Rock art and rituality in the construction of the Maya person of the Postclassic period at Mensabak Lake, Chiapas

Josuhé Lozada, Silvina Vigliani, Guillermo Acosta, Patricia Pérez, Jorge Ezra Cruz, Diana B. Chaparro, Víctor Hugo García

Abstract:

The notion of person among the Maya has been studied particularly for the Classic and post-contact periods. However, we know little about the Maya person in the Postclassic period. In this paper, our initial assumption is that the Postclassic rock art found in some of the cliffs of Mensabak Lake, Chiapas, conveys elements regarding the notion and construction of the Maya person. In this sense, we analyze the rock paintings and the material culture associated with the cliffs based on the anthropology of the person.

For the Classic Maya, the limits of the person were relatively permeable, something that can be observed in various scenes of Classic art, given the presence of various essences emanating from the bodies of the individuals depicted therein. Permeability, in that sense, is expressed when the person is saturated by substances whose qualities influence the internal composition of the person.

Here we discuss an interpretation of a rock scene from the Postclassic period, where we observe a ritual of construction of the Maya person. In addition, we conducted underwater archaeological surveys and archaeological excavations at the foot of a particular cliff, whose collected materials suggest the presence of a repeated ritual practice, where food was prepared, copal was burned and substances were exchanged with the deities.

Keywords: *Person, Postclassic, Maya, Rock art*

Josuhé Lozada ■ Dirección de Estudios Arqueológicos del INAH, email: josuhe_lozada@inah.gob.mx, <https://orcid.org/0000-0002-6203-2513>

Silvina Vigliani ■ Subdirección de Arqueología Subacuática del INA, email: silvina_vigliani@inah.gob.mx, <https://orcid.org/0000-0003-3818-6499>

Guillermo Acosta ■ Instituto de Investigaciones Antropológicas de la UNAM, email: acostaocha@gmail.com

Patricia Pérez ■ Escuela Nacional de Antropología e Historia, email: patricia_perez@inah.gob.mx

Jorge Ezra Cruz ■ Posgrado en Antropología UNAM, email: ezrajorge@gmail.com

Diana B. Chaparro ■ Escuela Nacional de Antropología e Historia, email: chaparro.berenice04@gmail.com

Víctor Hugo García ■ Posgrado en Antropología UNAM. email: victortikgarca@gmail.com

Resumen:**ARTE RUPESTRE Y RITUALIDAD EN LA CONSTRUCCIÓN DE LA PERSONA MAYA DEL PERIODO POSCLÁSICO EN LAGUNA MENSABAK, CHIAPAS**

La noción de persona entre los mayas ha sido estudiada especialmente para el periodo Clásico y para las épocas posteriores al contacto. Sin embargo, poco sabemos acerca de la persona maya en el periodo Posclásico. En este trabajo, partimos del supuesto de que el arte rupestre Posclásico presente en algunos de los riscos de Laguna Mensabak, Chiapas, expresa elementos vinculados a la noción y construcción de la persona maya. En tal sentido, hacemos un análisis de las pinturas rupestres y de la cultura material asociada a los riscos a partir de la antropología de la persona.

Para los mayas del Clásico, los límites de la persona eran relativamente permeables, algo que puede observarse en algunas escenas del arte Clásico mediante la presencia de diversas esencias que emanan de los cuerpos de los personajes representados. La permeabilidad, en ese sentido, se expresa cuando la persona es permeada por sustancias cuyas cualidades influyen en la composición interna de la persona.

Aquí presentamos la interpretación de una escena rupestre del periodo Posclásico, donde se observa un ritual de construcción de la persona maya. Además, realizamos prospecciones arqueológicas subacuáticas y excavaciones arqueológicas al pie de este risco, cuyos materiales recolectados permiten suponer la presencia de una práctica ritual reiterada, donde se prepararon alimentos, se quemó copal y se intercambiaron sustancias con las deidades.

Palabras clave: Persona, Posclásico, Maya, Arte rupestre

Introduction

One of the greatest challenges presented by the study of the past through archaeological research has been the identification of ways of being and knowing the world through ontological bases closest to those of the groups studied. In this regard, we will trace and analyze factors related to corporeality and the notion and construction of the Maya person through ethnographic and linguistic information about local groups.

We will then analyze the rock art found on the cliffs that border Mensabak Lake, located in the Lacandon Jungle in the northeastern region of the state of Chiapas, Mexico. Subsequently, we will contrast this information with the additional archaeological context, including the excavations and underwater surveys conducted below these cliffs. Finally, we discuss a way of interpreting the context mentioned previously.

The main questions raised by this study are: How did the Postclassic Maya of Mensabak Lake conceive the notion of personhood, and how did they convey this conceptualization through ritual and rock art? To provide some possible answers to these questions, our approach engages with the anthropology of personhood (Busby 1997; Strathern, 1988) and its applications in archaeology (Fowler 2004; Gillespie 2001; Jones, 2005; Vigliani 2016).

The notion of personhood among the Maya

In the Tsotsil groups of the Los Altos region of Chiapas the animic entity that has been most studied is the *ch'ulel*, which refers to an immortal and individual anima that can be lost due to fear, fright, or when a person falls to land or water,

whereby the *ch'ulel* remains wherever the fall occurred (Guiteras 1965). There is also the *wayjel*, which refers to an animal soul that accompanies a person and is called *lab* among the Tseltal Maya (Pitarch 2010). Traditionally, a complete Tsotsil person has 13 *ch'ulel* and 13 *wayjel* (Page 2014). Furthermore, *ik'* is recognized as air, which manifests itself as muscular pains (Guiteras 1965), and *k'al* or heat, which refers to a Tsotsil person's vital energy. In fact, there is a relationship between entities and animic forces, since a person's strength, or *k'al*, resides within the *ch'ulel* (Page 2014).

Among the Yucatec Maya there are two animic entities: *ool* and *pixan* and animic force called *ik'*. The *ool* is the animic entity associated with the heart; it is thought to be the marrow of a human being, and is even used to refer to the medullary component, stem, or tender bud of vegetables (Bourdin 2007). The *ool* is said to be a will or capacity for intentional participation, referring to a world of common sense, emotions, energy, and spirit (Cervera 2007). *Pixan*, for the Yucatec Maya, literally means a person's "wrapping" or "covering". The *pixan* is thought to be the animic entity that separates from the body at death (Bourdin 2007). It is described as a "hot gas" that leaves a deceased person's body by dissolving into the air (Bourdin, 2007). Other authors indicate that *pixan* refers to the soul of the dead, which is remembered and fed during its annual return in November, during the festival of *hanal pixan* or "food of the souls". It also alludes to what is blissful, fortunate, and blessed (Ruz 2003; Villa 1987).

The Yucatec Maya, in addition to *ool* and *pixan*, distinguish an animic force called *ik'*; it refers to breath, animation, and life. Reportedly, one has *ik'* when he/she takes on and acquires consciousness and responsibility. Sometimes it appears in the deceased as a whirlpool of spirits (Cervera 2007). According to the Cordemex Maya Dictionary (1980), *ik'* among the Yucatec Maya refers to the air or wind, or a gasp, or a puff of air that one blows through the mouth; thus, a breath is linked to both respiration and vitality, virtue, and power. Breath, then, refers to something deeper than the mechanical act of breathing (Martínez 2015).

The Lacandon Maya of Chiapas also recognize the animic entity called *pixan* that designates a kind of bodily covering linked to the Western notion of soul or spirit (Boremanse 1987). *Pixan* also refers to an animic entity that leaves the body after death in order to travel over a lake accompanied by a dog and ends up entering a rock surface in an area with several cave paintings (Lozada 2013). The *pixan* of the Lacandon is not exclusive to humans; it is believed that the jungle, as a place of life and interaction, is also endowed with *pixan* (Balsanelli 2018). Two other animic entities of the Lacandon Maya are *-or*, which refers to the mood or spirit of a person (morale or animic characteristics of the subject), and *ik'*, which is also viewed as an essence that may correspond to a gaseous entity related to the breathing processes (Balsanelli 2019).

For the purposes of this study, the Lacandon concept of *pixan* is used as one of the closest ethnographic referents to the analyzed material, due to the location of

Mensabak Lake in the Lacandon jungle. However, given the ethnic and linguistic proximity to the Yucatec Maya, we include information related to the *anima* from both Yucatec and Lacandon groups.

As for the pre-Hispanic Maya, the information we have comes mainly from archaeology and epigraphy. In general terms, the most frequently identified animic component has been *ik'*, translated as wind, although it involves a whole set of ideas about life. Thus, *ik'* is present in the objects that were important to the Maya, such as certain constructions, places, objects, or animals, and implanting it requires an act of creation (García 2007). Both entities and animic forces among the Maya were important in defining a person and determining his or her destiny by acquiring responsibility. Responsibility played a fundamental role in the construction of the Maya person, especially in the transition from an immature state to social maturity.

During the Classic Maya period, a person's boundaries were relatively permeable, as we can observe in some Classic art scenes showing diverse essences emanating from people's bodies. In that sense, permeability is manifested when a person is infused with substances whose qualities influence his/her internal composition. Similarly, practices of partibility have been identified in the treatment of the deceased, especially of nobles and rulers, and where the persona of the deceased is reconfigured in specific practices involving the exchange or circulation of body parts (Grube and Werner 1994; Gillespie 2001; Houston, Stuart and Taube 2006 and Velásquez 2009, 2013).

In general terms, the notion of personhood during the Classic and post-contact periods has been thoroughly studied. However, little is known about the Postclassic (Lozada and Vigliani 2021). In this paper we endeavor to contribute to the notion of personhood during the Postclassic period.

The study area

Mensabak Lake is located in the northeast region of the state of Chiapas in the Lacandon Jungle (Fig. 1). It is a lake system located in a karstic zone where caves and cliffs abound. It is also a national protected area and home to about one hundred northern Lacandon Maya. Mensabak contains several lakes, the two largest being Tsibaná (also Tz'ib'ana) and Mensabak and is dominated by the Mirador Mountain (Palka *et al.* 2020).

Around this lake, seven archaeological sites with architecture dating from the Late Preclassic and Late Postclassic periods, in addition to five cliffs with rock art from the same two eras have been documented (Fig. 2). In total, 208 rock motifs have been documented at Mensabak Lake, distributed in several panels along five cliffs. For our purposes here, we will discuss Panel 1 of the Mensabak Cliff because of what is represented in its images.

Figure 1. Location map of Mensabak Lake. Prepared by Josuhé Lozada.

Figure 2. Cliffs with rock art at Mensabak Lake. Prepared by Josuhé Lozada.

Another important place in this area is the Tsibaná cliff, which contains many rock paintings, including handprints, animals, human figures, and painted hieroglyphs. The Lacandon state that this is the house of Tsibaná, the god of the house of painted writing, showing possible connections to past beliefs regarding the cliff. The Lacandon also believe that souls of dead people travel through the Tsibaná cliff to reside in the house of Mensabak, which is a cliff with rock art to the north.

Mensabak is the Lacandon God of rain, keeper of dead souls, and one of the central deities at the lakes. Human bones rest on the surface of Mensabak's shrine and our investigations informed the community that men, women, and children were interred there during Protohistoric times (Palka *et al.* 2020).

The Mensabak cliff is a large rock front overhanging the edge of the lake, about 30 meters high with an approximate extension of 60 meters. Access to the cliff is exclusively by boat or canoe. Because of its location and topography, it is considered a ritual space.

Panel 1 of Mensabak Cliff

The scene has eight rock motifs in red and orange (Fig. 3). From left to right, a small, red anthropomorphic figure emerges, apparently seated, out of a natural hollow in the rock. Opposite this figure there are two additional and larger anthropomorphic figures painted in red. One appears seated in profile with its arms ex-

Figure 3. Panel 1 of the Mensabak Cliff (Josuhé Lozada).

tended. Its face reveals a pronounced jaw or beard, an open mouth, a nose, an eye cavity, and a headdress. The other figure is similarly positioned, and its face reveals a mouth, nose, and eyes, also wearing a headdress. In the lower right there is an abstract figure in red.

Above and around these figures there are complex orange strokes in the form of hooks, virgules, circles, and zigzags that communicate with the upper area of the panel. Here two orange circles appear and below them some wide vertical lines that are drawn above five natural holes that form a crack that runs towards the east side of the panel.

Finally, in the upper righthand corner of the panel, there is a quadruped zoomorphic figure in orange with ears, a snout, and tail and above it another zoomorphic figure painted in red; it also has ears, a snout, and tail, but appears in a more anthropomorphic and erect position.

Beyond the cliff with rock art

Since 2018 we have studied the rock art at the foot of the cliffs. At those sites that have a flat surface we have undertaken archaeological excavations, while at the cliffs overhanging the water's edge (Fig. 4), where the only way to reach them is by canoe, we have conducted underwater archaeological surveys (Fig. 5).

Under the Mensabak Cliff we dug two excavation pits whose archaeological materials revealed two *metates* and four *metate manos* [smooth, hand-held stones], which were analyzed by the starch extraction technique (Cruz and Chaparro 2018). The results indicate that they were used to grind corn, chili, tomato, and sweet potato and were dated to the Late Preclassic (Fig. 6). This means that this cliff was probably used since early times for the preparation of ritual meals, which persisted until the 1980s, and involved Lacandon Maya rituals.

Figure 4. Excavation area of the Mensabak Cliff. Prepared by Josuhé Lozada.

Figure 5. Underwater archaeology at the foot of the Mensabak Cliff (Dámaris Noemí Ovando)

Figure 6. Grinding stones used for the starch grain analysis (left) and starch grains recovered (right):
A) corn (circle) and sweet potato (square) starches, B) chili granules (elongated starch grains) and green tomato (small ones), C) gelatinized bean starch, D) granule of a possible tuberous root.
Prepared by Jorge Ezra, Diana Chaparro and Guillermo Acosta.

Figure 7. Ceramics found in a stone altar at Mensabak Cliff (Josuhé Lozada).

Furthermore, towards the Late Postclassic period, a stone altar, a good amount of ritual pottery (predominantly *cajetes* [earthenware pots]) (Fig. 7), as well as blades, flakes, and an obsidian projectile point were found. A 3-to-4-cm-thick layer of ash containing Postclassic ceramics is noteworthy. The lithics were analyzed by means of use-wear analysis and x-ray fluorescence (Pérez 2019). The X-ray Fluorescence analysis on 10 elements (Mn, Fe, Zn, Ga, Th, Rb, Sr, Y, Zr and Nb) using the methodology developed by Speakman (2012) allowed us to identify two of the three main obsidian deposits from the Guatemalan Altiplano: El Chayal and San Martín Jilotepeque (Fig. 8), with 7 and 3 specimens respectively. The use-wear analysis results indicate they were used to cut bone (Fig. 9). In addition, in two of the four pieces that show signs of bone cutting, there are also micro remains of blood and collagen, indicating that they were probably used for ritual purposes. We noted that a few meters away there is a small cave or shelter converted into an ossuary (Fig. 10) with numerous human bones from different periods.

The local inhabitants have interesting cultural interpretations of the bones collected at this and other shrines: they say these are bones of people who passed through the cliff to live with Mensabak god, the bones of gods who went to the spiritual realm, or the remains of people who died during epidemics (Palka *et al.* 2020).

Our underwater archaeological surveys carried out at the foot of Mensabak Cliff turned up an adult female humerus (Fig. 11) (Montes de Paz, 2021), as well as ritual pottery (*cajetes*) (Fig. 12), probably intentionally thrown to the bottom of the lake.

Figure 8. Bivariate analysis (Zr vs Rb in ppm) of three obsidian sources (ellipses): San Martin Jolo-tepeque (SMJ), Ixtepeque and El Chayal Guatemala, compared with the archaeological samples (black dots). The results indicate their identification as sources of SMJ and El Chayal. Prepared by Víctor Hugo García and Guillermo Acosta.

Figure 9. M2-4-B-1-2 artifact: (1) and (2) micropolishes associated with bone cutting; (3) collagen residue, (4) blood residue, and (5) micro-flaking and micro-polishing resulting from bone work (200x). Prepared by Patricia Pérez.

Figure 10. Ossuary found at the Mensabak Cliff, near to the rock art motifs (Josuhé Lozada).

Figure 11. Adult female humerus found at the underwater archaeological survey (Yael Sánchez).

Figure 12. Ritual pottery found at the underwater archaeological survey (SAS-INAH).

We now turn to the interpretation of the panel as well as the archaeological surroundings.

Interpretation of the scene of Panel 1 of Mensabak Cliff

The scene as a whole resembles the “codex style”, characteristic of the Late Postclassic period (Lozada 2017). The small figure is probably a child who is being presented by two adults before the Mensabak rain deity displaying his classic blinkers (Fig. 13).

The two adults to the right of the child are seated in a ritual position and are wearing headdresses, and one of them is wearing a mask. The masks reflect the relationship that these figures had with the world of the gods and their role as intermediaries with the earthly world. The beard attached to the lower part of the masks indicates that they were an incarnation of older personages, perhaps ancestors.

An orange-colored gaseous form comes out of the mouth of the Mensabak God, runs across the upper part of the scene, passes through the hand of the small figure, and finally enters and merges with the child's body. This orange gaseous form also seems to envelop the two adults (Lozada and Vigliani 2021).

In this scene, we see that the figures were first painted in red and an orange gaseous form was added later. This gaseous substance envelopes the child, the adult figures, the eyes of the Mensabak God, and one of the zoomorphic figures in the upper part of the panel.

Given these details, our interpretation posits that the two adult figures were officiants or priests who present the child before the Mensabak god in order to endow him with personhood or responsibility. Thus, we might be viewing a ritual whereby the child's persona is constructed and the *ik'* or vital breath, i.e. the orange gaseous form, comes out of the god's mouth, bifurcates, and aided by the officiants, completely *permeates* the child.

When the image of the child is viewed up close, we can see that the gaseous figure is not directed to his head, but rather to an area associated with the diaphragm; therefore, it is likely that it is a breath or *ik'*, rather than a soul-heart or *ool* in terms of the Yucatec Maya (Balsanelli 2019). In turn, the small figure seems to hold the gaseous element with one of his hands, which suggests that he is controlling or receiving the breath.

The vital breath was insufflated by the celestial gods at the moment when a person was created; this breath or *ik'* could be, for the Postclassic Maya of Mensabak Lake, the essence or breath of the Mensabak god which was placed in children so that they could receive their personhood by means of a ritual act.

An interesting detail is that under the figure of the child there is a natural hollow that apparently was used by the Maya painter to represent the cave as a dark and cold place associated with the first years of life of the Maya person. For the Maya, when a child is born, he or she is a cold being that gradually increases in warmth as

Figure 13. Panel 1 of the Mensabak Cliff. Drawn by Josué Lozada.

they reach maturity. If the relationship between the natural hollow and the location of Panel 1 was intentional, we can assume that it represents the passage from the child's cold state to a warmer one in the process of building personhood (Lozada and Vigliani 2021).

In this process of ritual reciprocity, conducted under a kind of debt, the Maya person acquired the responsibility of feeding the deities. Excavations at the foot of the cliff turned up *metates* and grinding *manos* with evidence of food processing dating from the Preclassic, and, from the Postclassic, a large amount of ritual pottery, especially *cajetes*, which may have contained food. We believe that these findings indicate a continuous practice of some type of ritual commensality (Bray 2012; Hamilakis 2015) where it was possible to establish social relations between different persons (humans and non-humans) through shared consumption. In this case, through shared experiences such as the smell of food, copal smoke, and probably the words or chants of an orator, others (beings) were incorporated into the social order transforming them into social persons (Bray 2012). Given the polysemic nature of the ritual, this could be linked to one or several activities performed at that location, revealing the transubstantiality between dividual beings.

Final comments

An approximation to the notion (or state) of being a person among the Postclassic Maya is a complex task, since we do not have enough data to describe the animic entities or animic forces that characterized these groups. Further, we must consider

that there is not, for example, a single animic model shared among Nahuas and the Maya (Martínez 2006). Quite the contrary. A wide variety of Mesoamerican animic conceptions with regional, local, and even personal variants, has been recorded for groups from central Mexico as well as the Chiapas highlands (Martínez 2015).

That said, and given the evidence presented in this work based on the scene depicted in Panel 1, we posit that the notion of personhood among the Postclassic Maya of Mensabak Lake was built on the basis of a permeable, relational ontology. If the interpretation of Panel 1 is correct and the gaseous form represents the vital breath that flows from the Mensabak God to the child with the intermediation of two officiants, we would be witnessing a process of transition from one state of being to another, perhaps corresponding to the construction of personhood.

Regarding the origin of the obsidian found in the dig, the El Chayal source is ubiquitous in the Chiapas sites since Preclassic times, while the obsidian of San Martín Jilotepeque occurs mainly in the Late Classic and Postclassic in the region. Ixtepeque obsidian, present in low quantities during the Preclassic in Chiapas, is absent from the sample analyzed.

The use-wear analysis suggests that the lithic artifacts were used before being deposited in the context. The micro residues in some lithics suggest their probable ritual use (blood traces). The starch grain analysis, on the other hand, may indicate that these are remains of food present on objects of daily use that were offered on the site, but we suggest their use in ritual meals or feasts accompanying the ceremonial use of the space associated with rock paintings.

The archaeological context discussed herein incorporates several elements: the location of the site in its liminal aspect, the evidence of ritual meals, the association with ossuaries, the presence of Lacandon censers, the rock art, and the relationship of this setting with water. This entire context encourages us to approach the ontological framework where this type of practices was conducted, offering insights into the notion of becoming a person in the Postclassic Maya.

References

Balsanelli, Alice

2019 "Almas lacandonas: estudio de las entidades anímicas de los Jach Winik". In *LiminaR. Estudios Sociales y Humanísticos*, XVII (2), pp. 115-130. Universidad de Ciencias y Artes de Chiapas, Mexico.

2018 "Desde el punto de vista lacandón: propuesta para un nuevo acercamiento a la ontología lacandona". In *Cuiculco. Revista de Ciencias Antropológicas*, 72, pp. 83-102. Escuela Nacional de Antropología e Historia, Mexico.

Boremanse, Didier

1987 "La quête religieuse des Hach Winik (Indiens Lacandons) du Mexique meridional". In *Journal de la Société des Américanistes*, 73, pp. 51-74. Paris, France.

Bourdin, Gabriel Luis

- 2007 "La noción de persona entre los mayas: una visión semántica". In *Revista Pueblos y Fronteras Digital*, 2 (4), pp- 1-31. Centro de Investigaciones Multidisciplinarias sobre Chiapas y la Frontera Sur, Universidad Nacional Autónoma de México.

Bray, Tamara

- 2012 "Ritual commensality between human and non-human persons: investigating native ontologies in the Late Pre-Columbian Andean World". Edited by Susan Pollock, *Between feasts and daily meals: toward and Archaeology of Commensal Spaces*, *eTopoi Journal for Ancient Studies*, Special Volume 2, pp. 197-212.

Busby, Cecilia

- 1997 "Permeable and Partible Persons: A Comparative Analysis of Gender and the Body in South India and Melanesia". In *Journal of the Royal Anthropological Institute* 3 (2), pp. 261-278. England.

Cervera, María Dolores

- 2007 "El *hetsmek*' como expresión simbólica de la construcción de los niños mayas yucatecos como personas". In *Revista Pueblos y Fronteras Digital*, 2 (4), pp. 1-34. Centro de Investigaciones Multidisciplinarias sobre Chiapas y la Frontera Sur, Universidad Nacional Autónoma de México, Mexico.

Cruz, Jorge y Diana Chaparro

- 2018 *Informe del análisis de almidones en piedras de molienda de Laguna Mensabak*. Technical report delivered to the Dirección de Estudios Arqueológicos del Instituto Nacional de Antropología e Historia. Instituto de Investigaciones Antropológicas-Laboratorio de Prehistoria y Evolución Humana, Universidad Nacional Autónoma de Mexico.

Diccionario Maya Cordemex

- 1980 Diccionario Maya Cordemex. Dirigido por Alfredo Barrera Vázquez. Ediciones Cordemex, Mérida, Yucatán, México.

Fowler, Chris

- 2004 *The Archaeology of Personhood. An Anthropological Approach*. 192 pp. Londres y Nueva York, Routledge.

García, Valeria

- 2007 *Imágenes materializadas: la máscara de jadeíta como retrato y representación en el Clásico maya*. Master's Thesis in Archaeology. Escuela Nacional de Antropología e Historia, Instituto Nacional de Antropología e Historia, Mexico.

Gillespie, Susan

- 2001 "Personhood, Agency, and Mortuary Ritual: A Case Study from the Ancient Maya". In *Journal of Anthropological Archaeology*, 20 (1), pp. 73-112. United States.

Grube, Nikolai y Nahm Werner

1994 "A Census of Xibalba: A Complete Inventory of Way Characters on Maya Ceramics". Edited by J. Kerr, *The Maya Vase Book*, 4, pp. 686 -715. Kerr Associates, New York.

Guiteras, Calixta

1965 *Los peligros del alma. Visión del mundo de un tzotzil*. Fondo de Cultura Económica, Mexico.

Hamilakis, Yannis

2015 *Arqueología de los sentidos. Experiencia, memoria y afecto*. 132 pp. JAS Arqueología Editorial, Madrid, España.

Houston, Stephen D., David S. Stuart y Karl A. Taube

2006 *The Memory of Bones. Body, Being and Experience Among the Classic Maya*. University of Texas Press, Austin, United States.

Jones, Andy

2005 "Lives in fragments? Personhood and the European Neolithic". In *Journal of Social Archaeology*, 5 (2), pp. 193-224. Stanford, England.

Lozada, Josuhé

2017 *El arte rupestre y la temporalidad del paisaje en Laguna Mensabak y Laguna Pethá, Chiapas*. PhD Thesis in Archaeology, Escuela Nacional de Antropología e Historia, Instituto Nacional de Antropología e Historia, Ciudad de México, Mexico.

2013 *Usos del agua entre los lacandones de Metzabok, Ocosingo, Chiapas. Un análisis de Ecología Histórica*. Master's Thesis in Sciences, San Cristóbal de Las Casas, Chiapas, Mexico.

Lozada, Josuhé y Silvina Vigliani

2021 "Un soplo de vida en la pared. Arte rupestre y la noción de persona entre los mayas del Posclásico en Laguna Mensabak, Chiapas". In *LiminaR. Estudios Sociales y Humanísticos*, XIX (2), pp. 225-241. Universidad de Ciencias y Artes de Chiapas, Mexico.

Martínez González, Roberto

2015 *El nahualismo*. México: Instituto de Investigaciones Históricas, Instituto de Investigaciones Antropológicas-UNAM.

Martínez González, Roberto

2007 "Las entidades anímicas en el pensamiento maya". In *Estudios de Cultura Maya*, XXX, pp. 153-174. Centro de Estudios Mayas, Universidad Nacional Autónoma de México, Mexico.

2006 "El *ihiyotl*, la sombra y las almas-aliento en Mesoamérica". In *Cuicuilco. Revista de Ciencias Antropológicas*, XIII (38), septiembre, pp. 177-200. Escuela Nacional de Antropología e Historia, Mexico.

Montes de Paz, Javier

- 2021 "Informe preliminar de material óseo humano en Laguna Mensabak, Chiapas". Technical report delivered to the Dirección de Estudios Arqueológicos del Instituto Nacional de Antropología e Historia, Mexico.

Page, Jaime Tomás

- 2014 "La importancia del cuerpo en la noción de persona entre mayas actuales de Oxchuc, Chamula y Chenalhó, Chiapas". In *Revista Pueblos y Fronteras Digital*, 9(18), pp. 35-48. Centro de Investigaciones Multidisciplinarias sobre Chiapas y la Frontera Sur, Universidad Nacional Autónoma de México, Mexico.

Palka, Joel, Fabiola Sánchez, Ian Hollingshead, Alice Balsanelli, Christopher Hernandez, Santiago Juarez, Josué Lozada, John McGee and Sebastian Salgado-Flores

- 2020 "Long-Term Collaborative Research with Lacandon Maya at Mensabak, Chiapas, Mexico". In *The Mayanist*, Vol. 2, No.1, pp. 1-20. North Carolina, United States.

Pérez, Patricia

- 2019 *Análisis funcional de artefactos líticos recuperados de las excavaciones arqueológicas en el Risco Mensabak*. Technical report delivered to the Dirección de Estudios Arqueológicos del Instituto Nacional de Antropología e Historia. Laboratorio de Prehistoria y Evolución Humana, Universidad Nacional Autónoma de México.

Pitarch Ramón, Pedro

- 2010 "Los dos cuerpos mayas. Esbozo de una antropología elemental indígena". In *Estudios de Cultura Maya*, XXXVII, pp. 149-178. Centro de Estudios Mayas, Universidad Nacional Autónoma de México, Mexico.

Velásquez García, Erik

- 2013 "Nuevas ideas en torno a los espíritus *wahyis* pintados en las vasijas mayas: hechicería, enfermedades y banquetes oníricos en el arte prehispánico". In *Estética del mal: conceptos y representaciones*, pp. 561-585. Instituto de Investigaciones Estéticas-Universidad Nacional Autónoma de México, Mexico.
- 2009 *Los vasos de la entidad política de 'ik': Una aproximación histórica-artística. Estudio sobre las entidades anímicas y el lenguaje gestual y corporal en el arte maya Clásico*. PhD Thesis in History of Art, Facultad de Filosofía y Letras-Universidad Nacional Autónoma de México, Mexico.

Vigliani, Silvina

- 2016 La noción de persona y la agencia de las cosas. Una mirada desde el arte rupestre. In *Anales de Antropología* 50 (1): 24-48.