthropological rock art researchers (e.g., [Lewis-Williams 2002](#); [Whitley 2009](#)) have been employing similar methodologies since the 1970s and 80s. For more on animism, perspectivism, and multinaturalist conceptions of the world, (see e.g., [Descola 1994](#); [Århem 1996](#); [Viveiros de Castro 1998](#)).
- 9 As we shall see below, Indigenous elders repeatedly refer to the paintings as animistic and shamanistic 'knowledge', in order to help manage their territory.
- 10 When Indigenous peoples tell us that there are such things as 'other-than-human-persons' ([Hallowell 1960, p. 36](#)), then 'the anthropological exercise is not about translating the idea of nonhuman persons into concepts we already know, but rather about challenging our own assumptions about personhood so as to make it possible for us to imagine how persons in *this* world actually include humans and nonhumans alike.' ([Willerslev 2013, p. 42](#)).
- 11 A *maloca* is a house modelled on the cosmological beliefs of many Indigenous groups in the Amazon (e.g., [Reichel-Dolmatoff 1997](#)); *malocas* are often painted with shamanistic motifs.
- 12 *Yagé*, also known as ayahuasca, is made from the hallucinogenic *Banisteriopsis caapi* vine. As we shall see below, entering shamanic altered states of consciousness was and is widespread in Amazonia (e.g., [Reichel-Dolmatoff 1997](#); [Langdon 2017](#)).
- 13 Victor also mentioned that the Nueva Tolima rock art site was 'another *maloca*'.
- 14 The Jiw group's traditional lands straddle the Guaviare and Meta border.

- ¹⁵ As Loubser and Lewis-Williams (2014, p. 4) point out, however, ‘The current trend to deny the usefulness of ethnographies in archaeological research, whilst laudable in its critical endeavour, is often too dismissive. Valuable records of Indigenous peoples’ beliefs are today sometimes jettisoned along with what are clearly spurious or superficial accounts.’
- ¹⁶ According to Whitley (2021, p. 69): ‘Earlier researchers [working with Indigenous groups in western North America] did not apprehend the ontological distinctions that made the ethnographic statements logical, consistent and informed, instead inferring that the commentary was incoherent gibberish signaling a lack of any knowledge about the art.’
- ¹⁷ Tapirs ‘in real life’ have three toes on the front foot, and four on the back. Tapir paintings (e.g., Figure 4e above), on the other hand, always have two toes (on both front and back feet). Unsurprisingly, symbolic relationships between Amazonian groups and tapirs ‘develop on several different levels and use many different images’ (Reichel-Dolmatoff 1997, p. 81; see also Cabrera et al. 1999). Tapir is sometimes equated with Thunder, a powerful being who lives in the sky; in several myths, the first Desana take narcotic snuff and visit Thunder ‘by climbing up to the sky on a column of tobacco smoke’ (Reichel-Dolmatoff 1987, p. 81). Tapirs also feature in the myth concerning the origin of the hallucinogenic coca plant (e.g., Reichel-Dolmatoff 1997). For the Nukak, a person has three spirits which take different paths upon death; one of the spirits journeys to the ‘tapir’s home’ and emerges at night (Cabrera et al. 1999). Large trees also have spirits which make their way to the ‘house of the tapir’ (Cabrera et al. 1999).
- ¹⁸ As Lévi-Strauss (1963) famously said, ‘*Les animaux sont bons à penser.*’
- ¹⁹ For the Barasana, if an anaconda wishes to eat birds, it simply sheds its skin and becomes an eagle—another important shamanic avatar (see below, and Hugh-Jones 1979, p. 125).
- ²⁰ Moreover, as Furst and Furst (1981, p. 262) point out, the Desana ‘seek to assure continued balance between their needs and the environmental possibilities by supernatural means. Hunting is thus as much a matter of ideological determinants as of economic ones.’
- ²¹ Lewis-Williams and Dowson (1988) famously drew much of their research on phosphenes, entoptics, and neurologically induced geometric imagery from the work of Reichel-Dolmatoff in the Amazon.
- ²² Several ‘dancing figures’ also have exaggerated knees, or what might possibly be dancing rattles (see Iriarte et al., forthcoming for the possible connections between dancing, geometrics, and fishing; see also Hampson, forthcoming).
- ²³ Victor, pointing to another U-shaped geometric motif at the same panel, said: ‘This could be a shortcut, to use if your enemies are chasing you, a portal. It could also be a metaphor: if you get sick, you can use the shortcut to get healed.’ Ismael, on another visit to Principal, made it clear that ‘That’s why there has to be a main promenade that says ‘here is the door to leave the offerings’...’
- ²⁴ As Whitley (2021, p. 73) states, ritual specialists ‘were the necessary bridge upon which these relationships were established. That is, these relationships required the active participation of [ritual specialists] with the production of rock art a key performative element in their practices.’
- ²⁵ Interview recorded and transcribed on 1 September 2022.
- ²⁶ Ulderico explained later that ‘to concentrate’ was akin to going into an altered state of consciousness.

References

- Abram, David. 2010. Becoming animal. *Green Letters* 13: 7–21. [CrossRef]
- Aceituno, Francisco Javier, Mark Robinson, Gaspar Morcote-Ríos, Ana María Aguirre, Jo Osborn, and José Iriarte. 2024. The peopling of Amazonia: Chrono-stratigraphic evidence from Serranía La Lindosa, Colombian Amazon. *Quaternary Science Reviews* 327: 108522. [CrossRef]
- Alberti, Benjamin, and Tamara Bray. 2009. Animating archaeology: Of subjects, objects and alternative ontologies. *Cambridge Archaeological Journal* 19: 337–43. [CrossRef]
- Argüello, Pedro, and Diego Martínez. 2016. Rock Art Research in Colombia. *Rupestreweb*. Available online: <http://www.rupestreweb.info/colombia.html> (accessed on 1 June 2024).
- Århem, Kaj. 1996. The cosmic food web: Human–nature relatedness in the northwest Amazon. In *Nature and Society: Anthropological Perspectives*. Edited by Philippe Descola and Gísli Pálsson. London: Routledge, pp. 185–204.
- Baeta, Alenice, and André Prous. 2017. The history of the studies of prehistoric rock paintings in the Lagoa Santa karst. In *Archaeological and Paleontological Research in Lagoa Santa: The Quest for the First Americans*. Edited by Pedro Da-Gloria, Walter Neves and Mark Hubbe. Cham: Springer, pp. 319–44.
- Ballestas Rincón, Luz. 2007. *La Serpiente en el Diseño Indígena Colombiano*. Bogotá: Universidad Nacional de Colombia.
- Ballester, Benjamin. 2018. El Médano rock art style: Izcuña paintings and the marine hunter-gatherers of the Atacama Desert. *Antiquity* 92: 132–48. [CrossRef]
- Becerra, José. 2019. *Pinturas Rupestres de la Vereda Nuevo Tolima, San José de Guaviare*. Bogota: Organización Internacional para las Migraciones.
- Beltrão, Maria, and Martha Locks. 1993. Rock paintings of mammals at Central, Bahia, Brazil. *Revista Brasileira de Zoologia* 10: 727–45. [CrossRef]
- Bird-David, Nurit. 1999. “Animism” revisited: Personhood, environment, and relational epistemology. *Current Anthropology* 40: 67–91. [CrossRef]

- Brito-Sierra, Carlos, and Hugo López-Arévalo. 2015. Registro de mamíferos en las pinturas rupestres de Cerro Azul, Guaviare, Colombia. In *Saberes Etnozoológicos Latinoamericanos*. Edited by Rafael Monroy, Alejandro García Flores, José Pino Moreno and Eraldo Costa Neto. Feira de Santana: UEFS Editora, pp. 175–85.
- Cabrera, Gabriel, Carlos Franky, and Dany Mahecha. 1999. *Los Nukak: Nómadas de la Amazonía Colombiana*. Santafé de Bogotá: Editorial Universidad Nacional.
- Carden, Natalia. 2009. Prints on the rocks: A study of the track representations from Piedra Museo locality (Southern Patagonia). *Rock Art Research* 26: 29–42.
- Castaño-Urbe, Carlos. 2019. *Chiribiquete. La Maloka Cosmica de los Hombres Jaguar*. Bogota: Villegas Editores.
- Castaño-Urbe, Carlos, and Thomas van der Hammen. 2005. *Visiones y Alucinaciones del Cosmos Felino y Chamanístico de Chiribiquete*. Bogota: UASESPNN Ministerio del Medio Ambiente, Fundacion Tropenbos-Colombia. Embajada Real de los Países Bajos.
- Cayón, Luis, and Thiago Chacon. 2014. Conocimiento, historia y lugares sagrados. La formación del sistema regional del alto río Negro desde una visión interdisciplinaria. *Anuario Antropológico* 39: 201–36. [\[CrossRef\]](#)
- Chagnon, Napoleon. 1997. *Yanomamo*. New York: Harcourt Brace College.
- Challis, Sam. 2019. High and mighty: A San expression of excess potency control in the high-altitude hunting grounds of southern Africa. *Time and Mind: The Journal of Archaeology, Consciousness, and Culture* 12: 169–85. [\[CrossRef\]](#)
- Correal, Gonzalo, Thomas van der Hammen, and Fernando Piñeres. 1990. Guayabero I: Un Sitio Precerámico de la Localidad Angosturas II, San José del Guaviare. *Caldasia* 16: 245–54.
- Currie, Adrian. 2016. Ethnographic analogy, the comparative method, and archaeological special pleading. *Studies in History and Philosophy of Science* 55: 84–94. [\[CrossRef\]](#)
- Daly, Lewis. 2024. Fragrant ecologies: Aroma and olfaction in Indigenous Amazonia. In *Smell, Taste, Eat: The Role of the Chemical Senses in Eating Behaviour*. Edited by Lorenzo Stafford. London: Palgrave Macmillan, pp. 141–63.
- Descola, Philippe. 1994. *In the Society of Nature: A Native Ecology in Amazonia*. Cambridge: Cambridge University Press.
- Descola, Philippe. 2012. Beyond nature and culture: The traffic of souls. *Journal of Ethnographic Theory* 2: 473–500.
- Déléage, Philippe. 2007. Amazonian graphic directories. *Journal of the Society of Americanists* 93: 97–126. [\[CrossRef\]](#)
- Fausto, Carlos. 2008. Too many owners: Mastery and ownership in Amazonia. *Mana* 4: 329–66. [\[CrossRef\]](#)
- Fernández-Llamazares, Álvaro, and Pirjo Virtanen. 2020. Game masters and Amazonian Indigenous views on sustainability. *Current Opinion in Environmental Sustainability* 43: 21–27. [\[CrossRef\]](#)
- Fiore, Danae, and Atilio Zangrando. 2006. Painted fish, eaten fish: Artistic and archaeofaunal representations in Tierra del Fuego, Southern South America. *Journal of Anthropological Archaeology* 25: 371–89. [\[CrossRef\]](#)
- Fulop, Marcos. 1954. Aspectos de la cultura Tukana: Cosmogonía. *Revista Colombiana de Antropología* 3: 99–137. [\[CrossRef\]](#)
- Furst, Peter, and Jill Furst. 1981. Seeing a culture without seams: The ethnography of Gerardo Reichel-Dolmatoff. *Latin American Research Review* 16: 258–63. [\[CrossRef\]](#)
- Gheerbrant, Alain. 1993. *L'Expédition Orénoque-Amazone: 1948–1950*. Paris: Gallimard Education.
- Goldman, Irving. 1940. Cosmological beliefs of the Cubeo Indians. *Journal of American Folklore* 53: 242–47. [\[CrossRef\]](#)
- Hallowell, Alfred Irving. 1960. Ojibwa Ontology, Behaviour, and World View. In *Culture in History: Essays in Honor of Paul Radin*. Edited by Stanley Diamond. New York: Columbia University Press, pp. 19–51.
- Hampson, Jamie. 2015. *Rock Art and Regional Identity: A Comparative Perspective*. London: Routledge.
- Hampson, Jamie. 2016. Embodiment, transformation and ideology in the rock art of Trans-Pecos Texas. *Cambridge Archaeological Journal* 26: 217–41. [\[CrossRef\]](#)
- Hampson, Jamie. 2019. Symbolism, aesthetics, and narrative in rock art. In *Aesthetics, Applications, Artistry and Anarchy: Essays in Prehistoric and Contemporary Art*. Edited by Jillian Huntley and George Nash. Oxford: Archaeopress, pp. 109–18.
- Hampson, Jamie. 2024. Towards an understanding of Indigenous rock art from an ideational cognitive perspective: History, method, and theory from west Texas, North America, and beyond. In *Oxford Handbook of Cognitive Archaeology*. Edited by Thomas Wynn, Karenleigh Overmann and Frederick Coolidge. Oxford: Oxford University Press, pp. 1019–42.
- Hampson, Jamie. forthcoming. *Rock Art and Animism in the Colombian Amazon: Meaning and Motivation at La Serranía La Lindosa*.
- Hampson, Jamie, Sam Challis, and Joakim Goldhahn, eds. 2022. *Powerful Pictures: Rock Art Research Histories Around the World*. Oxford: Archaeopress.
- Harvey, Graham, ed. 2002. *Readings in Indigenous Religions*. London: Bloomsbury.
- Harvey, Graham. 2014. Relational health: Animists, shamans and the practice of well-being. In *Science and Religion: One Planet, Many Possibilities*. Edited by Lucas Johnson and Whitney Bauman. London: Routledge, pp. 204–15.
- Heizer, Robert, and Martin Baumbhoff. 1962. *Prehistoric Rock Art of Nevada and Eastern California*. Berkeley: University of California Press.
- Hugh-Jones, Stephen. 1979. *The Palm and the Pleiades: Initiation and Cosmology in Northwest Amazonia*. Cambridge: Cambridge University Press.
- Hugh-Jones, Stephen. 1996. Shamans, prophets, priests and pastors. In *Shamanism, History, and the State*. Edited by Nicholas Thomas and Caroline Humphrey. Ann Arbor: University of Michigan Press, pp. 32–75.
- Hugh-Jones, Stephen. 2016. Writing on stone; writing on paper: Myth, history and memory in NW Amazonia. *History and Anthropology* 27: 154–82. [\[CrossRef\]](#)
- Hultkrantz, Åke. 1987. *Native Religions of North America: The Power of Visions and Fertility*. San Francisco: Harper and Row.
- Ingold, Timothy. 2006. Rethinking the animate, re-animating thought. *Ethnos* 71: 9–20. [\[CrossRef\]](#)

- Iriarte, José, Alan Outram, Michael Ziegler, Patrick Roberts, Mark Robinson, Gaspar Morcote-Ríos, Francisco Javier Aceituno, and Michael Keeseey. 2022a. Ice Age megafauna rock art in the Colombian Amazon? *Philosophical Transactions of the Royal Society B* 377: 20200496. [[CrossRef](#)] [[PubMed](#)]
- Iriarte, José, Jamie Hampson, Andrzej Rozwadowski, Francisco Javier Aceituno, and Barbara Oosterwijk. forthcoming. Dancing figures and geometrics in the rock art of La Lindosa, Colombia. *Cambridge Archaeological Journal*.
- Iriarte, José, Mark Robinson, Francisco Javier Aceituno, Gaspar Morcote-Ríos, and Michael Ziegler. 2022b. *The Painted Forest: Rock art and Archaeology in the Colombian Amazon*. Exeter: University of Exeter Press.
- Keyser, James, and David Whitley. 2006. Sympathetic magic in western North American rock art. *American Antiquity* 71: 3–26. [[CrossRef](#)]
- Kohn, Eduardo. 2013. *How Forests Think: Toward an Anthropology Beyond the Human*. Berkeley: University of California Press.
- Kopenawa, Davi, and Bruce Albert. 2013. *The Falling Sky: Words of a Yanomami Shaman*. Cambridge: Harvard University Press.
- Laird, Carobeth. 1976. *The Chemehuevi*. Banning: Malki Museum Press.
- Laming-Emperaire, Annette. 1957. Civilisations préhistoriques. (Fouilles et recherches de laboratoires; le développement des civilisations). In *L'Homme, Race et Moeurs*. Edited by André Leroi-Gourhan. Paris: Encyclopédie Clartés, vol. 87, pp. 4500–900.
- Langdon, Esther. 2017. From rau to sacred plants: Transfigurations of shamanic agency among the Siona Indians of Colombia. *Social Compass* 64: 343–59. [[CrossRef](#)]
- Leroi-Gourhan, André. 1965. *Treasures of Prehistoric Art*. New York: Abrams.
- Lewis-Williams, James David. 1981. *Believing and Seeing: Symbolic Meanings in Southern African San Rock Art*. London: Academic Press.
- Lewis-Williams, James David. 1991. Wrestling with analogy: A methodological dilemma in Upper Palaeolithic rock art research. *Proceedings of the Prehistoric Society* 57: 149–62. [[CrossRef](#)]
- Lewis-Williams, James David. 2002. *A Cosmos in Stone: Interpreting Religion and Society Through Rock Art*. Lanham: Rowman Altamira.
- Lewis-Williams, James David. 2006. The evolution of theory, method and technique in southern African rock art research. *Journal of Archaeological Method and Theory* 13: 343–77. [[CrossRef](#)]
- Lewis-Williams, James David. 2024. Rock art and cognitive archaeology: A personal southern African journey. In *Oxford Handbook of Cognitive Archaeology*. Edited by Thomas Wynn, Karenleigh Overmann and Frederick Coolidge. Oxford: Oxford University Press, pp. 55–77.
- Lewis-Williams, James David, and Thomas Dowson. 1988. The signs of all times: Entoptic phenomena in Upper Palaeolithic art. *Current Anthropology* 29: 201–45. [[CrossRef](#)]
- Lewis-Williams, James David, Geoffrey Blundell, William Challis, and Jamie Hampson. 2000. Threads of light: Re-examining a motif in southern African San rock art research. *South African Archaeological Bulletin* 55: 123–36. [[CrossRef](#)]
- Lévi-Strauss, Claude. 1963. *Totemism*. Boston: Beacon Press.
- Loubser, Johannes, and James David Lewis-Williams. 2014. Bridging Realms: Towards Ethnographically Informed Methods to Identify Religious and Artistic Practices in Different Settings. *Time and Mind: The Journal of Archaeology, Consciousness, and Culture* 7: 109–39.
- McDonald, Josephine. 2013. Contemporary meanings and the recursive nature of rock art: Dilemmas for a purely archaeological understanding of rock art. *Time and Mind: The Journal of Archaeology, Consciousness, and Culture* 6: 65–72. [[CrossRef](#)]
- McEwan, Colin. 2001. Seats of power: Axiality and access to invisible worlds. In *Unknown Amazon*. Edited by Colin McEwan, Cristiana Barreto and Eduardo Neves. London: British Museum Press, pp. 176–97.
- McGranaghan, Mark, and Sam Challis. 2016. Reconfiguring hunting magic: Southern Bushman (San) perspectives on taming and their implications for understanding rock art. *Cambridge Archaeological Journal* 26: 579–99. [[CrossRef](#)]
- Métraux, Alfred. 1949. Religion and shamanism. In *Handbook of South American Indians*; Edited by Julian Steward. Washington, DC: United States Printing Office, vol. 5, pp. 559–99.
- Miotti, Laura, and Natalia Carden. 2007. *Relationships between Rock Art and the Archaeofauna in the Central Patagonian plateau (Argentina)*. Oxford: BAR Publishing, p. 203.
- Morcote-Ríos, Gaspar, José Iriarte, Francisco Javier Aceituno, Mark Robinson, and Jeison Chaparro-Cárdenas. 2021. Colonisation and early peopling of the Colombian Amazon during the Late Pleistocene and the Early Holocene: New evidence from La Serranía La Lindosa. *Quaternary International* 578: 5–19. [[CrossRef](#)]
- Moro-Abadía, Oscar, and Martin Porr, eds. 2021. *Ontologies of Rock Art: Images, Relational Approaches, and Indigenous Knowledge*. London: Routledge.
- Motta, Ana, and Guadalupe Romero Villanueva. 2020. South American art. In *Encyclopedia of Global Archaeology*. Edited by Claire Smith. New York: Springer, pp. 2914–40.
- Munduruku, Jairo, Eliano Munduruku, and Raoni Valle. 2021. Muraycoko Wuyta'a Be Surabudodot/Ibararakat: Rock art and territorialization in contemporary Indigenous Amazonia—The case of the Munduruku people from the Tapajós River. In *Visual Culture, Heritage and Identity: Using Rock Art to Reconnect Past and Present*. Edited by Andrzej Rozwadowski and Jamie Hampson. Oxford: Archaeopress, pp. 107–19.
- Muñoz, Guillermo. 2020. Estética amazónica y discusiones contemporáneas: El arte rupestre de la serranía La Lindosa, Guaviare, Colombia. *Revista de Investigación en el Campo del Arte* 15: 14–39. [[CrossRef](#)]
- Nimuendajú, Curt. 1939. *The Apinayé*. Washington, DC: The Catholic University of America Press.
- Oosterwijk, Barbara, Jo Osborn, José Iriarte, Jamie Hampson, Francisco Javier Aceituno, and Gaspar Morcote-Ríos. forthcoming. A cross-cultural analysis of decorated handprints in rock art: A view from La Lindosa, Colombian Amazon. *World Archaeology*.

- Pilaar Birch, Suzanne, ed. 2018. *Multispecies Archaeology*. London: Routledge.
- Politis, Gustavo. 2007. *Nukak: Ethnoarchaeology of an Amazonian People*. Walnut Creek: Left Coast Press.
- Politis, Gustavo, and Nicholas Saunders. 2002. Archaeological correlates of ideological activity: Food taboos and spirit-animals in an Amazonian hunter-gatherer society. In *Consuming Passions and Patterns of Consumption*. Edited by Preston Miracle and Nicky Milner. Cambridge: McDonald Institute for Archaeological Research, pp. 113–30.
- Prous, André. 2007. *Arte Pré-histórica do Brasil*. Belo Horizonte: Arte, vol. 1.
- Reichel-Dolmatoff, Geraldo. 1967. A brief field report on urgent ethnological research in the Vaupés Area, Colombia, South America. *Bulletin of the International Committee on Urgent Anthropological and Ethnological Research Wien* 9: 53–62.
- Reichel-Dolmatoff, Geraldo. 1971. *Amazonian Cosmos: The Sexual and Religious Symbolism of the Tukano Indians*. Chicago: University of Chicago Press.
- Reichel-Dolmatoff, Geraldo. 1976. Cosmology as ecological analysis: A view from the rain forest. *Man* 11: 307–18. [[CrossRef](#)]
- Reichel-Dolmatoff, Geraldo. 1978a. *Beyond the Milky Way: Hallucinatory Imagery of the Tukano Indians*. Los Angeles: UCLA Latin American Center.
- Reichel-Dolmatoff, Geraldo. 1978b. Drug-induced optical sensations and their relationship to applied art among some Colombian Indians. In *Art and Society: Studies in Style, Culture and Aesthetics*. Edited by Michael Greenhalgh and Vincent Megaw. London: Duckworth, pp. 289–304.
- Reichel-Dolmatoff, Geraldo. 1985. Tapir avoidance in the Colombian Northwest Amazon. In *Animal Myths and Metaphors in South America*. Edited by Gary Urton. Salt Lake City: University of Utah Press, pp. 107–43.
- Reichel-Dolmatoff, Geraldo. 1987. *Shamanism and Art of the Eastern Tukanoan Indians: Colombian Northwest Amazon*. Groningen: Institute of Religious Iconography.
- Reichel-Dolmatoff, Geraldo. 1997. *Rainforest Shamans: Essays on the Tukáno Indians of the Northwest Amazon*. Dartington: Themis Books.
- Riris, Philip, José Oliver, and Natalia Lozada Mendieta. 2024. Monumental snake engravings of the Orinoco River. *Antiquity* 98: 724–42. [[CrossRef](#)]
- Rivière, Peter. 1994. WYSINWYIG in Amazonia. *Journal of the Anthropological Society of Oxford* 25: 255–62.
- Robinson, Mark, Francisco Javier Aceituno, Gaspar Morcote-Ríos, Juan Berrío, Patrick Roberts, and José Iriarte. 2021. 'Moving South': Late Pleistocene plant exploitation and the importance of palm in the Colombian Amazon. *Quaternary* 4: 26. [[CrossRef](#)]
- Robinson, Mark, Jamie Hampson, Francisco Javier Aceituno, Gaspar Morcote-Ríos, Jo Osborn, Michael Ziegler, and José Iriarte. 2024. Animals of the Serranía de la Lindosa: Exploring representation and categorisation in the rock art and zooarchaeological remains of the Colombian Amazon. *Journal of Anthropological Archaeology* 75: 101613. [[CrossRef](#)]
- Rodd, Robin. 2002. Snuff synergy: Preparation, use and pharmacology of *yopo* and *Banisteriopsis caapi* among the Piaroa of southern Venezuela. *Journal of Psychoactive Drugs* 34: 273–79. [[CrossRef](#)]
- Ross, Eric, Margaret Arnott, Ellen Basso, Stephen Beckerman, Robert Carneiro, Richard Forbis, and Wilma Wetterstrom. 1978. Food taboos, diet, and hunting strategy: The adaptation to animals in amazon cultural ecology. *Current Anthropology* 19: 1–36. [[CrossRef](#)]
- Rostain, Stéphen. 2019. Un Lascaux en Amazonie. *Pour la Science* 498: 24–35. [[CrossRef](#)]
- Russell, Themi. 2017. 'People will no longer be people but will have markings and be animals': Investigating connections between diet, myth, ritual and rock art in southern African archaeology. *Azania: Archaeological Research in Africa* 52: 192–208. [[CrossRef](#)]
- Santos-Granero, Fernando. 2008. Writing history into the landscape: Space, myth and ritual in contemporary Amazonia. *American Ethnologist* 25: 128–48. [[CrossRef](#)]
- Santos-Granero, Fernando. 2009. *The Occult Life of Things: Native American Theories of Materiality and Personhood*. Flagstaff: University of Arizona Press.
- Shepard, Glen. 1999. Shamanism and diversity: A Machiguenga perspective. In *Cultural and Spiritual Values of Diversity: Indigenous Peoples, Their Environments and Territories*. Edited by Darrell Posey. London: Intermediate Technology Publications, pp. 93–95.
- Sierra, Ismael. 2019. *El Payé y los Mundos Espirituales*. San José de Guaviare: Gobernación del Guaviare, Secretaria de Cultura y Turismo.
- Stewart, Brian, and Sam Challis. 2023. Becoming elands' people: Neoglacial subsistence and spiritual transformations in the Maloti-Drakensberg Mountains, southern Africa. *Transactions of the Royal Society of South Africa* 78: 123–47. [[CrossRef](#)]
- Stoffle, Richard, Kathleen Van Vlack, Hannah Johnson, Phillip Dukes, Stephanie De Sola, and Kristen Simmons. 2011. *Tribally Approved American Indian Ethnographic Analysis of the Proposed Delamar Valley Solar Energy Zone*. Washington, DC: Bureau of Land Management Solar Programmatic EIS.
- Surallés, Alexandre. 2005. Intimate horizons: Person, perception and space among the Candoshi. In *The Land Within: Indigenous Territory and Perception of the Environment*. Edited by Alexandre Surallés and Pedro García Hierro. Copenhagen: International Work Group for Indigenous Affairs, pp. 126–49.
- Troncoso, Andrés, and Felipe Armstrong. 2022. Making rock art: Correspondences, rhythms, and temporalities. *Journal of Archaeological Method and Theory* 30: 1–25. [[CrossRef](#)]
- Troncoso, Andrés, Felipe Armstrong, and Mara Basile. 2017. Rock art in Central and South America: Social settings and regional diversity. In *The Oxford Handbook of the Archaeology and Anthropology of Rock Art*. Edited by Bruno David and Ian McNiven. Oxford: Oxford University Press.
- Troncoso, Andrés, Marcela Sepúlveda, Francisca Moya, and José Carcamo. 2018. First absolute dating of Andean hunter-gatherer rock art paintings from North Central Chile. *Archaeological and Anthropological Sciences* 9: 223–32. [[CrossRef](#)]

- Trujillo, Judith. 2016. Step forwards in the archaeometric studies on rock paintings in the Bogotá Savannah, Colombia. Analysis of pigments and alterations. In *Paleoart and Materiality: The Scientific Study of Rock Art*. Edited by Robert Bednarik, Danae Fiore and Mara Basile. Oxford: Archaeopress, pp. 73–84.
- Tuyuka, Poani, Kumu Tukano, Kumu Makuna, Kumu Desano, and Raoni Valle. 2022. Toñase Masise Tutuase—Memory, Knowledge and Power Between Tukanoan Kumuã and Rock Art Wametisé in the Middle Tiquié River, Northwest Amazonia. In *Rock Art and Memory in the Transmission of Cultural Knowledge*. Edited by Leslie Zubieta. Cham: Springer, pp. 47–76.
- Urbina, Fernando. 1994. El hombre sentado: Mitos y petroglifos en el río Caquetá. *Boletín del Museo del Oro* 36: 67–111.
- Urbina, Fernando, and Jorge Peña. 2016. Perros de guerra, caballos, vacunos y otros temas en el arte rupestre de la serranía de La Lindosa (río Guayabero, Guaviare, Colombia): Una conversación. *Ensayos: Historia y Teoría del Arte* 20: 7–37.
- Valenzuela, Daniela, José Capriles, Calogero Santoro, Ronny Peredo, María Quinteros, Eugenia Gayó, and Marcela Sepúlveda. 2015. Consumption of animals beyond diet in the Atacama Desert, northern Chile (13,000–410 BP): Comparing rock art motifs and archaeofaunal records. *Journal of Anthropological Archaeology* 40: 250–65. [CrossRef]
- Valle, Raoni, Gori-Tumi Lopez, Poani Tuyuka, and Jairo Munduruku. 2018. What is anthropogenic?: On the cultural aetiology of geo-situated visual imagery in indigenous Amazonia. *Rock Art Research* 35: 123–44.
- van der Hammen, Thomas. 2006. Bases para una prehistoria ecológica amazónica y el caso Chiribiquete. In *Pueblos y Paisajes Antiguos de la Selva Amazónica*. Edited by Gaspar Morcote-Ríos and Carlos Franky. Bogotá: Universidad Nacional de Colombia-Taraxacum, pp. 19–28.
- Vinnicombe, Patricia. 1972. Myth, motive, and selection in southern African rock art. *Africa* 42: 192–204. [CrossRef]
- Viveiros de Castro, Eduardo. 1998. Cosmological deixis and Amerindian perspectivism. *Journal of the Royal Anthropological Institute* 4: 469–88. [CrossRef]
- Vriesendorp, Corine, Nigel Pitman, Alejandra Salazar Molano, Diana Alvira Reyes, Arelis Arciniegas, Rodrigo Botero García, Lesley de Souza, Álvaro del Campo, Tyana Wachter, and Douglas Stotz, eds. 2018. *Colombia: La Lindosa, Capricho, Cerritos. Rapid Biological and Social Inventories Report 29*. Chicago: The Field Museum.
- Whitley, David. 1994. By the hunter, for the gatherer: Art, social relations and subsistence change in the prehistoric Great Basin. *World Archaeology* 25: 356–73. [CrossRef]
- Whitley, David. 2009. *Cave Paintings and the Human Spirit: The Origin of Creativity and Belief*. Amherst: Prometheus.
- Whitley, David. 2021. Rock art, shamanism, and the ontological turn. In *Ontologies of Rock Art: Images, Relational Approaches, and Indigenous Knowledges*. Edited by Oscar Moro Abadía and Martin Porr. London: Routledge, pp. 67–90.
- Willerslev, Rane. 2013. Taking animism seriously, but perhaps not too seriously? *Religion and Society* 4: 41–57. [CrossRef]
- Wright, Robin. 2013. *Mysteries of the Jaguar Shamans of the Northwest Amazon*. Lincoln: University of Nebraska Press.
- Wylie, Alison. 1985. The reaction against analogy. *Advances in Archaeological Method and Theory* 8: 63–111.
- Xavier, Caco. 2012. A escrita da Ñaperikoli. Ensaio sobre os petroglifos do rio Içana. In *Rotas de Criação e Transformação Narrativas de Origem dos Povos Indígenas do Rio Negro*. Edited by Geraldo Andreello. São Gabriel da Cachoeira: FOIRN/ISA, pp. 195–210.
- Yoamara, Asatrizy-Kumua, Carlos Hernández Vélez, Sebastian Restrepo Calle, and Elcy Corrales Roa. 2020. Cosmology as Indigenous land conservation strategy: Wildlife consumption taboos and social norms along the Papuri River (Vaupés, Colombia). In *Indigenous Amazonia, Regional Development and Territorial Dynamics: Contentious Issues*. Edited by Walter Leal Filho, Victor King and Ismar Borges de Lima. Cham: Springer, pp. 311–39.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.