The concept of wrapping and its ontological character among the Maya

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Abstract
A textile with its threads, its weft, and warp, for the western ontology, is a simple utilitarian object or a body adornment. This study will discuss the wrapping among the Maya, starting from concepts present in ancient and contemporary Maya thought to identify the ontological character of some ceremonial textiles present in these societies. Based on an approach proposed by the ontological archaeology, I will discuss the conceptual proximity between the terms pix (to wrap, to cover) and pixan (soul, or something that is received from the other world), to think of the wrap as an element of articulation between the two ontological spaces, allowing the presence of beings and entities of the cosmos in Maya cities of the Classic and contemporary periods.

By generating the materialization and performance of these beings, wraps create relational fields that activate these entities temporarily in ordinary space, establishing effective contact with the Maya cosmos. A brief analysis of these Textile Beings present during the Classic Period will be discussed as a case study, in order to consider such a conceptual proposal.

Keywords: ceremonial wrappings; Textile Beings; relational fields; ontologies; Maya

Resumen
EL CONCEPTO DE ENVOLTURA Y SU CARÁCTER ONTOLÓGICO ENTRE LOS MAYAS.
El textil con sus hilos, su trama y urdimbre son para la ontología occidental, un simple objeto utilitario o un adorno corporal. En este estudio se discutirá la envoltura ceremonial entre los mayas, partiendo de conceptos presentes en el pensamiento maya antiguo y contemporáneo para identificar el carácter ontológico de algunos textiles ceremoniales presentes en estas sociedades. Desde un enfoque propuesto por la arqueología ontológica, discutiré la proximidad conceptual entre los términos pix (envolver, cubrir) y pixan (alma, o algo que se recibe del otro mundo), para pensar la envoltura como un elemento de articulación entre los dos espacios ontológicos, permitiendo la presencia de seres y entidades del cosmos en las ciudades mayas de los periodos clásico y contemporáneo.

Al generar la materialización y actuación de estos seres, las envolturas crean campos relacionales que activan estas entidades temporalmente en el espacio ordinario, estableciendo un contacto efectivo con el cosmos maya. Como estudio de caso, se presentará un breve análisis de estos Seres Textiles presentes durante el Período Clásico, con el fin de discutir dicha propuesta conceptual.

Palabras-clave: Envolturas ceremoniales; Seres Textiles; campos relacionales; ontologías; Mayas
Introduction

Textiles have been present among the different Mesoamerican peoples since the most ancient times, with the earliest date around the year 8000 B.C. for textile remains collected in a cave at the Guilá Naquitz site in Oaxaca, Mexico. The oldest evidence of the presence of unspun cotton dates back to before 5000 B.C. and it was found in another cave in Coxcatlán, in the Tehuacán Valley, south of Puebla, Mexico (Anawalt 2000: 206).

The antiquity and the wide presence of the Maya and Mesoamerican textiles contributes to the understanding that fabrics and yarns in these worlds are much more than elements used for body adornment, transport, and wrapping objects and food. In fact, they are present in the very conception of the creation of the cosmos and its inhabitants. This article aims to discuss this fundamental element of Maya cosmology and ontology, namely objects wrapped in textiles. Commonly called “sacred bundles”, such objects are present at different times in different sources relating the Maya and Mesoamerican. But why are some types of objects wrapped? What does such a bundle mean? How do the wrapped objects participate in relations between the different ontological spaces? These are some of my research questions that will direct this study.

To answer these questions, I will discuss the concept of wrapping among the Maya, based on the theoretical and methodological approach called ontological archaeology in an attempt to consider a concept from the ontology of the current Maya peoples themselves. By following such a theoretical proposal my objective is to approach the study of the ontologies of the peoples of the past from an ethnographic reflection to consider material elements of the Maya of the past.

My approach seeks to go beyond traditional approaches that are of representational character and based on the idea that things can exist and be understood by themselves, and not just a reflection of the representation of something else (Henare et al. 2007; Alberti, Jones, Pollard 2013; Alberti 2016). Things can be social actors and have an important role in the social dynamics of different groups in the past and in the present (Olsen 2010). By proposing to work with the concepts and philosophies of the Maya peoples to reflect on the performance and materiality of ceremonial wrappings, I move away from traditional approaches that consider such sets of objects as being simple powerful objects, artefacts that represent the power of the ajaw, transformative objects, relics of ancestors, objects related to the maintenance of purity. All of these interpretations come from a representational perspective.

My study represents a different proposal. I seek to identify the ontological aspect of Maya bundles. These ideas come from the study of the lexicon of contemporary Mayan languages and the pre-Hispanic and colonial periods, to identify the conceptual proximity between the terms used for “thing wrapped” or “wrap”
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and “soul” or “something that is offered or received from the other world” (Barrera 1980: 658). In addition, my interpretation attempts to integrate contemporary Maya knowledge, especially of the Tz’utujil communities of Santiago Atitlán, Guatemala, where it is possible to identify the ontological character of Maya textiles.

The cult of beings wrapped in cloth is still present in the brotherhoods (cofradías) in Santiago Atitlán. From previous studies carried out by Michael Mendelson (1958), Robert Carlsen (2011), and especially from the ethnographies carried out by Allen Christenson (2006), come important elements and ideas that contributed to my first observations about the concept of wrapping. For example, Martín is a wrapped being present in the Brotherhood of San Juan Bautista, in Santiago Atitlán. Martín’s body is considered a “sacred” bundle called Yol Jap, “navel of the rain” (Vallejo Reyna 2005: 108). This being is responsible for incorporating positive and generative aspects of life, and according to the Tz’utujil ontology, Martín is the “face of the earth”, the field where plants grow. He is the patron of maize crops, of the land, of the mountains, of the volcanoes that surround the community, of the ancestral spirits (Christenson 2006: 232). The bundle of textiles and animal skins gives it a physical corporeity. And he allows the presence of these intangible beings, like the beings of the cosmos in our ordinary world.

Another important set of observations comes from the work carried out by Martin Prechtel and Robert Carlsen (1988) connecting the manufacturing of a textile with the process of birth. Maya textile manufacturing is an ontological event, an act of creation of a new Being. This processing is carried out through an animated loom, with different parts of the body, connected to the tree of life. Maize brings consistency to threads, the body of the Textile Beings. When the weaver connects to the loom at the waist, she shapes this new being from her corporality, from a bodily movement, which gives birth to the new being.

Thinking about these cases as well as the recent studies carried out by Pedro Pitarch (2020) about Maya textile metaphors as elements of contact with the other ontological space, I decided to work with the approach of the recursive ontological archaeology to think about the concept of wrapping between the Maya with the focus on their ontological aspect. Such an approach seeks to recognize the existence of multiple ontologies in the past and allows for different possibilities of understanding these other ways of thinking and contributing to the recognition of the existence of other modes of existence beyond the human, such as alterities, beings, and subjectivities, that are not part of the modern ontology (Alberti 2016). With this in mind, I propose to use the concept of ontology as a possibility to reconsider other worlds and to enable the creation of new concepts of materiality (Alberti and Marshall 2009).
Wrapped objects

Weaving plays a fundamental role among the Maya and throughout Mesoamerica, where it is widely believed that the cosmos is formed by a great interlacing of threads that form a woven fabric, in a weave that unites heaven and earth in a huge seam (Klein 2015: 235). The presence of wrapped objects has an ancient origin in Mesoamerica, dating back to the Preclassic Period (2000 B.C. - 250 A.D.) with the Olmecs. The practice and importance of wrapping certain types of objects is a tradition popular throughout Mesoamerica and in other parts of the world, especially among the indigenous peoples of the Abya Yala\(^1\), such as the Andean peoples (Brown Vega 2015) and the indigenous peoples of North America (Zedeño 2008). In Mesoamerica, according to Fray Andrés del Olmos, who participated in the intellectual conquest of the indigenous groups of this region, textile wrappings would be the main objects of worship and reverence for these peoples (Olivier 2007: 281).

In addition, another material piece of evidence confirming that there is a large presence of images of objects wrapped in textiles between the Maya are, on one hand, stone objects such as panels and stelae, and on the other, ceramic objects, in contexts of scenes related to the other Maya ontological space, known as the Underworld, which is dominated by “fantastic” beings such as “gods”, ancestors, and other non-human entities. In other images present especially in the lowland sites of the Classic Period (250 – 950 A.D.), we find bundles associated with scenes of rulers ascending to power as well as self-sacrifice, for example in the Palace Tablet of Palenque, which shows a scene with the ruler K’inich Kan Joy Chitam accompanied by his father, K’inich Janab Pakal, and his mother Ix Tz’akbu Ajaw, who hands him an open bundle with a lithic eccentric and a shield (Grecco Pacheco 2019).

Textile wraps are associated with different elements and objects such as images of divinities or forces of nature, effigies, lithic material, objects used for the performance of self-sacrificing ceremonies, and mortal remains of important ancestors. From the analysis of the archaeological material, it is possible to find two types of wrappings: the important and powerful wrapped objects deposited in offerings, caches, or tombs, and wrapped people, such as mortuary packages. Some wrapped objects found in archaeological assemblages are feathers, flint, jade (green stones), wood, ashes, self-sacrifice paraphernalia, small objects used for the extraction of blood, such as eccentrics or striped thorns, small stones, leather, animal parts, and bones.

During the colonial period, the main records of the presence of wrapped objects point to two main characteristics. The first is body wrapping in mortuary practices. The second is items wrapped as relics of lineage founding chiefs (Carmack 1981).
Investigating the ontologies of the past

One of the goals of this research was to develop an approach in archaeology that investigates the ontologies of the past. The starting point for these reflections has been the application of the concept of relational ontologies, and the development of local theories for archaeological studies (Holbraad and Pedersen 2017; Henare et al. 2007; Alberti 2016; Haber 2006).

The main idea of the concept of ontology offered by this approach is related to other worlds, other ways of thinking, and acting differently than expected by the western world (Venkatesan et al. 2010). It proposes to discuss the constitution of Beings and elements of other ontologies besides the Western one. It recognizes the existence of multiple ontologies in the past and allows different possibilities of understanding these other ways of thinking, helping to recognize the presence of other modes of existence beyond the human (Alberti and Marshall 2009). These approaches use ethnographic concepts to reconfigure archaeology theoretically and conceptually, thinking about materiality. The recursive ontological archaeology is an approach proposed by Benjamin Alberti (2016) based on the work of Martin Holbraad and Morten Axel Pedersen (2017); an approach that was influenced by the idea of “methodologies that think through things”.

Another important point discussed by this archaeological approach is the idea of conceptualization, to access other worlds and other ways of thinking. Or, like it was proposed by Amiria Henare, Martin Holbraad and Sari Wastell, “we need to seize on a methodology that allows for concept production that makes worlds” (Henare et al. 2007: 19). These concepts can be discussed through the use of ethnographic data from societies associated with the archaeological material studied, or concepts that come from the material analysis of things. Benjamin Alberti’s proposal for a recursive ontological archaeology (2016) is an attempt to identify the intrinsic ontological differences present in things for the proposition of concepts from the materials themselves and from indigenous theories.

From such theoretical bases, an approach was developed to think about the concept of wrapping among the Maya. My main proposal is to think about wrapping based on Maya thought and philosophy. To current Maya communities and also to the ancient Maya, the cosmos is divided into two ontological spaces or states of being: the ordinary world and the other side of something, also called the Underworld, a space composed of the presence of unstable substances, essences, soul entities, ancestors, entities of the cosmos, and “gods”. Ceremonial wraps are the result of a relation between these two ontological spaces (Pitarch 2020).

Based on this proposal, a method was developed for the creation of a reflection on the concept of wrapping among the Maya, to work with the archaeological material related to this topic. The first step was to think of the thing as a heuristic phenomenon, removing their previous Western meanings from Maya wrappings,
such as the idea of “sacred objects”, or “sacred bundles”, or the idea that they are simply objects to carry something. The next step was to transform things into concepts by the use of ethnographic, ethnohistoric, linguistic, and epigraphic data from different Maya peoples to “fill in” the blanks.

From my investigation of the lexicon of different Mayan languages in different temporalities, I have identified that the word *pix*, used for “wrapping, binding, covering”, in many of the Mayan languages has the same linguistic root and is related to *pixan*, which is used to designate “the soul or something that is offered or received from the other world” (Barrera 1980: 658). In two of the dictionaries studied, the *Calepino de Motul*, from Yucatán from the 16th century, and the Maya *Cordemex*, from contemporary Yucatecan, indicate that the same word *pixan* can be used both for “soul that gives life to the body of man” and for “thing that is covered, and thing tangled” (Arzápalo Marín 1995: 643; Barrera 1980: 658).

This linguistic and conceptual proximity between the terms can also be seen in other contemporary Yucatecan dictionaries and in other Mayan languages, such as Ch'ol, Ch’uj, Itza, Jakaltek, Q’anjob’al, and also the Tsotsil and Tzeltal.

The proximity of these words leads me to agree with Pedro Pitarch who argues that what defines the soul is not its substance, but its fold condition (2020). In this way, it is possible to think of the wrap and non-tangible beings of the other space as the same element, made up of the same essence and to find their possible distinction in their change of shape.

Another important contribution to my analysis of the concept of wrapping comes from epigraphy, the analysis of ancient Maya writing. The *kál* glyph, a word found in ceramics and stone monuments, refers to ceremonies of wrapping certain dedicated objects with cloth, the *káltuun*, which is associated with the concept of “wrapping something, tying” (Boot 2009: 231; 248). Those ceremonies were performed to celebrate a *k'atun* ending among the ancient Maya. Another glyph related to the concept of wrapping is the *joy* glyph, represented graphically by a wrap and which means “to be surrounded, and bound” (Calvin 2004: 17). Linda Schele and Nikolai Grube in their studies about the *pih* glyph present in the city of Palenque, also added an important contribution to the reflection of the notion of wrapping present in the Classic Period (1993).

The last step of my process of rethinking the idea of wrapping is when the thing becomes a concept, from the ethnographic, linguistic, ethnohistorical data, and the philosophical elements of the theories of relationality, so we can have the concept of *pix* to refer to Maya textile wrapping.

The main role of the *pix* is to retain elements of the other ontological space in the ordinary world. They surround virtual objects that have their activation in the other world, the presence of this thing in a temporary way, with a virtual content, which belongs to the other side, updated through a wrap; a bundle that materializes those movements of the cosmos; instable elements in the ordinary world, whose
conceptual feature can be thought of as similar to its physical feature; the textile’s fragility.

Manifestations of the pix in objects present among the Maya of the Classic Period, appear in certain important moments that are related to the Underworld. It seems to be managed by the entities of the cosmos and also by the ancestors, as elements of contact between these two ontological spaces.

The first practice emphasized by this research is the performance of the wrappings through which different types of beings gain life. The wrap and the intangible beings of the other space become the same element, constituted of the same essence and finding their possible distinction in their change of form. By wrapping certain types of objects, or beings, these textiles become the being or the wrapped object itself. The two elements become one. The conceptual characteristics of the pix also merge with its own materiality.

The second manifestation related to pix is its role in creating relational fields between elements of different ontologies, within a meshwork (Ingold 2015). Fields that unite different classes of objects such as stones, powerful objects for the extraction of blood in sacrifices, bones such as parts of ancestors, parts of gods, and non-tangible beings, among others, that are wrapped under the same field of relations. When using the concepts of relational field and relational ontologies in archaeology, a detailed analysis of the archaeological assemblage in which the analyzed materials are located is essential. To identify the elements of this meshwork (Ingold 2015) or assemblage (Deleuze and Guattari 1999; Laguens 2013; Fowler 2013; Edgeworth 2012), the study of objects and their relations with other kinds of objects is an essential element. This includes architectural structures, people, remains of fauna and flora, the groupings of vibrating materials, flows, forces and agents of all kinds, both human and non-human, material and cognitive (Edgeworth 2012: 86).

According to Tim Ingold, the social is composed of dynamic and continuous lines of life that flow through and in relation to other processes (Ingold 2015: 115). Thus, members of some groups, whether they are human or non-human, are part of a great meshwork of relations established where life and action emerge from the interaction of forces and contacts conducted along the lines of this mesh (Ingold 2015: 148). The identities and properties of material entities are constituted from and defined by physical, biological, and social relations. They are contextual elements that are generated continuously, and which remove the dualism between subject-object, a characteristic of Western thought, as well as the fixed border between the organism and its environment.

This presupposes that humans, non-human beings, objects, landscapes, and natural phenomena can interact with each other in a meshwork of relations, to form an exchange and expanded sociability. They are elements endowed with an agentive potential, that are created and that gain an action from relations.
The different classes of beings are formed from their existence in the world, with the creation of different types of relations. In a relational ontology, relations are bidirectional with things in the world and with materiality, being both constituted jointly. This continuity between humans and objects, animals, and intangible beings emphasizes a relational perspective of interdependence with the cosmos (Harrison-Buck 2020: 425).

Thereby, the wrap creates different relational fields with beings and elements belonging to different ontologies that act and interrelate under the same space defined by these entangled agencies. That would be something closer to the way the ancient Maya thought of their world, as an intertwining of different ontological elements in constant relations with each other; a world where the division between subject-object was not present in its relations with the material world, where certain objects were treated as people with a soul and with agentive powers (Vogt 1993).

For the Maya, the relations that exist between subject and object, human and non-human, can produce a variety of identities and commitments. According to Eleanor Harrison-Buck, such relations would be “conversational”, incorporating a relational ontology or a way of being in the world where there is no separation between the subject (as an informed observer) and the object (as an unknown inert material) (Harrison-Buck 2020: 424).

In this way, I think that in the case of the pix, especially those that are entities and beings of another nature, they are activated and gain life from their presence in the mesh of fields of relations between elements of different ontologies, where action and sociability emerge through the interaction of contacts and movements present in the entanglement of the lines of this meshwork. In other words, the actions and the relations established throughout this entanglement are due to contextual and positional issues where, from a certain position, it is possible to activate certain entities and beings.

The pix materiality

Just as the beings from the other space are unstable and fragile when they are in our ordinary world, the textiles that make up these wraps are also unstable. They are made of perishable materials, their materiality also indicates an instability, a temporary and limited existence. They are materials with low durability.

Its conceptual characteristic indicates its unstable, fragile and temporary condition when it is in contact with the ordinary world and when it merges with the materiality of the fabrics that make up these bundles, that is, its instability and its ephemeral condition of duration. Such reflections were produced from an exercise proposed by Martin Holbraad and Axel Morten Pedersen (2017) who propose that things can contribute to their own analysis based on studies and reflections of their properties, uniting material and conceptual issues in each object analyzed and giving these attributes a leading role in the archaeological analysis. In such analyses,
beyond discursive questions, the importance of affective character is emphasized from the relations established between people and things through experimentation with what is heard, seen, tasted, touched, and experienced.

Thinking about the things from their own matter (Henare et al. 2007), and the matter as something relational, it is possible to identify a constant becoming, a transformation that is part of their own constitution. In other words, a matter that is formed through and from its practical activity, an active component of the world (Ingold 2015: 61). In addition, such an active characteristic of the matter is also related to the way the ancient Maya thought of it, as something that stores energy, “spirits” and forces of nature, with a latent potential (Houston 2014: 5).

The constituent material of textile wrappings, thought of as constructed stories, enables us to identify that the weaves of the fabric become entangled and unraveled through time. They find a parallel in the temporal presence of the pix in our ontological space. A presence marked by the durability of the material that constitutes it, the vegetal threads that flow and are in constant change throughout its entire existence. The spun wefts of textiles are formed like a mesh, like a spider web with its interlaced threads that constitute a living space for spiders and at the same time it is part of their own being.

The movements of entangling and untangling, the wrapping and the “unwrapping” erase the reckoning of time, inside these wrappings time is annulled, past, present, and future are mixed in disordered positions. The beings retained by these meshes come from distant temporal spaces, from distant pasts, such as the ancestors, or the entities from the creation of the Maya cosmos. By wrapping any kind of being, its space-time presence is canceled. The being remains wrapped, covered, hidden, and in a certain way forgotten by time.

The pix have their relations beyond themselves because, they are in a constant process of becoming, a visible characteristic in their meanings and in their changes of matter. In the case of the fabric, these changes are made by the perishable nature of the fibers that compose it, because they have vegetable elements with ephemeral durability as their main material. This matter is constantly evolving, mainly due to the action of two types of agents, non-human beings that are present in plant fibers, such as bacteria, fungi, and other organisms, and also due to the action of climatic agents. These sets of elements act decisively for the process of becoming of the vegetable matter that makes up the textiles.

Another important element is how the ceremonial wrappings are manufactured. The construction of textiles with four sides obeys the spatial arrangement of the Maya cosmos. It is a model of this cosmos, a reduced space, which nonetheless obeys the same dynamics of the cosmic space among the Maya. Such a practice is made possible by the technology called the backstrap loom, that allows the creation of textiles with four finished sides, something that contributes to the very model of this cosmos.
Finally, it is important to highlight another type of process related to textiles among the ancient Maya: the intentional changes of matter of certain elements. Such transformations are characterized, for example, by animal skins that go from their original context to being used in stone objects. Textiles with their wefts and warp that go from being plant tissue to becoming a vessel where it is possible to perceive all the complexity of the textile elements present on another material medium.

These exchanges of materials and the condition of the wrapping are useful tools to think about reflections on their materiality in changes oriented by ontological premises and also political practices that needed the lasting presence of such elements of contact with the beings that inhabited the other spaces. Protective entities of the Maya cities and creators of the cosmos, in many cases, needed to be present for a long time in order to participate actively in the conduct of the political practices of Maya rulers.

**The pix of the Beings of maize**

After discussing the concept of pix, we can think about different types of its manifestations during the Classic Period. The first is its presence in the ajaw’s power-taking acts, as part of the personhood of important ancestors. Part of their partible, divisible person (Strathern 2006), or their expanded personhood (Gell 1998), present in the ordinary world through the use of the bundle. The second is the time involved in the k’atun ending - the wrapping of temporary animated beings during the k’altuun ceremonies. The third is wrapping rulers after their death, in preparation for their journey to the Underworld and their rebirth as the Maize God - the wrap as an element of renewal and conservation of the soul entities that made up the body of the Maya rulers. The last case involves the entities of the Maya cosmos and the wrapped offerings, which determined moments of contact with the other Maya ontological space - a materialization of the cosmos entities.

The case study that I will discuss is related to its last type of manifestation of the pix, present in the Barton Creek Cave, Belize. This cave is a site with ritual occupation and activity between the Early Classic Period (250-550 A.D.) and the Late Classic (550-830 A.D.). It is important to emphasize the role of the caves in Maya ontology as places connected with the Underworld, an entry point to this world of ancestors, the dead, the creators of the cosmos, and other types of beings (Stone 1995).

In their study in Barton Creek, Christopher Morehart et al. (2004) recovered a textile fragment with a great diversity of plants such as maize fragments, with intact grains, pumpkin seeds, beans, peppers, and copal. All these elements were wrapped in a textile fragment 5 cm long and 3 cm wide. The cloth presents technology similar to other textile remains found in the Maya lowlands in ceremonial contexts, such as tombs, caches, caves, and cenotes, that is textiles manufactured in
Z and S-folded cotton, with at least three types of plain weave, brocade (plain weave with complementary weft decoration), twill, double weave, interlocking weft, and tapestry (Looper 2006: 85).

The letters Z and S refer to the twisting direction of the bent yarns depending on whether the spiral adjusts to the central inclination. Regarding diameter measurements, the number of twists per centimeter and twist angle for warp yarns, and weft elements are useful methods for analyzing tension elements, and differences in fabric textures (Morehart et al. 2004: 52).

Among the main materials used in textile production of the pre-Hispanic Maya are cotton, henequen, ceiba, yucca, palm, nettle, and different types of cactuses. The main technique used is that of the backstrap loom, a very portable device, where one end is tied to a tree or pole, while the other end is tied to the waist of the weaver, who maintains a tension in the warp by using their bodyweight.

An analysis with scanning electron microscopy, conducted by Morehart’s team, revealed long and narrow single-celled fibers and characteristics of cotton of the *Gossypium hirsutum* type, a species that constitutes the majority of textile production in ancient Mesoamerica (Berdan 1987: 236). Among the Maya, the earliest record of cotton cultivation date back to the Pre-Classic period (2000 B.C. to A.D. 250), intensifying in the lowlands during the Late Classic Period with the production and exchange of tribute fabrics (Morehart et al. 2004: 53).

It is not possible to identify the warp and weft elements of the tissue fragment, but according to Morehart et al. (2004), the fabric would be a 2/2 twill. The cotton fibers of both items A and B were Z-spun. The Z-spun yarns were then S-doubled to create composite assemblies. A elements are looser with compound yarns of about 0.56 mm, 12 turns/cm, and a twist angle of 20°. The B elements have a wider diameter with 1.04 mm composite yarns and have a tighter layer with 12 turns/cm and a more pronounced 55° twist angle.

In addition to the textile fragment, five sets of folded fibers were recovered from another sampling site. These sets are likely to be remnants of the same fabric because their technical attributes are identical. The cotton fibers of both items A and B were Z-spun.

The material, technical, and contextual information regarding the objects, and the textile fragment from the Barton Creek cave suggest that it was a piece of a ceremonial textile, a *pix*. Such an element was used to establish contact with the entities of Maize present in the Maya cosmos, possibly as an offering. By wrapping maize seeds, the *pix* permits the presence and performance of the Beings of Maize in the ordinary world; it recreates a fundamental element of Maya creation: maize.

By establishing contact with these primordial moments of the cosmos and the creation of the world and the Maya beings, the *pix* managed to materialize these Beings of Maize, similarly to the case of bundles that are now materializing Martín,
the patron of Maize crops, of the earth, currently housed in the brotherhood of San Juan, in Santiago Atitlán. This being of the Maya cosmos associated with maize is materialized through a ceremonial textile wrapping.

This points to an ontological character of these textile wrappings, by allowing such beings and elements of the Maya cosmos to materialize and to be present in the ordinary world through this tool. A relational instrument capable of creating points of contact with the elements of the other ontological space.

Conclusions

This study proposed the application of the recursive ontological archaeology to a conceptualization of Maya wrapping from ethnographic, ethnohistoric, linguistic, and epigraphic data to discuss the concept of pix as an element that materializes contacts between the different ontological spaces present in the Maya world.

Such elements can be considered parts of the other ontological space in the ordinary space with the function of materializing “supernatural” entities and beings, with the ability to form meshes of ontological relations within them by bringing together different classes of beings under the same space. In their performances it is possible to perceive a junction of these physical and ontological characteristics that make up the materiality of the pix in the Maya area, which contributes to its multifaceted state built from these multiple categories.

Such characteristics contribute to the ontological role of these ceremonial textiles among the peoples of different temporalities, with their capacities to form beings and shape intangible existences, as well as to retain parts of beings and different types of entities such as ancestors and patron entities of the cities of the Classic Period. Such characteristics are also depicted in wraps in stone monuments in cities such as Palenque. The Palace Tablet shows the ruler K’inich K’an Joy Chitam accompanied by his father, K’inich Janab Pakal, and his mother Ix Tz’akbu Ajaw, who gives him a pix with part of the essence of those ancestors for the exercise of their political power.

From the same city, there are other examples of bundles that give shape and action to the patron beings, entities G1, G2, G3, such as those that are described in the texts of the Temple of the Inscriptions. Such practices were present especially during the ceremonies of the katun endings, the k’altuunes, moments of the realization of ritual offerings for the entities of the Triad, with the decoration of effigies with ornaments, and also the ritual practice of textile wrappings (Stuart and Stuart 2008: 167).

The narrative present in this temple describes the k’altuun ceremonies and the headbands of rulers wrapped with the cosmos entities. The text says that on 9.11.0.0.0 12 Ajaw 8 Keh (October 12, 652 A.D.), during the k’altuun ceremony per-
formed by *K’inich Janahb’ Pakal*, “it became ajaw”, the main entity of the *k’atun*, Ich Chan Uh/Ixim, for B’olon Chan, an emblematic nomination of the ruling dynasty of Palenque (De la Garza, Bernal Romero; Cuevas García 2012: 92). Mercedes de La Garza, Guillermo Romero Bernal and Martha Cuevas García describe this text as:

Su segundo asiento o inicio del tuun [es en] 12 Ajaw 8 Keh, el décimo primer k’atun (09.11.00.00.00, 12 Ajaw 8 Keh, 11 de octubre de 652). Se enseñoreó el dios Ich Chan Uh/Ixiim, brotaron los árboles frutales, brotaron los cinco árboles... el ikaatz celeste, el ikaatz terrestre. Fue dotada de collares y orejeras B’olon Chan, la Familia de las 16 Familias del Gobernante de los Innumerables Sucesores. La espalda del K’atun 12 ajaw. Lo vio el Incensador del k’atun, el señor K’inich Janahb’ Pakal, Sagrado Gobernante de B’aakal.

Él da […] el tocado ko’haw e la veintena (del k’atun) y el pik del dios Unen-K’awiil. Se da la blanca/sagrada diadema, el ko’haw de la veintena y el pik del dios K’in Ajaw (GIII). Es la atadura de la diadema del altar-kuch-al de los Dioses Incensarios de GI, Unen-K’awiil y GIII, los hijos de K’inich Janahb’ Pakal, Sagrado Gobernante de B’aakal (De la Garza, Bernal Romero; Cuevas García 2012: 92-93).

In this text, it is possible to identify the presence of the wrappings of the earth and the sky, offerings, tributes with elements of the cosmos, carried by the creation entities of the Maya world. The second part of the text also identifies the presence of the *pix* with the attributes of “gods” or entities of the cosmos; in this case, the *pix* of *Unen-K’awiil* and the *pix* of *K’in Ajaw*. In the text, objects related to the Patron “gods” of Palenque and the wrappings dedicated to them are identified, such as: *tup* (earmuffs), *sak hunal* (white paper), *uh* (necklace), and *kohaw* (helmet) (Carrasco 2005: 72). In addition, in other passages of the temple texts, the wrapping of the altars belonging to the Triad of Palenque is described.

This practice of wrapping the offerings, the censers, and the patron “gods” of this city, at each *k’atun* ending, seems to be something common and recurrent at different times in Palenque and allowed these entities to participate and be present at certain important events in the city.

In the same way, it is possible to identify the presence of these beings from the cosmos wrapped in textiles in the offering of the Beings of Maize found in the Barton Creek cave in Belize. From the use of the theoretical reflections on the concept of *pix*, it is possible to think of the presence and the materialization of these entities in the ordinary world of Barton Creek from the performance of a ceremonial wrapped textile that gave these beings an agency and performance.

From the discussions presented, my intention has not been to use an ethnographic concept as a simple analogy for archaeological interpretation, but to work with concepts that are not of Western origin to explain non-Western things and ontologies. I attempted to use an ethnographic category as a heuristic resource to understand the archaeological material and thus study the otherness present in this material (Haber 2006).
With these reflections about the ontological character of the ceremonial textile wrappings, it is possible to think “together with the Maya peoples”, and propose a change in the ideas about these elements (Atalay 2020; Haraway 1995). The textile object becomes a textile subject that acts in different social spheres where it is involved, forming a part of the dynamics between people, different beings, the landscape, and the different ontological spaces.

Since pre-Hispanic times, Maya weaving has been considered beyond its practical function of covering something, dressing a person, or carrying certain types of products. It is related to an ontological and fundamental importance in the life of the members of Maya societies and associated with a lunar entity in charge of births and textiles. This female being was named *Ix Chel* during the colonial period (Milbrath 1999: 141). This entity is also responsible for the creation of beings among the Maya from Yucatan, according to Friar Diego de Landa (1982).

The association between birth and textile is also observed among contemporary Maya groups, such as the Lacandon (Boremanse 1999), the Chamulas, located in Chiapas, Mexico (Rosenbaum 1999), and also among the Tz’utujil, with the idea that the birth process and textile manufacturing merge with each other (Prechtel and Carlsen 1988).

The reflections presented in this article align with the knowledge, philosophies, and concepts of contemporary Maya peoples. First, as a practice of an epistemic and ontological respect, a recognition of alterity, acknowledging the existence of such types of thoughts is a political act. The proposal raised here to bring and work with original concepts of the Maya peoples themselves to generate reflections and interpretations in the archaeological research relates to reflections of the construction of a pan-Maya concept of a Maya worldview. These ideas were thought of and proposed by Maya intellectuals and activists in Guatemala as tools in the search for their community, their legal, political, cultural claims, and as an agglutination of the processes of strengthening and claiming Maya culture, years after the Guatemalan Civil War (Cano Contreras, Page Pliego and Estrada Lugo 2018).

The idea of keeping an open mind to this wisdom and knowledge forgotten by the Western world, with its deep scientific base, is something fundamental to the exercise of an identity, of an expression of the ontologies of the Maya, something constantly denied by Western modernity and consequently by colonialism. The proposal of a dialogue of this knowledge and experiences with Western structures of our modern societies becomes an important tool in the constant fight for their rights, undertaken by indigenous peoples globally.

I believe that only through research that develops concepts beyond Western thought is the study of ontologies of the past and the contemporary possible. I think that such approaches can constitute an important tool for democratizing knowledge, with openness to the presence of other ontologies and other ways of thinking within the academic knowledge.
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Notes

1 The use of the term *Abya Yala* is an attempt to avoid the perpetuation of epistemic violence present in the society and academia of countries of both Americas. *Abya Yala* is a word that comes from the language of the Kuna people, located in present-day Colombia, and means "Mature Earth", "Living Earth", being a synonym of America, and the way these people treat this territory. Even though each of the different original peoples that inhabit the continent have different proper names to designate the place where they live or dwell, the term *Abya Yala* has been increasingly used as a feeling of unity and belonging.

2 "His second seat or start of the tuun [is at] 12 Ajaw 8 Keh, the eleventh k'atun (09.11.00.00.00, 12 Ajaw 8 Keh, October 11, 632). The god Ich Chan Uih / Ixiim ruled, the fruit trees sprouted, the five trees sprouted ... the celestial ikaatz, the terrestrial ikaatz. She was endowed with Bolon Chan necklaces and earmuffs, the Family of 16 Families of the Ruler of Countless Successors. The back of the K'atun 12 ajaw. It was seen by the Censer of the K'atun, K'inich Janaahb' Pakal, Holy Ruler of B'akal.

He gives [...] the ko'haw headdress in the twenties (of the K'atun) and the pik of the god Unen-K'awiil. He gives himself the white / sacred diadem, the ko'haw of the twenties and the pik of the god K'in Ajaw (GIII).

It is the binding of the diadem of the altar-kuch-al of the Censer Gods of GI, Unen-K'awiil and GIII, the sons of K'inich Janaahb' Pakal, Sacred Ruler of B'akal." (Translation by the author).

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