
Posthuman Archaeology and Rock Art

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This paper aims to contribute to the current debate about Posthumanism in archaeology, arguing for the potential that Posthumanism can have for the study of rock art. Through a case study in San Luis Potosí, Mexico, this work seeks to explore a posthuman approach to rock art as vibrant and relational assemblages, through affects as relational agencies and non-human personhood and ritual landscape as theoretical tools, articulated with aspects from indigenous ontologies explored from archaeological, ethnographic and documentary information. It is proposed that this approach can help interpret hunter-gatherer rock art created between 1000 and 1500 CE in the northern region of Mexico. Through this exercise it is considered that Mexican archaeology of rock art can embrace posthumanism for a more complex and comprehensive understanding of the painted memory of hunter-gatherers from this part of the world.

A new revolution has come to archaeology under the name of Posthumanism and its theoretical ramifications for understanding in new ways the vast and diverse worlds that constitute our multiple pasts. Such rhizomes go from symmetrical archaeology (e.g. Petúrsdóttir & Olsen 2018; Witmore 2021), to its second wave as archaeology with object-oriented ontology (e.g. Olsen 2010; Olsen *et al.* 2012), to relational and entanglement archaeologies (e.g. Fowler 2013; Hodder 2012; 2016; Watts 2013), to the Deleuzian, new materialist, critical and feminist post-human archaeologies (e.g. Crellin 2020; Crellin & Harris 2021; Fredengren 2021; Harris 2021), archaeology with assemblage theory (e.g. Díaz de Liaño & Fernández-Götz 2021; Fernández-Götz *et al.* 2021; Jervis 2019; Kay & Haughton 2019;), and to collaborative Indigenous archaeologies (e.g. Cipolla 2021 & Marshall 2021), among others.

Cooked over a low fire through the last three decades, these archaeologies have been nourished by the works of Bruno Latour and his actor-network theory (2007; 2008), from Karen Barad's agential realism (2007), the vitalist, critical and feminist post-humanism of Rosi Braidotti (2015), the political ecology and vibrant matter theory of Jane Bennett (2010), DeLanda's interpretations (2006; 2016) of the

assemblage theory, but principally from the philosophy of Gilles Deleuze (2002; Deleuze & Guattari 2002 & 2004). Posthuman archaeologies are defined by sharing a common ground by the critiques against Humanism's failed hypothesis and Cartesian dualisms, seeking to destabilize anthropocentric narratives that have posited a long-term focus on the humans, to assemble alternatives that embrace and explore other relational, non-Western and post-anthropocentric ontologies of past and present worlds, where the human and the non-human were and are related in active, complex and intensive forms that have not been fully comprehended because of our anthropocentric biases. This has given an entry to the archaeological adaptations of Deleuzian concepts such as the becoming (the always changing condition of everything that exists), the virtual and the actual (material and immaterial possibilities of becoming), the Body without Organs and the rhizome (free flows of vibrant matter and energy), intensive forces (e.g. affect, desire and power) and analytical tools such as the assemblages, understood as historical processes of de/re/territorialization of the material and immaterial elements of everything that exists, at multiple scales, including archaeological vibrant matter (Deleuze & Guattari 2002;

Harris 2021; Jervis 2019). To contribute to this current discussion in archaeology, I present a posthuman comprehension of the three best studied cases to date of archaeological sites with rock art in San Luis Potosí, Mexico, through the assemblage of affect as relational agencies, non-human personhood and ritual landscape, from the position of a Deleuzian-inspired posthuman archaeology (e.g. Crellin 2020; Harris 2021). The study makes use of ethnographic evidence, documentary sources and archaeological data, and proposes that a posthumanist approach to the study of hunter-gatherer rock art offers enriching possibilities that expand the limits of our interpretations about the worlds of the past.

Assembling posthuman theory for rock art

The sites with rock art studied are located in the semi-desert highlands of the Mexican state of San Luis Potosí (Martínez-Moreno 2021; Vega *et al.* 2021; Fig. 1), within an area considered ‘on the border’ between agricultural Mesoamerica and the Mexican northern lands that were populated down the millennia of pre-Hispanic history by many differential forms of hunter-gatherer societies, generally mis-called *Chichimecas*. Because of this, to construct interpretations this work depends on argumentation by analogy (Gándara 1990). It considers similarities between certain cultural aspects from communities with different subsistence practices, such as nomadic, semi-nomadic and agricultural peoples, reflected in documentary sources and ethnographies from regional and cross-cultural cases, that could be linked to the next notions: *affect as relational agencies* (e.g. affect as the capacity to affect and be affected, through material and immaterial relations between humans and the non-human), *human and other-than-human personhood* (e.g. the condition of becoming a person, and notions of the human and non-human body) and *ritual and sacred landscape* (e.g. cosmological concepts about ‘nature’ and its constituent elements related to the human and non-human).

This argumentation is also aided by the concept of cultural ‘hard-core’ proposed by the historian Alfredo López-Austin (2001) for Mesoamerican studies, that from our perspective could be understood as a complex stratification of an *assemblage* of structuring, flexible and differentiating cultural elements which are to some extent resistant to change, although not immune to it. This helps us to realize why there were so many common social structures extended around the pre-Hispanic Mesoamerican world, and why many persist in contemporary

Mexico, as well as to comprehend the complex assembling of similarities and differences in the practices, beliefs and technologies of Mesoamerican agrarian societies over their millennia of existence (López-Austin 2001). It has been argued that a similar ‘hard-core’ stratified assemblage existed for the hunter-gatherer societies of northern Mesoamerica and the US Southwest, grounded in the recognition of substantial elements such as beliefs in communication, contact and interaction with other-than-human forces through diverse practices, the distribution of ‘human’ properties throughout the non-human, and cyclical conceptions of time and what we miscall nature, among others (e.g. Bonfiglioli *et al.* 2008; 2011; Braniff-Cornejo 2008; Martínez-González 2007). These arguments have also been applied for the study of hunter-gatherer rock art from northern Mexico, and for the ‘archaic core of belief’ among the creators of the Pecos River-style rock art from the area of Lower Pecos, between Texas and the Mexican state of Coahuila, potentially linked to Mesoamerican traditions (Boyd 2021; Boyd & Cox 2016; Martínez-Moreno 2021; Salinas-Hernández 2012; Viramontes-Anzures 2005; Viramontes-Anzures & Flores 2017).

However, the observations of archaeological, ethnographic and ethno-historical data in this paper do not assume an unchanging continuity between the different societies to which they refer. On the contrary, those observations aim to indicate aspects that speak about the differential and relational becoming of societies, the multiple and constantly changing constitution of pre-Hispanic human and non-human persons, and the fluid distribution of vitality, affect and power in objects, substances, animals, plants, celestial bodies or in the landscape, which gave these entities a powerful affective capacity for active and significant action. The notions of affect as relational agencies, non-human personhood, and ritual landscape are assembled in this work, to show that they can converge in posthuman archaeologies and with relational ontologies to help us look at the archaeological record to understand hunter-gatherer rock art in a relational and posthuman way.

Affect as relational agencies

Although the agency debate in archaeology has been long (Crellin & Harris 2021; Dobres & Robb 2000; Dornan 2002; Gell 1998; Robb 2010), the concept is generally understood as something relational and socially constituted (Harrison-Buck & Hendon 2018; Vigliani 2015), where the complex entanglement of relations between the human and the non-human are the main vehicle for agency expression. Agency

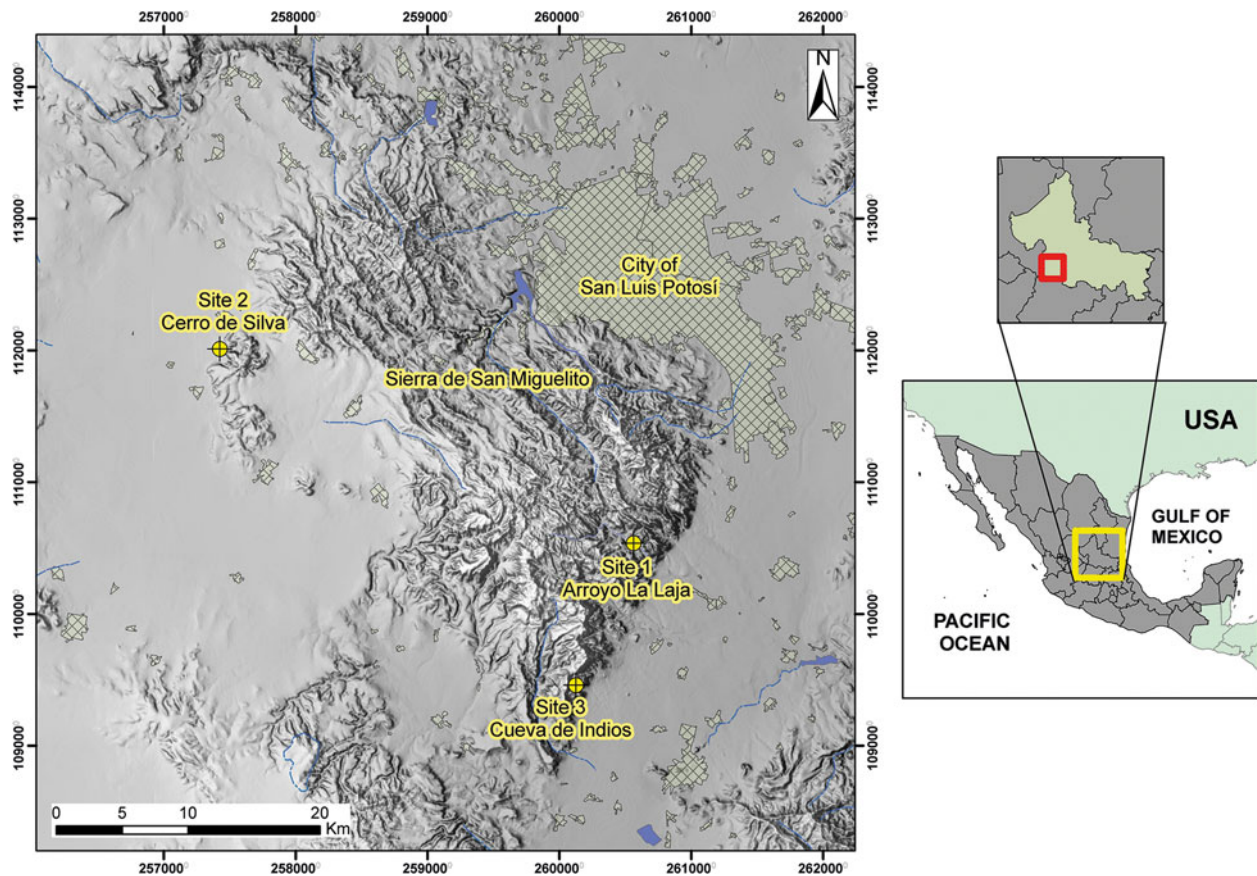


Figure 1. Archaeological sites discussed in this work, with an emphasis on the Central Zone of the Mexican state of San Luis Potosí, within which the sites of this paper are located.

has ceased to be anthropocentric to give way to the agency of things (e.g. Knappett & Malafouris 2008), and non-human or other-than-human agency (Harrison-Buck & Hendon 2018). In their recognition the agential realism of Karen Barad (2007) has played an important role, by posing reality and the world as an open process in continuous becoming composed of flows and arrangements of matter and energy, where agency is expressed through the dynamism of constant materialization of matter that constitutes itself (Barad 2007).

Thanks to the theoretical contribution of Jane Bennett's vibrant matter theory, this agency realism allows us to understand materiality as a generating vitality in itself, creator of entities and forces capable of acting in the world and the universe, with their own trajectories, propensities, tendencies and intentions (Bennett 2010). Something that is consistent with some posthuman and post-anthropocentric vitalist ideas that, for example, propose to understand life as *Zoe*, an immanent force in the organic and inorganic (Braidotti 2015), or with the notion of

affect, as the complex capacity of bodies (human and non-human) to affect and be affected through the differential expressions of agencies in the form of 'atmospheres', 'auras' or *haecceities* (Deleuze & Guattari 2002; Hamilakis 2017), the latter understood as the unique qualities of individuation of a given assemblage (Harris 2021). This has led to thinking about a revolution and reorganization of thought that, for example, considers the non-human physical, 'natural', geological or biochemical forces that govern the cosmos and the world, as vital forces that actively shape them (e.g. Haraway 2019).

The human, then, would be part of that vibrant affective matter, since we share material vitality with the rest of the non-human that makes up reality and the universe (Bennett 2010): ideas that have contributed to the Deleuzian–Spinozist inspiration in archaeology, which for example allow us to reimagine agency from concepts such as those of *affect* and *assemblages* (DeLanda 2016; Jarvis 2019), the latter understood as temporary, multiple, complex and ever-changing amalgams of vibrant states of matter,

events, phenomena, processes of things, human bodies, objects, animals, plants, landscapes, languages, signs or beliefs, always dynamic, constantly changing, historically contingent, always emerging, in the process of becoming (Crellin 2020; Harris 2021). These assemblages would have their own contingent historical identity, heterogeneous components, as well as the susceptibility to form part of larger and more complex assemblages, emerging and expressing themselves from the so-called *intra-actions*, understood as mutual and relational constitution of entangled agencies (Barad 2007; Harris 2021; Zubieta 2021). Due to the previous arguments, here relational agencies are defined as the assemblage of material affective capacities for effective and significant action within relations between the human and the non-human, which affects a certain process of things, or particular becoming conditions in which the elements that make up reality are found (objects, 'natural' phenomena, flora and fauna, human and non-human bodies, identity, personhood, beliefs, etc.).

The ethnographies of different Amerindian peoples teach us that in their relational ontologies, the non-human can generate, give and acquire vital essences and life qualities not just through simple contact, but even through just an existing relationship between both the human and the non-human itself (Harrison-Buck & Hendon 2018; Vigliani 2015). From ethnography we also learn that for many non-Western communities life essences, varied in details of what they are and how they affect and flow, are distributed among all things, even allowing the establishment of kinship relationships (Descola 1996; Santos-Granero 2009). The non-human is in constant change and transformation, and also maintains the qualities of what the non-human could have been in the past (e.g. the virtual and the actual). Similar ideas exist among contemporary Mexican indigenous agricultural peoples—some of them related to pre-Hispanic hunter-gatherer societies—such as the Otomi and Pame peoples of the semi-desert of the Mexican state of Queretaro and San Luis Potosí, Coras and Huichol peoples of the states of Nayarit and Jalisco, or between Yaqui, Raramuri and Tepehuan peoples in northern Mexico (Aguilar & Martínez 2008; Aguilar *et al.* 2008), for whom orographic elements such as hills and mountains are mythical ancestors turned into rock, capable of significant action and communication through the expression of emotions that could be read in certain contexts, some related to rock art and ritual pilgrimage (Mendoza-Rico & Vázquez-Estrada 2008; Viramontes-Anzures 2005).

These relationships allow us to consider affective relational agencies distributed between elements, which are activated or expressed in contexts of human and non-human communication, and affective relationality with other entities. These communicative and activating properties of affect, as well as its hierarchical and heterogeneous distribution—i.e. not everything that may affect does so in the same way in a certain state of matter (Harrison-Buck & Hendon 2018; Vigliani 2015)—is also documented in the relationships that other peoples in India or Highland Papua New Guinea have with substances, objects and body parts through the *intra-actions* in which bodies and identities are transformed and reconfigured (Fowler 2004). Something similar has also been observed among the Nahua peoples of Central Mexico and northern peoples, such as the Otomi and Pame, for whom the affective relations with cold and hot substances and materials—even archaeological ones among other kind of objects, body parts and essences—could bring gender, identity and body transformations, cosmic disorder, disease or even death (e.g. Cotonieto-Santeliz 2007; García-Lam 2017; Ramírez-Torres 2017; Rodríguez-Arcos 2021; Wyndham 2011).

Among the hunter-gatherer-fisher Seri people from the northwestern Mexican state of Sonora, ritual songs and paintings on rock-shelters are capable, through affective materiality (e.g. sound, rhythm, colour, design, texture, location, etc.), of summoning non-human forces who can be communicated with for different purposes. Different paintings such as crosses, zigzags, broken lines or painted and engraved concentric circles can contain power to cure diseases, enable communication with auxiliary spirits and facilitate 'spiritual possession' and pregnancy (Vigliani 2015). The healing of spaces and objects (which are sometimes considered bodily extensions of people also susceptible of becoming ill, like humans, or spiritually contaminated in mortuary contexts), has also been observed among hunter-gatherer-fishers and agriculturalists such as the Seri, Yaqui, Raramuri, Mexicanero and Tepehuan peoples of northern Mexico, as well as in the Baja California peninsula during the nineteenth century (Aguilar *et al.* 2008; Gutiérrez 2015; Martínez & Fujigaki 2011; Rodríguez 2012; Vigliani 2015).

On the other hand, in the writings of Father José Arlegui, Agustín de Espinoza, the Jesuit Andrés Pérez de Ribas, the explorer Álvaro Núñez Cabeza de Vaca, the Inquisitor Alonso de León, and even in the texts of Father Guillermo de Santa-María—all texts from between the sixteenth and seventeenth

centuries—it is also observed that the Spaniards witnessed elements that may emphasize the power and affect of human and non-human body parts (González-Arratia 2008; Kindl 2018; Powell 1977; Viramontes-Anzures 2005). For example, the practices of body segmentation, cutting, fracturing, dismemberment, fleshing, scalp removal and cooking of human and non-human bones that terrified the Spaniards colonizers in the sixteenth century (Santa-María 2003)—also documented in many archaeological contexts (e.g. Gómez-Ortíz *et al.* 2007; Pijoan-Aguadé & Mansilla-Lory 1990; Rodríguez-Loubet 1985; Valdovinos-Pérez 2018)—are better understood by noticing that in those texts such practices were linked to conferring qualities such as courage, strength, intelligence, knowledge and skills on the Chichimeca hunter-gatherers, who carried out such practices through fragmentation and distribution of human and other-than-human persons, something that reminds us of the Mesoamerican practices for the affective fragmentation and distribution of personhood, influence, identity, and power across time and space through material culture, as occurred among the Classic Maya peoples (Gillespie 2001; Geller 2012; Jackson 2018): ideas that also seem to be found among the pre-Hispanic Nahua societies of Central Mexico (e.g. Johansson 2006; Murillo-Rodríguez 2013; Sahagún 1938).

The above can also be related to sixteenth-century human and non-human body-painting practices, since it is known that the Chichimeca hunter-gatherers of pre-Hispanic Mexico painted their bodies with animal and geometric motifs, or arrangements of both, in order to assemblage affective qualities of what is represented and painted on their stratified bodies. Such paintings would have been territorialized in pictorial assemblages that not only conferred active differences in hunter-gatherer people, but also contributed to the construction of non-human kinship, identities, and of hunter-gatherer persons themselves in specific and emerging contexts such as those of ritual or combat. These ideas also surrounded animal meat and human bone consumption, which could add skills and knowledge to their persons (Chemin 1993; Powell 1977).

In each of these examples, affect as relational agencies can be seen as intrinsic vital qualities of materiality, proposed as fundamental to the relational ontologies of the agricultural and hunter-gatherer peoples of pre-Hispanic Mexico. The relationality of such ontologies can be seen even in their vision of the cycles of nature and mythological time, and the practices carried out to ensure their continuity, within a universe where everything human and non-human,

in the everyday and the exceptional, was part of a complex assemblage of affective relationships that gave life to everything that exists. However, to apply this to rock art implies certain consequences of becoming between the human and the non-human, which can be observed in the notions of indigenous peoples in the present, and potentially in the archaeological past, about their condition of becoming a person and their body's notions.

Towards a posthuman personhood

Discussion in archaeology for the understanding of personhood as the social condition of being a person has been ongoing since the seminal work of Chris Fowler (2004). Although personhood emerged with a strong focus on the human, it has recently been argued that, like the human, the non-human can also become a person through the recognition of their agencies and their ongoing becoming, due to the relational constitution of personhood, which allows the human and non-human to communicate, and the former to understand the other-than-human intentions, desires, language and even point of view (Fowler 2016; Harrison-Buck & Hendon 2018; Martínez-Moreno 2021; Vigliani 2015 & 2016). This seems consistent with similar notions derived from Amerindian relational perspectivism (e.g. Viveiros de Castro 2004), and with extended notions about the composite nature of human and non-human persons and bodies in many non-Western traditional societies in the Americas, where the vibrant qualities that give vitality and life can be varied and have different origins and concentrate in different body parts and non-human entities, and are susceptible of sharing, subtraction, assimilation, dissemination and redistribution (Gallardo-Arias 2020; Lozada-Toledo & Vigliani 2021; Martínez-González 2007; Martínez-Moreno 2021).

For example, for many indigenous peoples of central and northern Mexico the explanations for many body diseases, as well as sterility, lie within the framework of the body's multiple composition. They depend on the relation with hot or cold elements that affect health, identity or gender, and on the intra-action with certain spaces such as caves, rock-shelters, or with ancestor and non-human bones, and ancient artifacts (Aguilar *et al.* 2008; Wyndham 2011). For instance, among the Postclassic Mexico, Sahagún (1938) observed how the bodies of the *mocihuauquetzqueh*, women who died during their first and last pregnancy and who were considered warriors, were persecuted by young male soldiers, thieves, rapists and adulterers to mutilate specific parts of the deceased body due

to its power and affective properties, that could help them to blind their enemies in combat or for spiritual protection (Matos 2011; Rodríguez-Arcos 2021). The bodily practices of sixteenth-century hunter-gatherers suggest the existence of principles of partibility, concentration, permeability, disintegration and recombination around the notion of human and non-human body and person. From the latter, the evidence would be the practices of human skull accumulation, the craft of human bones onto animal forms, the cooking and painting of bones, the conversion of the same human bone fragments into anthropomorphic figures, or their pulverization and mixing with deer bones and peyote for consumption, as well as the use of human and non-human tendons for the assemblage of arrows and spears (González-Arratia 2014; Pijoan-Aguadé & Mansilla-Lory 1990; Powell 1977; Rodríguez-Loubet 1985; Santa-María 2003). Considering that for these societies both non-human and human bone possessed properties and part of the personality of the other-than-human or recently deceased person, the assimilation of this material, its craft, manipulation and derived objects, would have assembled, re-territorialized and stratified their affective material qualities (e.g. colour, texture, form, malleability, smell, flavour, etc.) as part of distributed human and non-human personhood assemblages, which were activated and rearranged in specific contexts to maximize their affect and power.

The artifacts made with human and non-human tendons such as spears, bows, arrows or bifacial knives like those recovered from archaeological mortuary contexts, as those of the Mexican Cueva de la Candelaria or Cueva de la Paila—also present as paintings in northern Mexico's rock art (González-Arratia 2014)—could then be seen as non-human persons, because they were capable of being built and affect in the same way as hunter-gatherer human persons: assembling affective properties such as flexibility, strength, or resistance, which would raise the virtual possibility that the hunter-gatherer lithic technologies would also have been non-human affective entities, with their own identity, gender and personhood that could communicate and express emotions, intentions and desire by themselves (Martínez-Moreno 2021).

Under this proposal, the actual painting of the body, the rock or any surface could then be seen as part of a vital, differential and generative practice that actively contributed to the mutual constitution of human and non-human bodies and personhood, through the relational agencies activated and expressed through the affective practice of rock art,

in which non-human acts and process could also have made differences in pre-Hispanic hunter-gatherers' becoming. But in order to investigate these possibilities, it is necessary to explore the ontological relationship of Mesoamerican and hunter-gatherer indigenous peoples with what is called 'nature'.

Ritual, sacred and vibrant landscape

Pre-Hispanic observation of what we call nature helped guide social behaviour and build worldviews that have integrated social practices over the millennia. This is the core of Johanna Broda's theory of ritual landscape (1991; 2004a,b). For her, the complex agrarian ritual symbolism of contemporary indigenous communities of the Mexican states of Morelos, Guerrero, Puebla, Oaxaca, Chiapas, State of Mexico and Veracruz, among others, finds its roots in the Mesoamerican agricultural and ritual tradition (Broda 2004a). Broda identified similarities in the cult of hills (still valid among the Otomi, Nahuatl, Chinanteco, Tlapaneco, Mixteco peoples and others), based on the belief of the existence of non-human powerful entities inhabiting mountains, rock-shelters, caves, springs, or rivers. In this worldview, power exists in certain parts of the landscape with particular material features (e.g. form, location, archaeological associations, textures, and other kind of *haecceities*), which can be activated through ritual practices to influence significantly the agricultural cycle and social reproduction (Broda 1991). Shrines built on the top of hills dedicated to rain-dwelling spirits; offerings of clay figures buried in the earth to facilitate fertilizing contact; the existence of people known as *graniceros* who, when affected by lightning and surviving, acquire abilities to protect their communities from storms; pools of water that attract rains; ritual pilgrimage and the deposit of offerings in caves to appease the entities that control weather and cause diseases, among many others, are some of the affective particularities that show the relational vision that many indigenous peoples of contemporary Mexico maintain towards the world and its other-than-human elements, as a result of a cultural tradition rooted in the relational ontologies of the pre-Hispanic world (Broda 1991; 2004b), as some recent posthuman archaeological studies in Monte Alban, Oaxaca, southeastern Mexico, have pointed out (Joyce 2020a,b; see also Leathem 2019).

Among some societies such as the Otomi from Querétaro, the Seri from Sonora, or the Raramuri from Chihuahua, dead cult is another component that is closely interrelated with landscape elements, territorializing them and shaping the future of peoples through the links they keep with the living,

mediated by ritual. Some contemporary indigenous peoples in Mexico, such as the Otomi or the Chichimeca-Jonaz peoples, believe they descended from ancient hunter-gatherers, and they believe that the emotional state of ancestors can be read through the landscape to understand their needs and for establishing communication bridges via offerings to maintain the balance of the universe (Mendoza-Rico & Vázquez-Estrada 2008; Viramontes-Anzures 2005), or through the search for spiritual power in rock-shelters and caves that has to be activated or opened by painting on the walls to summon a diverse range of non-human entities (Vigliani 2015), thereby also facilitating the encounter with the dead (Martínez & Fujigaki 2011; Mendoza-Rico & Vázquez-Estrada 2008). On the other hand, sixteenth-century sources suggest that northern Mexico's hunter-gatherers assembled, differentiated, moved, exploited and inhabited the landscape by virtue of its affective and powerful properties, of the surrounding animal entities and flora, of the associated myths, or from the experience in establishing effective communication with the dead and with entities that populated and controlled 'nature' and life-cycles, thus building a sacred and ritual landscape: a wide field where certain spaces were ideal for establishing communication with non-human forces that created the world (Broda 1991).

This proposal has been applied for the study of rock art among the Seri from Sonora (Vigliani 2015), or among the Raramuri of the Sierra Tarahumara, on the Mexican Sierra Madre Oriental, for whom rock-art sites are a fundamental part of a living landscape that surrounds them (Wyndham 2011), or between Coras and Huicholes (Fauconnier & Faba 2008), and for the hunter-gatherer rock art of the semi-desert of Queretaro and Guanajuato states (Viramontes-Anzures 2005; Viramontes-Anzures & Flores 2017). Considering the evidence available, what posthumanism adds here is that the sacred and ritual landscape can then be understood as a vibrant complex of assemblages of vital entities in ongoing becoming, with their own personhood and heterogeneous relational agencies which affect the identification of spaces for painting or engraving on the rock, depending on the particular relations of pre-Hispanic societies with the living and vibrant landscape of which they were part. These places affect the establishment of relationships and communication with the non-human and would then have expressed itself through material properties like fractures on the rocks, textures, visibility, climate, illumination, flora and fauna, mythical associations, among others, enchanting the groups that inhabited

these territories, which decided to establish, expand, cut or intensify ties (processes of de/re/territorialization) with these spaces and their entities and forces through rock art, thereby activating such relationships in particular and emerging historical moments.

A posthuman approach to hunter-gatherers' rock art

The rock-art sites studied here are related to a pre-Hispanic rock-art style convention known as *Semiarid Mexican Painted Tradition* created in the north of Mexico from c. 1000 to 1500 CE, and have as a context a landscape of mountains rich in diverse resources of flora and fauna typical of a semi-desert environment, with a temperate semi-dry climate. The focus area is also a volcanic field, and includes a diversity of microclimates and varied geological resources that give the region a contrasting environmental and landscape diversity, through which the vibrant landscape expressed its other-than-human personhood and agency in the past, in vital and differentiated ways (Fig. 2). The resulting *affects*—understood as the many ways in which human or non-human bodies affect other bodies (Harris 2021; Pauketat 2019)—were perceived as *haecceities* or unique properties of particular singularities and identities by hunter-gatherers, accentuating the relational character of those landscapes, influencing decisions of where and when to paint on the rock. That is why each identified rock-art site presents itself as it does, with its particular assemblages of pictorial motifs and landscape elements, due to the vibrant and agential realism that the landscape itself expressed in the past.

This could be seen in the decision that led to the painting of sites such as Arroyo La Laja, located on the southwestern bank of a temporary stream of the same name, also located in a canyon from which astronomical events such as new moons can be appreciated. The site is composed of five rock-shelters, mostly oriented to the northeast, which presents visibility horizons delimited by mountains. Most of the paintings of the shelters are red, representing mostly non-figurative motifs (those paintings whose geometric or abstract shapes do not allow a recognition of form with entities of our presumed material reality, *at least for us*), and to a lesser extent figurative motifs (anthropomorphic, zoomorphic and phytomorphic paintings, hand stencils, etc.). The exception is Cueva de la Contemplación rock-shelter, which also presents white paintings in the form of horizontal series of fingerprints above a pictorial

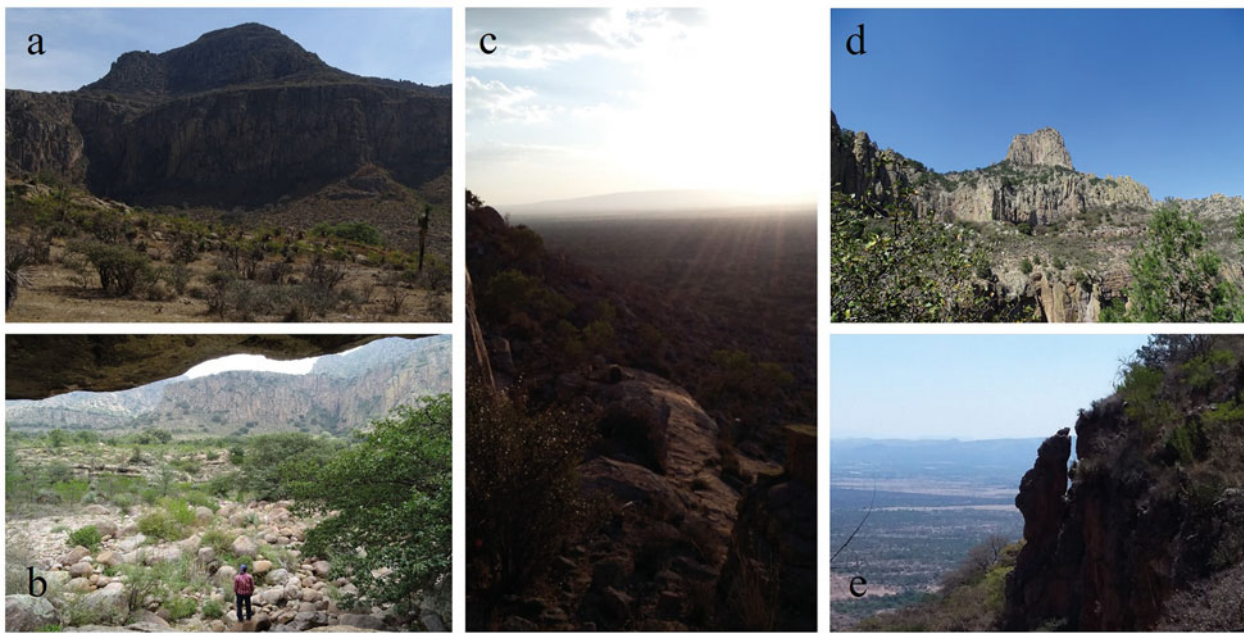


Figure 2. Arroyo La Laja presents a landscape surrounded by imposing elevations (a), which can still be seen from Cueva de la Contemplación (b). For the decision to paint in Cerro de Silva, perhaps the vast visibility from the rock-shelter was essential, from which the course of the setting sun could be followed (c). In Cueva de Indios, the Picacho de Bernalejo (d) could have been fundamental for the choice of the sacred place, but also the igneous forms of the landscape that are visible during the journey to and from the site back to the lower part of the canyon (e). (Photographs: Laura Rodríguez and the author.)

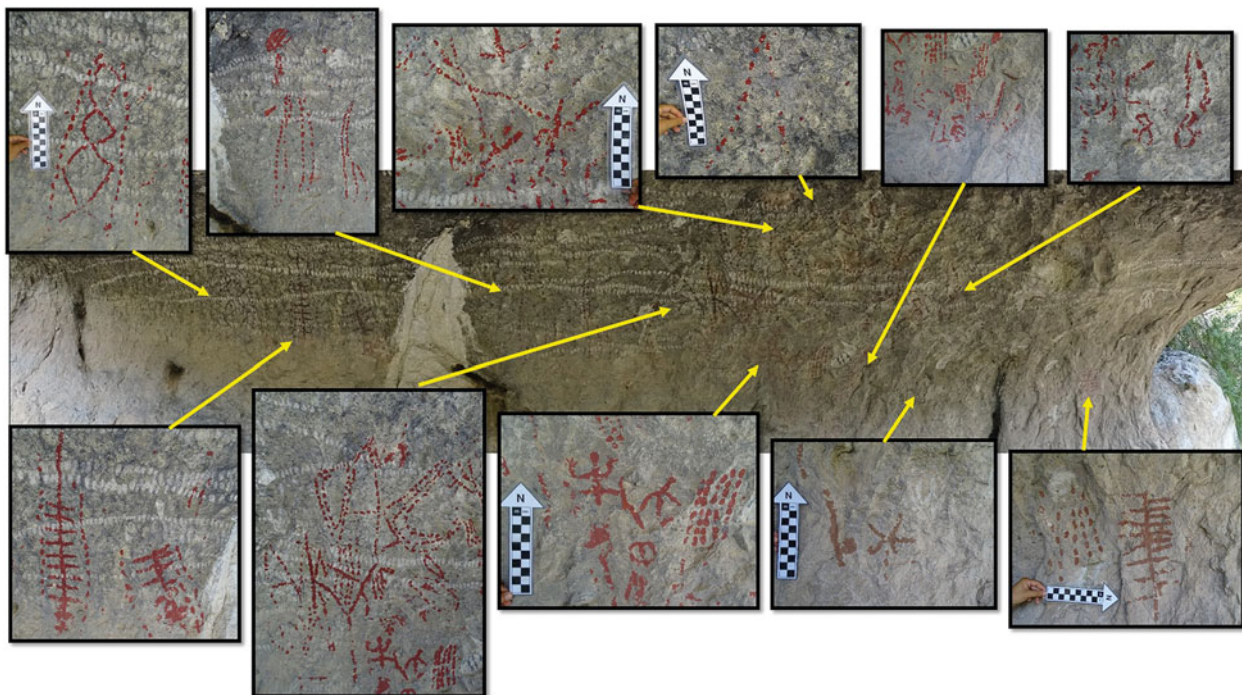


Figure 3. The pictorial event in Red in Cueva de la Contemplación, Arroyo La Laja. The arrows show the spatial distribution of the paintings on the rock wall. (Image processing carried out with the support of Laura Rodríguez.)

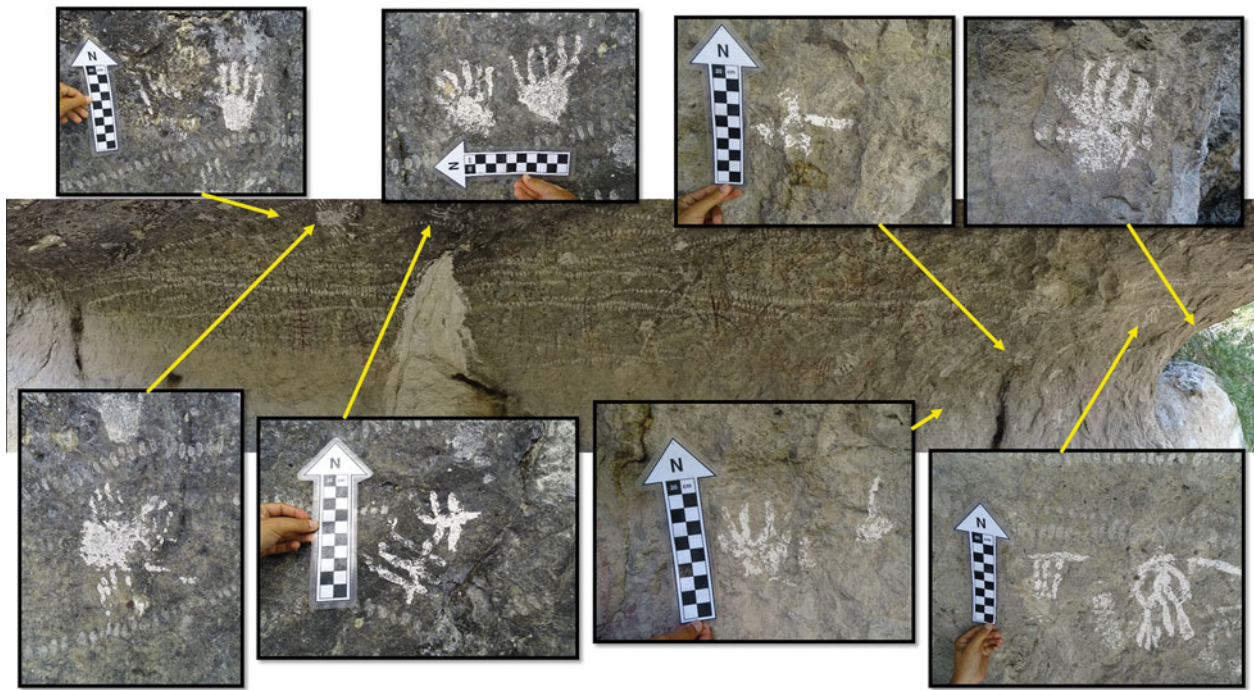


Figure 4. The pictorial event in white, above the red motifs in Cueva de la Contemplación, Arroyo La Laja. The arrows show the spatial distribution of the paintings on the rock wall. (Image processing carried out with the support of Laura Rodríguez.)

event in red, whose distribution on the rock surface was guided by the folds of the rock (Figs 3 & 4).

In light of ethnographic, archaeological and ethnohistorical data as discussed above, Arroyo La Laja presents some anthropomorphic paintings that can be understood as syntheses of solar signs associated with the power of ritual specialists, the spiritual world, fertility and communication with the dead. There are also paintings of hands that could continue to be understood as body parts that can activate the agency of the shelters through the contact of the paintings with rock and flesh (e.g. Viramontes-Anzures & Flores 2017). Other paintings in the site could refer us to representations of body postures or activities carried out within ritual practices, and with the manipulation of non-human affect through the representation of stylized entities, such as snake motifs for example, also to territorialize their attributes in some cases traditionally linked to ancestors, fertility, the underworld and mythological origins. On the other hand, the relation between the overlay of the pictorial event in white over the one in red allows us to think of it as an assemblage (and as an actual becoming) through which it was sought to expand and intensify ties and affect with a powerful place through rock art. The overlay in Cueva de la Contemplación could then be seen as a reterritorialization of a sacred

space to manipulate the stratified affect and non-human personhood of the entities or forces inhabiting the rock-shelter, rather than denying or rejecting a previous pictorial event.

From its pictorial repertoire, Arroyo La Laja can be understood as a sacred assemblage with its own non-human personhood, which through the vibrant expression of their particular haecceities—those of the rock-shelter's orientation, the surrounding water, climate, flora and fauna, fractures of the rock, texture, range of visibility, etc.—allowed territorialization of affective relationships expressed through rock art related to notions of fertility, associated with water, growth, mobility, humidity, the underworld, and communication with the dead and non-human entities. Such agential realism of the site is still perceived in the present. For example, one of the rock-shelters has been affected in the framework of contemporary magic practices through the emulation of rock art (e.g. leaving hand stencils and non-human figures through mixtures of mud, probably obtained from the same surrounding soil of the shelter), contributing to the stratification of the power, affects and haecceities of the vibrant assemblage of Arroyo La Laja.

The second site is known as Cerro de Silva. It is a cavity in the bedrock located on the slight slope of a

hill that has presence of pre-Hispanic architecture (e.g. rock alignments to delimit rooms, activity areas or simple orientated platforms, with presence of ceramic and lithic material) as well as wider hunter-gatherer activity areas. It is oriented to the northwest, illuminated during most of the day, and its location makes it possible to follow the course of the sun during sunset. This site possesses a predominance of red figurative motifs, of which a probable hunting scene stands out, as well as sexed male anthropomorphic motifs in dynamic poses and a painting of a probably stone knife with a wood handle (Fig. 5). The site also presents natural fractures at the top and at the access, in the manner of small cavities that could have allowed the deposition of small artifacts, and the accumulation of rainwater, potentially sacred, as has been documented in neighbouring areas (Viramontes-Anzures 2005). 'Natural' features of the world were much more than that, as seen in the ethnographic and ethnohistorical data discussed above. They were vibrant assemblages of active players with their own affect and non-human personhood who could communicate their emotions to humans depending on their intra-action with morphogenetic forces (e.g. erosion, rock fracture tendencies, the shaping force of river water, etc.) turning rainwater sacred through contact with powerful locations, sunlight or moonlight, and even bringing power, life and death through habitation, inner mobility, ritual practices, or physical contact. Some paintings at Cerro de Silva could be interpreted as syntheses of mythical ancestors, the power of rain, the initiation of ritual specialists, fertility, and even hunting, as the imagery with the deer seems to suggest (Fig. 6, bottom; Viramontes-Anzures 2005). Regarding the scene with the anthropomorphic motif and the deer, the notion is not rejected that the hunt has been an important issue to represent, given the ritual, political and subsistence relevance that hunting had for pre-Hispanic hunter-gatherers, for whom the practice was a means to procure food, but also to communicate with the dead, and celebration or community territorialization as seen in early ethnographic and ethnohistorical records from the north of Mexico (González-Arratia 2008; 2014; Santa-María 2003). Moving representation further, I propose that the scene also has to do with the quest for power over the non-human forces of the universe that also animated people (Whitley 1998). The scene could express the material and vibrant stratification of an assemblage between humans and deer as person/ancestor/non-human force with its own affect, gender and personhood. Therefore, these motifs could also be understood as

the continuous becoming of a non-human kinship relationship, which virtual possibility is taken from different ethnographic records as discussed above.

On the other hand, the sexed anthropomorphic motifs near the scene seem to have headdresses or masks—that could be interpreted as a radiation of power (Viramontes-Anzures 2005), or as an assemblage through which the vitality of another becoming could be accessed or merged with by a person affected by the assemblage of flesh and mask—and that could have to do with the active differentiation of hunter-gatherer ritual specialists. The above may be resembling the other-than-human kinship as an ongoing relational assemblage through the specialist's appearance, which does not appear to be fully human but halfway between human and non-human (Fig. 6). The anthropomorphic motifs also seem to carry artifacts that iconographically recall 'command sticks' or ritual artifacts such as the *kalatsikí* of the Huichol people, or the wooden rods used for soul healing ceremonies known as 'peyote rasp' among the Raramuri people of northern Mexico, that also evoke the grooved ritual artifacts made of human and non-human bone in pre-Hispanic Mexico, one of which was found in archaeological context near the study area (Rodríguez-Loubet 1985; Fig. 7). There is also an association with a probable painting of a stone knife with a wooden handle. The knives recovered from hunter-gatherer burials in northern and northwestern Mexico are extraordinary because they appear to have been multifunctional and multidimensional artifacts (González-Arratia 2014), whose relational agency, non-human personhood and power extended even to the realm of the dead (Martínez-Moreno 2021). Some have mesquite handles painted with geometric motifs like zigzags or broken lines in various colours, and even the presence of slots for the creation of fire, which by pre-Hispanic convention was the catalyst for communication with the dead (González-Arratia 2014). These artifacts, along with the bow-and-arrow complex, are also widely represented in the rock art of northern Mexico and even up to the central region of the country. These artifacts were territorialized from a relational assemblage of knowledge, bodies (human and non-human), embodied movements and an entanglement of vibrant matter where different so-called 'raw materials' came together. These artefacts (and materials) could have been considered persons or entities with their own gender, personhood and affect, powerful and significant enough not only for survival, but also to repel disease and evil spirits, as is known from some ethnographic records (González-Arratia



Figure 5. Cerro de Silva rock-shelter. The arrows show the spatial distribution of the red paintings on the rock wall. The black motif is a recent redrawing of a rock painting. Below the zoom of the painting of the probable hunting scene there is a rock cavity with potentially sacred water. (Image processing carried out with the support of Laura Rodríguez.)

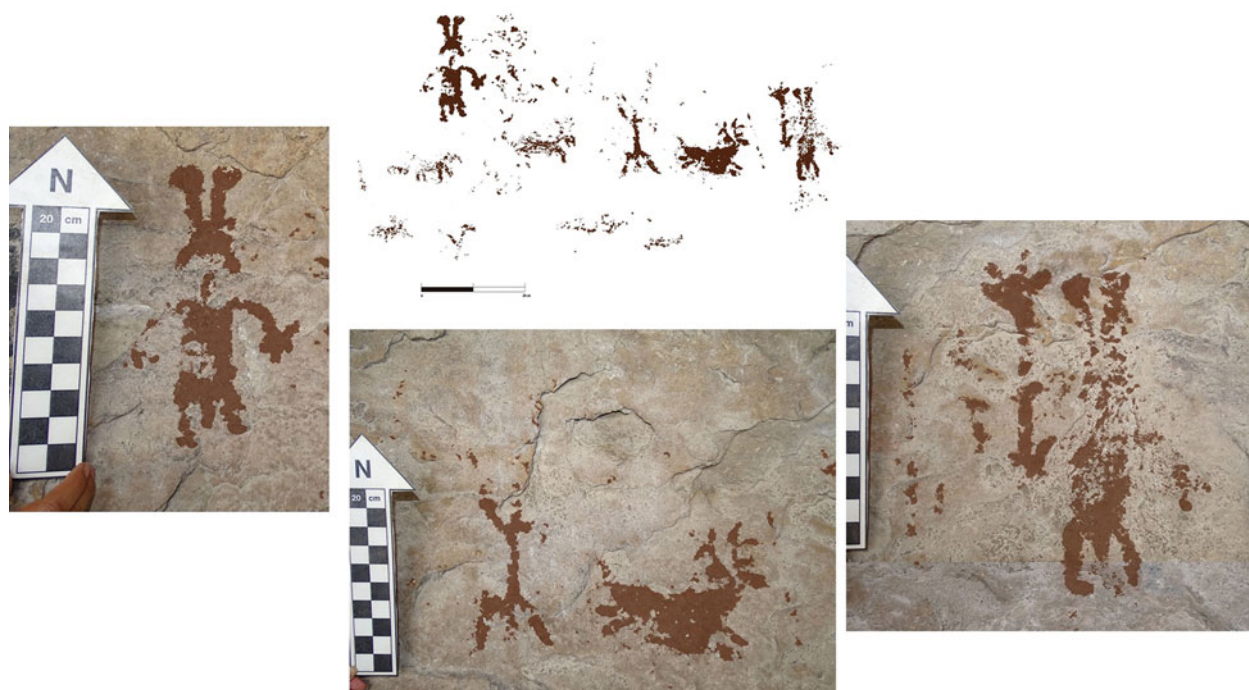


Figure 6. Some motifs in the second pictorial group of Cerro de Silva rock-shelter seem to represent sexed ritual specialists associated with animals, and anthropomorphic motifs in dynamic attitudes.

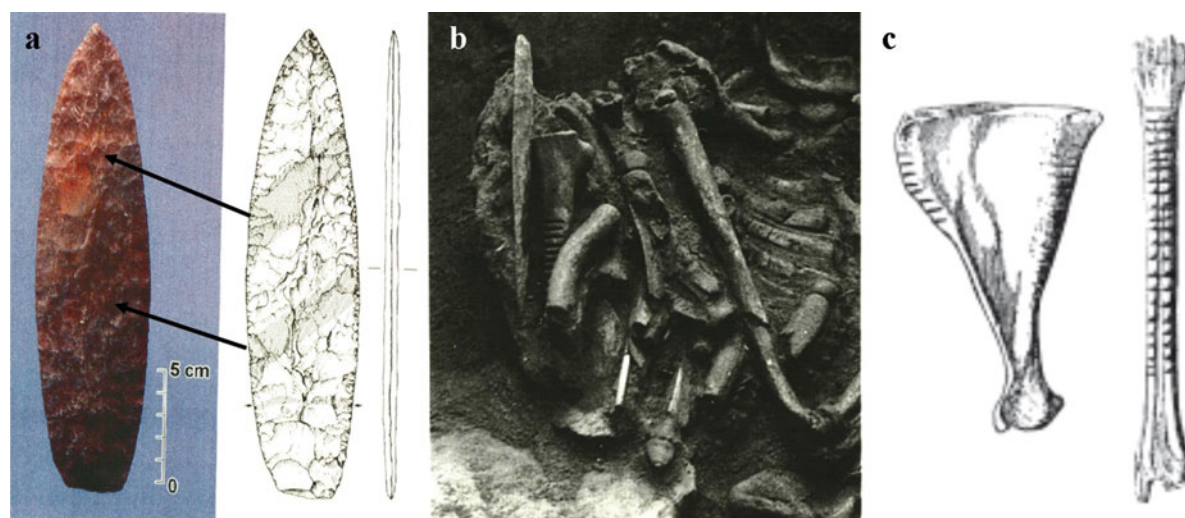


Figure 7. (a) A stone knife with two red painted bands marked with arrows. It was found in the mortuary assemblage of a hunter-gatherer (b) excavated in the 1980s near the study area of this paper, right next to the left of a modified human bone marked with horizontal slots (adapted from Rodríguez-Loubet 1985). This artifact resembles the marked deer bones (c) used by the Huichol people in the peyote rasp ceremonies reported by Carl Lumholtz (adapted from Bonfiglioli 2005).

2014), or to enable communication with the dead and activate the agency of ritual spaces, perhaps even just by painting or engraving their forms on the rock (Fig. 8). Cerro de Silva has a differentiating haecceity that can be understood as an assemblage of affects related to people's origins, their human and non-human kinship relationships, communication with the dead and other-than-human forces, the rhythms and cycles of human and non-human vitality, ritual healing and the cyclical maintenance of the world reflected through rock art. The intra-action of the assembled affects at Cerro de Silva—that may have been behind the agricultural and nomadic occupation of the site, yet to be explored in depth—could stratify practices related with a more explicit construction of hunter-gatherer relational personhood and persons (human and other-than-human) as resulting assemblages of vibrant matter.

The third site, Cueva de Indios, is difficult of access because of its location at the top of a dangerous canyon and at the same time on the slopes of a unique natural orographic formation known as Picacho del Bernalejo, identifiable from several kilometres away (Fig. 2-d). There is a single pictorial set with mostly non-figurative motifs, but where a couple of anthropomorphic motifs stand out as well as others that evoke the Mesoamerican *xicalcolihqui* (Fig. 9, upper right), a symbol which assembled broad notions of mythical time, fertility and water, deities such as Quetzalcoatl or cyclical movement, which has been found from the Southwest of the

United States, through Mesoamerica and into South America (Braniff-Cornejo 2008). From analysis of its pictorial assemblage this site could be associated with pre-Hispanic notions around water, fertility, dead cult, mythical time and the cycles of life. The vitality of the agential realism of Cueva de Indios was expressed through the assemblage of the affects of the haecceities of its context, such as the partial shade of the cave, the dangerous access, the distribution and form of the nearby rock formations, the position beneath the Picacho del Bernalejo, and the territorialization of these with other entities such as fauna, vegetation, water, or particular qualities such as fractures, cracks or folds in the micro-topography of the rock panel which actively guided the actions of those who painted on the rock; because the fractures and arrangements of blocks in the rock taught the people where and how to paint, as has also been proposed for Cueva de la Contemplación in Arroyo La Laja and in northern rock-art sites pending exploration in depth (Fig. 10). These ideas have also been discussed in South American perspectives like that which analyses the material assemblages and sensorial fields of hunter-gatherer rock art in north-central Chile (Armstrong *et al.* 2018), or that which, from Amazonian ethno-geologies, understands rocks as sentient beings, and rock art as a means by which rocks domesticate humans (Valle 2018). The expression of agency and non-human personhood the site demonstrated in the past led hunter-gatherers in

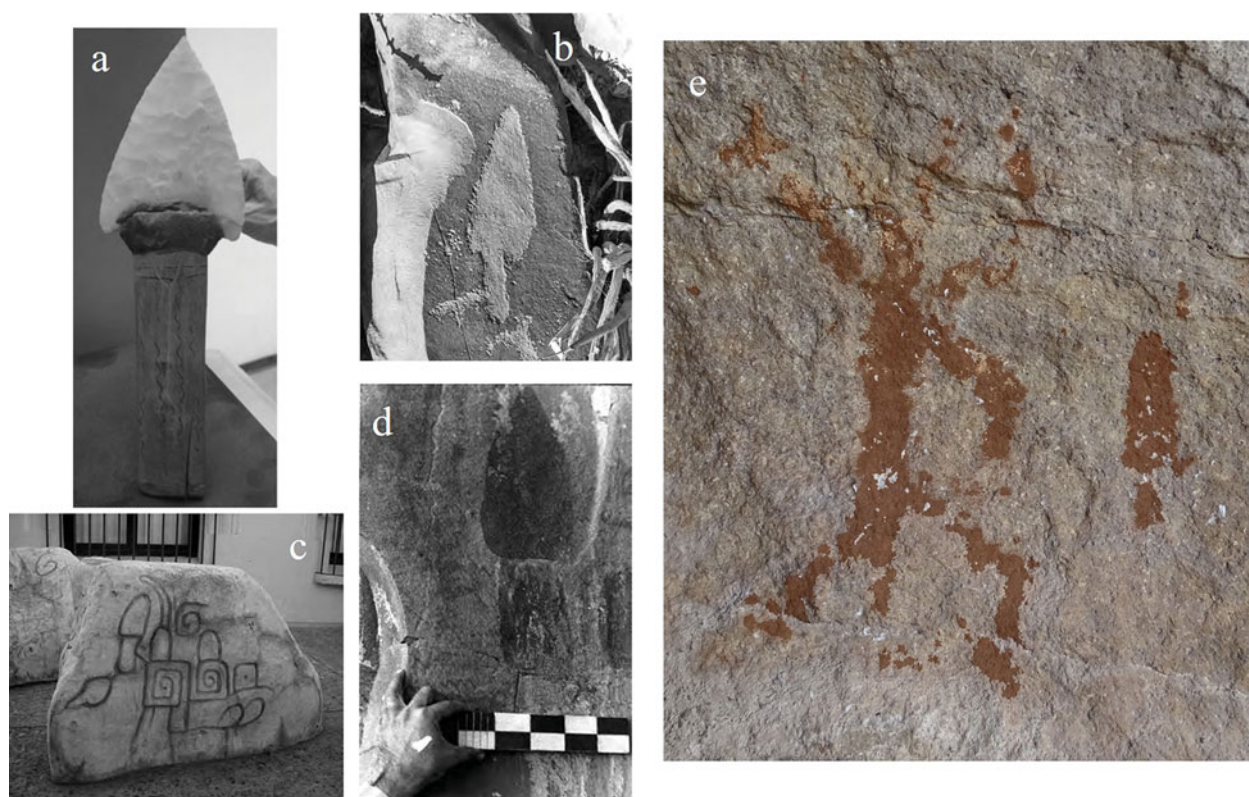


Figure 8. (a) An archaeological handled knife from Cueva de la Candelaria, found in the Mexican state of Coahuila (note the paintings on the handle); (b) rock engraving of a handled knife in El Molino archaeological site, in Coahuila; (c) painting of handled knives in Las Labradas archaeological site, in the Mexican state of Sinaloa; (d) Painting of a handled knife in the archaeological site of Chiquihuitillos, in the Mexican state of Nuevo León; (e) possible handled knife painted in Cerro de Silva, next to an anthropomorphic red motif.

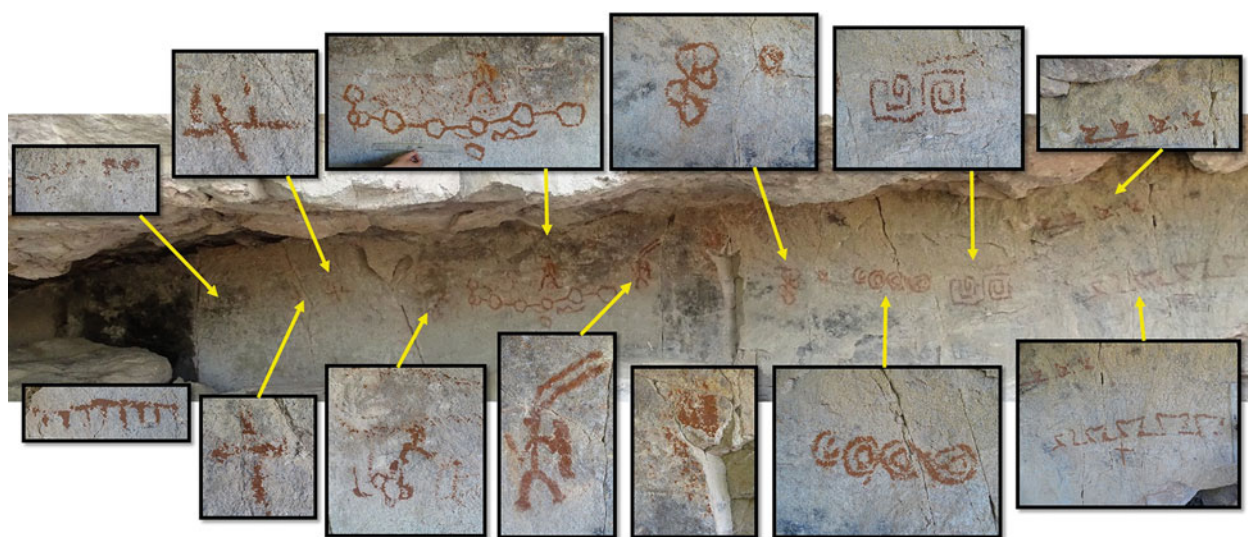


Figure 9. Cueva de Indios rock-shelter. The arrows show the spatial distribution of the red motifs on the rock wall. (Image processing carried out with the support of Laura Rodríguez.)



Figure 10. The ontology of the vitality of ritual landscape, and the non-human entities that lived there, is still expressed in the form of offerings like these deposited by Huichol peoples in the cracks and holes of rock walls with rock-art paintings in Cerro de la Nariz, Charcas municipality, in the northern desert plateau of San Luis Potosí, Mexico. The site is considered a sacred space and an obligatory step for the Huichol or Wixarika people during the pilgrimage to Wirikuta sacred territory, to which Cerro de la Nariz is considered its sacred entrance ‘gate’. (Photographs: Laura Rodríguez.)

the area to perceive and engage with it in a relational way. The agential vibrancy of Cueva de Indios actualized capacities and affects that the site expressed to establish effective and meaningful communication also with non-human forces, within the framework of diverse ritual practices such as the quest for power, rites of passage, or ceremonies known as *mitotes*, which would have involved intra-actions for the actualization and stratification of such entities and forces through rock art, because the place was known as a unique assemblage of vibrant matter.

Conclusion: Rockapower

Based on previous analysis, some conceptual considerations can be proposed about the properties of rock art from the posthuman perspective of this

work. The particular expression of the affect and non-human personhood at each site occurred through a process of active *differentiation* observed through the individuating character of each rock-art assemblage, which in turn variably actualized each site’s power into a broad and complex rhizome of emerging, continuous, dynamic and active relationships between the human and the other-than-human through *rockapower*. This would have been a form of ancient power, creator of the rock art itself and its spaces, creator also of the people who painted and engraved on the rock, attracting them to itself due to its seductive properties. Rockapower, recognized from hunter-gatherer relational ontologies, flowed through the materiality of rock-art practice, assembling practices linked to the procurement of resources and materials needed to

paint on the rock, as well as specialized knowledge, language, orality, mythical narratives, technical skills, memory, creativity, pigments, rock surfaces and implements, recursively shaping rock art as an assemblage of vibrant matter as an ever-emerging force from the dynamic intra-actions between the human and the non-human. Rockapower, then, was a force that flowed through the sites themselves, their pictorial assemblages, groups and motifs; it was a gravity that not only drew people and human bodies to itself, transforming them and forcing them into continuous movement, as reflected in the persistence of rock art itself. But this power also attracted non-human persons and bodies to itself, assembling affections, desires, memories, emotions, worries, dreams and needs. For this reason, rock art can also be understood as a *rhizomatic geometry of power*, because through its materiality it describes, calculates and explains the intensity of the affective expressions of the hunter-gatherer world. This could be the reason why there are so many different sites with rock art, because each affective assemblage actualized rockapower in variable ways, as part of a continuous process of difference creation. This difference in fluid and affective pictorial sites and compositions also expresses that rockapower was not equally distributed, as has been proposed for other ancient forms of power in the past (e.g. *monupower* in Harris 2021). As a life-giving animating force, rockapower flowed in a variety of ways, sometimes creating space for the expression of fields where different emotions, such as anxiety and excitement, could be present, although in other contexts, rockapower could also drive sadness, pain, fear and even terror, territorialized in oppressive and coercive forms of affect, which could contribute to perpetuate human and non-human relations of inequality through rock art, as could happen with gender (e.g. Rodríguez-Arcos 2021). Rockapower would also have been the capacity by which rock art could have maintained its importance for hunter-gatherer societies over time, which it called to itself again and again. Rock art, through rockapower, would then have been a form of power that contributed to the de/re/territorialization of more-than-human communities, always becoming, assembling power, always with the capacity to increase it exponentially due to its seductive appeal, operating also as a *world-building machine* (Deleuze & Guattari 2002; Harris 2021).

Therefore, the intra-actions of rock art are crucial as they imply recognition of the ontological inseparability of the dynamism of its vital

generating forces, in which all the human and non-human elements behind the practice of painting on rock existed in a continuous becoming of influence and exchange. For example, the relational agencies and modes of personhood behind rock art are crucial to study the affects behind the selection of 'raw materials' and their transformations into different states of vital matter. These could even change the perspective of our studies of physical-chemical composition of rock art, location of 'material banks' and eventual geospatial analyses, because from a posthuman position those 'resources', places and activities were territorialized into assemblages adjacent to rock art—processing artifacts, brushes and threads, clay bowls or baskets, grinding and pulverizing tools, minerals and their location—that could have been considered assemblages through which paintings were embodied, with their own gender, personhood and affect, and thus capable of expressing intentionality, will, desire and action in the world. Understanding rock art from Posthumanism also implies taking it into account as a set of assemblages of vibrant matter, diverse and heterogeneous, through whose relationships different modes of personhood and affect are expressed, even in the present, through anthropic and non-human processes to which it remains subject, and which recursively weave what the practice is, creating itself in specific, dynamic, ever-changing contexts: ideas that go against the assumptions derived from positivist-Cartesian and Humanist objectification that have encouraged some Western anthropocentric archaeologies to think of rock art as a phenomenon solidified in time and space, thus stripping it of any real possibility of agential realism, non-human vitality and personhood, which was recognized for rock art in its vibrant multiplicity in the relational worlds and ontologies of the past.

Acknowledgements

I would like to express my profound gratitude to Chris Fowler, Oliver J.T. Harris, Rachel Crellin, Nicolas Caretta, Arthur Joyce and Santiago Rubín for reviewing a preliminary version of this paper, improving it with their invaluable feedback, comments and observations. I would also like to thank the two anonymous reviewers who trusted the ideas in this paper and made it better with their comments. I also thank the Universidad Nacional Autónoma de México (UNAM) for having supported the publication of this paper in the format it has. I would specially like to thank the archaeologist Laura Rodríguez-Arcos, to whom I dedicate this work. Without her precious love, friendship, wonderful company and brilliant discussions over the years, I would not be here and the ideas raised

would never have been possible. Thank you so much. Any errors are my entire responsibility.

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References

- Aguilar, C., F. Berrojalbiz & A. Fujigaki, 2008. Aproximaciones hacia una idea común de la muerte entre yaquis, tarahumaras y tepehuanes [Approaches towards a common idea of death among Yaquis, Tarahumaras and Tepehuanes], in *Las vías del noroeste II: Propuesta para una perspectiva sistémica e interdisciplinaria* [The Northwest Roads II: A proposal for a systemic and interdisciplinary perspective], eds C. Bonfiglioli, A. Gutiérrez, M.A. Hers & M.A. Olavarria. Mexico City: Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, 601–21.
- Aguilar, C. & I. Martínez, 2008. Articulando la vida: reflexión comparativa entre nociones yoemem y rarámuri sobre las entidades físicas y anímicas [Articulating life: comparative reflection between Yoemem and Rarámuri notions of physical and animistic entities], in *Las vías del noroeste II: Propuesta para una perspectiva sistémica e interdisciplinaria* [The Northwest Roads II: A proposal for a systemic and interdisciplinary perspective], eds C. Bonfiglioli, A. Gutiérrez, M.A. Hers & M.A. Olavarria. Mexico City: Instituto de Investigaciones Antropológicas-Universidad Nacional Autónoma de México, 561–76.
- Armstrong, F., A. Troncoso & F. Moya-Cañoles, 2018. Rock art assemblages in north-central Chile: materials and practices through history, in *Archaeologies of Rock Art. South American perspectives*, eds A. Troncoso, F. Armstrong & G. Nash. New York (NY): Routledge, 241–63.
- Barad, K., 2007. *Meeting the Universe Halfway. Quantum physics and the entanglement of matter and meaning*. Durham (NC): Duke University Press.
- Bennett, J., 2010. *Vibrant Matter. A political ecology of things*. London: Duke University Press.
- Bonfiglioli, C., 2005. Jíkuri sepawa'ame (la 'raspa del peyote'): una danza de curación en la Sierra Tarahumara [Jíkuri sepawa'ame (the 'raspa del peyote'): a dance of healing in the Sierra Tarahumara]. *Anales de Antropología* 39(2), 151–88.
- Bonfiglioli, C., M.A. Hers & M.E. Olavarria (eds), 2008. *Las vías del noroeste II: Propuesta para una perspectiva sistémica e interdisciplinaria* [The Northwest Roads II: A proposal for a systemic and interdisciplinary perspective]. Mexico City: Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México.
- Bonfiglioli, C., A. Gutiérrez, M.A. Hers & D. Levin (eds), 2011. *Las vías del noroeste III: Genealogías, transversalidades y convergencias* [The Northwest Roads III: Genealogies, transversalities and convergences]. Mexico City: Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México.
- Boyd, C., 2021. Images-in-the-making. Process and vivification in Pecos River-style rock art, in *Ontologies of Rock Art. Images, relational approaches and indigenous knowledges*, eds O. M. Abadía & M. Porr. New York (NY): Routledge, 245–63.
- Boyd, C. & K. Cox, 2016. *The White Shaman Mural: An enduring creation narrative in the rock art of the Lower Pecos*. Austin (TX): University of Texas Press.
- Braidotti, R., 2015. *Lo Posthumano* [The posthuman]. Barcelona: Gedisa.
- Braniff-Cornejo, B., 2008. Iconos mesoamericanos en el noroeste [Mesoamerican icons in the Northwest], in *Las vías del noroeste II: Propuesta para una perspectiva sistémica e interdisciplinaria* [The Northwest Roads II: A proposal for a systemic and interdisciplinary perspective], eds A. Gutiérrez-Carlo, M. A. Hers & M. E. Olavarria. Mexico City: Instituto de Investigaciones Antropológicas-Universidad Nacional Autónoma de México, 83–102.
- Broda, J., 1991. Cosmovisión y observación de la naturaleza: el ejemplo del culto a los cerros en Mesoamérica [Cosmovision and observation of nature: the example of the cult of the hills in Mesoamerica], in *Arqueoastronomía y etnoastronomía en Mesoamérica* [Archaeoastronomy and ethnoastronomy in Mesoamerica], eds J. Broda, S. Iwaniszewski & L. Maupomé. Mexico City: Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México, 461–500.
- Broda, J., 2004a. Ciclos agrícolas en la cosmovisión prehispánica: el ritual mexica [Agricultural cycles in the Pre-Hispanic worldview: Mexica rituals], in *Historia y vida ceremonial en las comunidades mesoamericanas* [History and ceremonial life in Mesoamerican communities], eds J. Broda & C.G. Eshelman. Mexico City: INAH-UNAM, 35–60.
- Broda, J., 2004b. ¿Culto al maíz o a los santos? La ritualidad agrícola mesoamericana en la etnografía actual [Worship of maize or of saints? Mesoamerican agricultural ritual in contemporary ethnography], in *Historia y vida ceremonial en las comunidades mesoamericanas* [History and ceremonial life in Mesoamerican communities], eds J. Broda & C.G. Eshelman. Mexico City: INAH-UNAM, 61–81.
- Chemin, D., 1993. *Historia de la pamería Vol. 1. De los orígenes a finales del siglo XVI (Borrador)* [History of the Pamería Vol. 1. From the origins to the end of the 16th century (Draft)]. San Luis Potosí: El Colegio de San Luis.

- Cipolla, C., 2021. Posthuman potentials: considering collaborative Indigenous archaeology. *Cambridge Archaeological Journal* 31(3), 509–14.
- Cotonieto-Santeliz, H., 2007. No tenemos las mejores tierras, ni vivimos en los mejores pueblos...pero acá seguimos. Ritual agrícola, organización social y cosmovisión de los pames del norte [We don't have the best land, nor do we live in the best villages... but we are still here. Agricultural ritual, social organisation and cosmovision of the Pames of the North]. Master thesis, El Colegio de San Luis.
- Crellin, R.J., 2020. *Change and Archaeology*. London: Routledge.
- Crellin, R.J. & O.J.T. Harris, 2021. What difference does posthumanism make? *Cambridge Archaeological Journal* 31(3), 469–75.
- DeLanda, M., 2006. *A New Philosophy of Society. Assemblage theory and social complexity*. London: Continuum.
- DeLanda, M., 2016. *Assemblage Theory*. Edinburgh: Edinburgh University Press.
- Deleuze, G., 2002. *Diferencia y Repetición [Difference and Repetition]*. Buenos Aires: Amorrortu.
- Deleuze, G. & F. Guattari, 2002. *Mil Mesetas. Capitalismo y esquizofrenia [A Thousand Plateaus. Capitalism and schizophrenia]*. Valencia: PRE-TEXTOS.
- Deleuze, G. & F. Guattari, 2004. *El Anti-Edipo. Capitalismo y Esquizofrenia [The Anti-Oedipus. Capitalism and Schizophrenia]*. España: Paidós.
- Descola, P., 1996. *La selva culta. Simbolismo y praxis en la ecología de los Ashuar [The Cultured Forest. Symbolism and praxis in the ecology of the Ashuar]*. Quito: Ediciones Abya-Yala.
- Díaz de Liaño, G. & M. Fernández-Götz, 2021. Posthumanism, new humanism and beyond. *Cambridge Archaeological Journal* 31(3), 543–9.
- Dobres, M.A. & J.E. Robb, 2000. *Agency in Archaeology*. London: Routledge.
- Dornan, J.L., 2002. Agency and archaeology: past, present and future directions. *Journal of Archaeological Method and Theory* 9(4), 303–29.
- Fauconnier, F. & P. Faba, 2008. Las Adjuntas. Arte rupestre chalchihuiteño y cosmovisión huichola [Las Adjuntas. Chalchihuiteño rock art and Huichol cosmovision], in *Las vías del noroeste II: Propuesta para una perspectiva sistémica e interdisciplinaria [The Northwest Roads II: A proposal for a systemic and interdisciplinary perspective]*, eds C. Bonfiglioli, A. Gutiérrez, M.A. Hers & M.A. Olavarria. Mexico City: Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México, 475–536.
- Fernández-Götz, M., A. Gardner, G. Díaz de Liaño & O.J.T. Harris, 2021. Posthumanism in archaeology: an introduction. *Cambridge Archaeological Journal* 31(3), 455–9.
- Fowler, C., 2004. *The Archaeology of Personhood. An anthropological approach*. London: Routledge.
- Fowler, C., 2013. *The Emergent Past. A relational realist archaeology of Early Bronze Age mortuary practices*. Oxford: Oxford University Press.
- Fowler, C., 2016. Relational personhood revisited. *Cambridge Archaeological Journal* 26(3), 397–412.
- Fredengren, C., 2021. Bodily entanglements: gender, archaeological sciences and the more-than-ness of archaeological bodies. *Cambridge Archaeological Journal* 31(3), 525–31.
- Gallardo-Arias, P. (ed.), 2020. *Cuerpo y persona. Aportes antropológicos en México, El Salvador y Venezuela [Body and person. Anthropological contributions in Mexico, El Salvador and Venezuela]*. Mexico City: INAH.
- Gándara, M., 1990. La analogía etnográfica como heurística: lógica muestral, dominios ontológicos e historicidad [Ethnographic analogy as a heuristic: sample logic, ontological domains and historicity], in *Etnoarqueología. Coloquio Bosch Gimpera [Ethnoarchaeology. Bosch Gimpera Colloquium]*, eds Y. Sugiura-Yamamoto & M.C. Serra-Puch. Mexico City: Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México, 43–82.
- García-Lam, L., 2017. Entre chinchos y pitacoches: análisis del sistema ritual de los pames septentrionales de Ciudad del Maíz, San Luis Potosí [Between chinchos and pitacoches: analysis of the ritual system of the northern Pames of Ciudad del Maíz, San Luis Potosí]. Doctoral thesis, Universidad Nacional Autónoma de México.
- Gell, A., 1998. *Art and Agency. An anthropological theory*. Oxford: Oxford University Press.
- Geller, P.L., 2012. Parting (with) the dead: body partibility as evidence of commoner ancestor veneration. *Ancient Mesoamerica* 23(1), 115–30.
- Gillespie, S.D., 2001. Personhood, agency and mortuary ritual: a case study from the ancient Maya. *Journal of Anthropological Archaeology* 20, 73–112.
- Gómez-Ortiz, A., A. Vázquez de Santiago & J.I. Macías Quintero, 2007. Evidencias de prácticas rituales en La Quemada, Zacatecas: análisis de un osario [Evidence of ritual practices at La Quemada, Zacatecas: analysis of an ossuary]. *Estudios de Antropología Biológica* 13, 431–46.
- González-Arratia, L., 2008. Danza, canto y peyote. El mitote entre los cazadores recolectores del noreste de México [Dance, song and peyote. The mitote among the hunter-gatherers of northeastern Mexico], in *Tiempo y Región. Estudios históricos y sociales. Ana María Crespo Oviedo, in memoriam [Time and Region. Historical and social studies. Ana María Crespo Oviedo, in memoriam]*, ed. C. Viramontes-Anzures. Querétaro: Instituto Nacional de Antropología e Historia/Universidad Autónoma de Querétaro, 349–68.
- González-Arratia, L., 2014. La vinculación entre las armas, las manifestaciones gráfico-rupestres y el poder entre las sociedades prehispánicas del desierto del norte de México [The link between weapons, rock art manifestations and power among Pre-Hispanic societies

- in the desert of northern Mexico.]. *Arqueología* 48, 7–20.
- Gutiérrez, M. de la L., 2015. Paisajes ancestrales. Identidad, memoria y arte rupestre en las cordilleras centrales de la Península de Baja California [Ancestral landscapes. Identity, memory and rock art in the Central Mountain Ranges of the Baja California Peninsula.]. Doctoral thesis, Escuela Nacional de Antropología e Historia.
- Hamilakis, Y., 2017. Sensorial assemblages: affect, memory and temporality in assemblage thinking. *Cambridge Archaeological Journal* 27(1), 169–82.
- Haraway, D. J., 2019. *Seguir con el problema. Generar parentesco en el Cthuluceno* [Staying with the trouble. Making kin in the Cthulucene]. Bilbao: consonni.
- Harris, O.J.T., 2021. *Assembling Past Worlds. Materials, bodies and architecture in Neolithic Britain*. London: Routledge.
- Harrison-Buck, E. & J.A. Hendon, 2018. An introduction to relational personhood and other-than-human agency in archaeology, in *Relational Identities and Other-than-Human Agency in Archaeology*, eds E. Harrison-Buck & J.A. Hendon. Denver (CO): University Press of Colorado, 3–28.
- Hodder, I., 2012. *Entangled. An archaeology of the relationships between humans and things*. Oxford: Wiley-Blackwell.
- Hodder, I., 2016. *Studies in Human-Thing Entanglement*. <http://www.ian-hodder.com/books/studies-human-thing-entanglement>
- Jackson, S.E., 2018. Facing objects: an investigation of non-human personhood in Classic Maya contexts. *Ancient Mesoamerica* 30(1), 31–44.
- Jervis, B., 2019. *Assemblage Thought and Archaeology*. London: Routledge.
- Johansson, P., 2006. Mocihuaquetzqueh. ¿Mujeres divinas o mujeres siniestras? [Mocihuaquetzqueh. Divine or sinister women?]. *Estudios de Cultura Náhuatl* 37, 193–230.
- Joyce, A.A., 2020a. Assembling the city. Monte Albán as a mountain of creation and sustenance, in *New Materialisms, Ancient Urbanisms*, eds S.M. Alt & T.R. Pauketat. New York (NY): Routledge, 65–93.
- Joyce, A.A., 2020b. Mapping agricultural assemblages in ancient Oaxaca from the domestication of maize to the collapse of Monte Albán. *World Archaeology* 52 (3), 353–75.
- Kay, D. K., & M. Haughton, 2019. Weird relations: a prolegomenon to posthumanism and its archaeological manifestations. *Archaeological Review from Cambridge* 34 (Beyond the Human: Applying Posthumanist Thinking to Archaeology), 6–25.
- Kindl, O., 2018. The colors of the desert. Ritual and aesthetic uses of pigments and colorants by the Guachichil of northern Mexico, in *Painting the Skin. Pigments on bodies and codices in pre-Columbian Mesoamerica*, eds É.D. García & M.L.V. de Ágredos Pascual. Tucson (AZ): University of Arizona Press, 102–28.
- Knappett, C. & L. Malafouris, 2008. *Material Agency. Towards a non-anthropocentric approach*. New York (NY): Springer.
- Latour, B., 2007. *Nunca fuimos modernos. Ensayo de antropología simétrica* [We were never modern. Symmetrical anthropology essay]. Madrid: Editorial Siglo XXI.
- Latour, B., 2008. *Reensamblar lo social: una introducción a la teoría del actor-red* [Reassembling the social: an introduction to actor-network theory]. Buenos Aires: Manantial.
- Leathem, H.M., 2019. Manifestations that matter: a case of Oaxacan ruin possession. *Archaeological Review from Cambridge* 34 (Beyond the Human: Applying Posthumanist Thinking to Archaeology), 92–110.
- López-Austin, A., 2001. El núcleo duro, la cosmovisión y la tradición mesoamericana [Hard core, world view and Mesoamerican tradition], in *Cosmovisión, ritual e identidad de los pueblos indígenas de México* [World view, ritual and identity of indigenous peoples of Mexico], eds J. Broda & F. Báez-Jorge. Mexico City: Consejo Nacional para la Cultura y las Artes.
- Lozada-Toledo, J. & S. Vigliani, 2021. Un soplo de vida en la pared. Arte rupestre y la noción de persona entre los mayas del posclásico de Laguna Mensabak, Chiapas [A breath of life on the wall. Rock Art and the notion of personhood among the Postclassic Maya of Laguna Mensabak, Chiapas]. *LiminaR. Estudios Sociales y Humanísticos* 19(1), 225–41.
- Marshall, Y., 2021. Indigenous theory is theory: *Whakapapa* for archaeologists. *Cambridge Archaeological Journal* 31 (3), 515–24.
- Martínez, I. & A. Fujigaki, 2011. Los caminos de la muerte: un modelo de estudio regional para el noroeste de México [Death roads: a regional study model for Northwest Mexico], in *Las vías del noroeste III: Genealogías, transversalidades y convergencias* [The Northwest Roads III: Genealogies, transversalities and convergences], eds C. Bonfiglioli, A. Gutiérrez, M.A. Hers & D. Levin. Mexico City: Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México, 329–62.
- Martínez-González, R., 2007. El alma de Mesoamérica: unidad y diversidad en las concepciones anímicas [The soul of Mesoamerica: unity and diversity in soul conceptions]. *Journal de la Société des américanistes* 93 (2), 7–49.
- Martínez-Moreno, J.C.D., 2021. Visiones en la Tierra de la Memoria: Agencia relacional, personalidad y paisaje ritual en el arte rupestre de la Zona Centro de San Luis Potosí [Visions in the land of memory: relational agency, personality and ritual landscape in the rock art of central San Luis Potosí]. Graduate thesis, Universidad Autónoma de San Luis Potosí.
- Matos, E., 2011. *Muerte a filo de obsidiana* [Death by obsidian blade]. Mexico City: Fondo de Cultura Económica.

- Mendoza-Rico, M. & A. Vázquez-Estrada, 2008. Territorios etéreos. El papel de los antepasados en la construcción del paisaje sagrado entre los chichimeca otomíes del semidesierto queretano [Ethereal territories. The role of ancestors in the construction of the sacred landscape among the Chichimeca Otomi of the semi-desert of Querétaro.], in *Tiempo y Región. Estudios históricos y sociales. Ana María Crespo Oviedo, in memoriam* [Time and Region. Historical and social studies. Ana María Crespo Oviedo, in memoriam], ed. C. Viramontes-Anzures. Querétaro: INAH/Universidad Autónoma de Querétaro, 409–30.
- Murillo-Rodríguez, S., 2013. El tratamiento mortuario del cuerpo humano en las antiguas poblaciones mexicanas [The mortuary treatment of the human body in Ancient Mexican Populations]. *Journal of the Institute of Iberoamerican Studies* 15(2), 207–31.
- Olsen, B., 2010. *In Defense of Things: Archaeology and the ontology of objects*. Lanham (MD): AltaMira Press.
- Olsen, B., M. Shanks, T. Webmoor & C. Witmore, 2012. *Archaeology. The discipline of things*. Berkeley (CA): University of California Press.
- Pauketat, T., 2019. Introducing new materialisms, rethinking ancient urbanisms, in *New Materialisms, Ancient Urbanisms*, eds S.M. Alt & T.R. Pauketat. New York (NY): Routledge, 1–18.
- Petúrsdóttir, Þ. & B. Olsen, 2018. Theory adrift: the matter of archaeological theorizing. *Journal of Social Archaeology* 18(1), 97–117.
- Pijoan-Aguadé, C.M. & J. Mansilla-Lory, 1990. Prácticas rituales en el norte de Mesoamérica. Evidencia en Electra, Villa de Reyes, San Luis Potosí [Ritual practices in northern Mesoamerica. Evidence from Electra, Villa de Reyes, San Luis Potosí.]. *Arqueología. Revista de la Dirección de Arqueología del Instituto Nacional de Antropología e Historia* 4, 87–96.
- Powell, P.W., 1977. *La Guerra Chichimeca* [The Chichimec war]. Mexico City: Fondo de Cultura Económica.
- Ramírez-Torres, J.L., 2017. *Del binomio frío-caliente a la complejidad poliédrica de una estructura mesoamericana profunda* [From the hot-cold binomial to the polyhedral complexity of a deep Mesoamerican structure]. Toluca: Universidad Autónoma del Estado de México.
- Robb, J.E., 2010. Beyond agency. *World Archaeology* 42(4) 'Debates in "World Archaeology"', 493–520.
- Rodríguez, A., 2012. Los rimuká, 'hilos de vida y muerte', elemento cardinal de la etiología rarámuri [The rimuká, 'threads of life and death', cardinal element of Rarámuri aetiology], in *Hilando al norte: nudos, redes, vestidos, textiles* [Spinning in the north: knots, nets, clothing, textiles], ed. A. Gutiérrez del Ángel. San Luis Potosí: El Colegio de San Luis/El Colegio de la Frontera Norte, 235–56.
- Rodríguez-Arcos, L.C., 2021. Más allá de la roca: género y arte rupestre en el semidesierto guanajuatense [Beyond the rock: gender and rock art in the Guanajuato semi-desert]. Master thesis, Universidad Autónoma de Querétaro.
- Rodriguez-Loubet, F., 1985. *Les Chichimeques: Archéologie et Ethnohistoire des Chasseurs-Collecteurs du San Luis Potosí* [The Chichimecs: Archaeology and ethnohistory of the hunter-gatherers of San Luis Potosí]. Mexico City: Centre d'Etudes Mexicaines et Centraméricaines.
- Sahagún, F.B. de, 1938. *Historia general de las cosas de Nueva España* [General history of things in New Spain]. Mexico City: Editorial Pedro Robredo.
- Salinas-Hernández, F., 2012. Danzar para curar. Las representaciones antropomorfas del semidesierto guanajuatense y su función terapéutica [Dancing to heal. Anthropomorphic representations from the Guanajuato semi-desert and their therapeutic function.], Graduate thesis, Universidad Veracruzana.
- Santa-María, F.G. de, 2003. *Guerra de los Chichimecas (México 1575–Zirosto 1580)* [Chichimec War (Mexico 1575–Zirosto 1580)]. San Luis Potosí: El Colegio de Michoacán/El Colegio de San Luis-Universidad de Guadalajara.
- Santos-Granero, F., 2009. *The Occult Life of Things. Native Amazonian theories of materiality and personhood*. Tucson (AZ): University of Arizona Press.
- Valdovinos-Pérez, V.H., 2018. Entre manos y pies. Prácticas funerarias en el norte de la Huasteca, Formativo Terminal [Between hands and feet. Funerary practices in the northern Huasteca, Terminal Formative period]. Master thesis, Universidad Nacional Autónoma de México.
- Valle, R., 2018. Ethnogeology of rock art? Some considerations derived from Amazonianist ethnographies, in *Archaeologies of Rock Art. South American perspectives*, eds A. Troncoso, F. Armstrong & G. Nash. New York (NY): Routledge, 264–91.
- Vega, A., C. Viramontes, M. de la L. Gutiérrez, F. Mendiola, S. Cruz & F. Rodríguez, 2021. Rock art research in Mexico (2015–2019), in *Rock Art Studies. News of the World VI*, eds P. Bahn, N. Franklin & M. Strecker. Oxford: Archaeopress, 222–41.
- Vigliani, S.A., 2015. *Pinturas espirituales. Identidad y agencia en el paisaje relacional de sociedades cazadoras, recolectoras y pescadoras* [Spiritual paintings. Identity and agency in the relational landscape of hunting, gathering and fishing societies]. Mexico City: Instituto Nacional de Antropología e Historia.
- Vigliani, S.A., 2016. La noción de persona y la agencia de las cosas [Notion of personhood and the agency of things. A view from rock art]. *Anales de Antropología* 50, 24–48.
- Viramontes-Anzures, C., 2005. *Gráfica rupestre y paisaje ritual. La cosmovisión de los recolectores-cazadores de Querétaro* [Rock art and ritual landscape. The cosmovision of the hunter-gatherers of Querétaro]. Mexico City: INAH.

- Viramontes-Anzures, C. & L. M. Flores, 2017. *La memoria de los ancestros. El arte rupestre de Arroyo Seco, Guanajuato* [The memory of the ancestors. The rock art of Arroyo Seco, Guanajuato]. Guanajuato (MX): Ediciones La Rana-Fiarca.
- Viveiros de Castro, E., 2004. Perspectivismo y multinaturalismo en la América Indígena [Perspectivism and multinaturalism in Indigenous America], in *Tierra Adentro. Territorio indígena y percepción del entorno* [Inland. Indigenous territory and perception of the environment], eds A. Surrallés & P. García-Hierro. Copenhagen: IWGIA, 37–80.
- Watts, C., 2013. *Relational Archaeologies. Humans, animals, things*. London: Routledge.
- Witmore, C., 2021. Finding symmetry? Archaeology, objects and posthumanism. *Cambridge Archaeological Journal* 31(3), 477–85.
- Whitley, D.S., 1998. Finding rain in the desert: landscape, gender and far western North American rock art, in *The Archaeology of Rock-Art*, eds C. Chippindale & P.S.C. Taçon. Cambridge: Cambridge University Press, 12–29.
- Wyndham, F.S., 2011. Living landscapes of the Sierra Tarahumara: steps toward a social ecology of rock art, in *Las vías del noroeste III: Genealogías, transversalidades y convergencias* [The Northwest Roads III: Genealogies, transversalities and convergences], eds C. Bonfiglioli, A. Gutiérrez, M.A. Hers & D. Levin. Mexico City: Instituto de Investigaciones Antropológicas/Universidad Nacional Autónoma de México, 471–97.
- Zubieta, L.F., 2021. Relational beings modeled in clay within the depths of the Sierra Mixe of Oaxaca, Mexico. Bridging Indigenous knowledge and archaeology. *HAU: Journal of Ethnographic Theory* 11(3), 1168–90.

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